PROJECT
(Professional Journal of English Education)
Volume 9, No. 6, November 2026
p–ISSN 2614-6320
e–ISSN 2614-6258

From Culture to Communication: Developing a Local Wisdom Project-Based E-Modules for Descriptive Text Speaking Skills

Siti Ayuni Rahmah[1], Sri Supiah Cahyati[2], Yana[3]

IKIP Siliwangi
[1] sitiayunirahmah83@gmail.com,
[2] srisupiahcahyati@ikipsiliwangi.ac.id., [3] yana@ikipsiliwangi.ac.id.

Abstract

This study aimed to develop and examine the feasibility of a Project-Based Learning (PjBL) E-module integrating West Java local wisdom into Descriptive Text learning to support senior high school students' speaking skills. The study employed a Research and Development (R&D) design adapted from Borg and Gall and Sugiyono, involving needs analysis, product design, expert validation, revision, preliminary field testing, and main field testing. The participants consisted of 6 students in the preliminary field test and 20 students in the main field test at a senior high school in West Bandung Regency. Data were collected through expert validation sheets, a speaking performance assessment rubric, a 10-item Likert-scale questionnaire, and documentation. The findings revealed that the E-module achieved a feasibility score of 85.42% based on expert validation, indicating that it was categorized as Very Good. The E-module integrated West Java local wisdom, including local tourist attractions, traditional foods, traditional clothing, traditional houses, traditional dances, and traditional musical instruments, to provide meaningful contexts for speaking-learning activities. The speaking performance assessment showed good performance in pronunciation, fluency, vocabulary and grammar accuracy, confidence, and expressing ideas during project presentations. Students' responses were categorized as very positive, with an average response percentage of 89.31%, indicating that the E-module was attractive, clear, useful, and engaging. The study concluded that the PjBL E-module was feasible for classroom implementation and supported students' speaking performance.

Keywords: Descriptive Text; E-module; Local Widom; PjBL (Project-Based Learning); Speaking Skills.

INTRODUCTION

English speaking skill is one of the essential competencies in EFL learning because it enables students to communicate ideas, opinions, and information effectively in academic and social contexts (Nuninsari et al., 2020; Widiyati & Pangesti, 2022; Purwati et al., 2024). However, many Indonesian students still experience difficulties in speaking English due to limited vocabulary mastery, lack of confidence, low classroom participation, and teacher-centered learning practices (Muzri et al., 2024; Widanta, 2023; Syafryadin et al., 2024). Based on the needs analysis questionnaire conducted at one of the senior high schools in West Bandung Regency, students reported difficulties in expressing ideas orally and describing objects in English. The questionnaire results also indicated that the existing learning materials were less engaging and not sufficiently related to students' daily lives, which affected their motivation and participation in speaking activities.

To address these challenges, an appropriate learning approach is needed to encourage students' active participation and communication in speaking activities. Project-Based Learning (PjBL) has been widely implemented in EFL classrooms because it promotes active, collaborative, and meaningful learning experiences. Previous studies have reported that PjBL encourages students

to participate more actively in speaking activities, supports collaborative interaction, and facilitates authentic communication practices (Nuninsari et al., 2020; Widiyati & Pangesti, 2022; Muzri et al., 2024). Technology-assisted PjBL has also been found to increase students' classroom engagement and speaking participation by creating more interactive learning environments (Benlaghrissi & Ouahidi, 2024; Zhao, 2025; Zhong et al., 2025).

Several studies also found that PjBL supported students' critical thinking, creativity, collaboration, and self-directed learning in EFL classrooms (Purwati et al., 2024; Rosmayanti et al., 2024; Rampeng et al., 2026). Previous studies also reported that students were encouraged to express ideas more confidently because they participated in meaningful projects connected to real-life situations. Furthermore, vlog-based and collaborative speaking projects enabled students to practice pronunciation, fluency, and communication strategies more naturally (Siregar et al., 2024; Widanta, 2023).

Besides the implementation of PjBL, integrating local wisdom into English learning has also received significant attention in recent years. Local wisdom-based learning materials create contextual learning experiences and strengthen students' cultural awareness. Recent research by Sari et al. (2025) demonstrated that an interactive Project-Based Learning E-module effectively supported English speaking instruction through authentic project activities and received positive validation from experts and students. Several studies also showed that local wisdom integration increased students' motivation, participation, and classroom engagement because the learning materials were closely related to students' daily lives and cultural backgrounds (Fadhli, 2020; Safitri, 2020; Ratri et al., 2024). In addition, local wisdom-based teaching materials and E-modules supported meaningful language learning activities and encouraged students to appreciate local culture while learning English (Rahawarin & Ghufron, 2025; Septiyana et al., 2026).

In learning Descriptive Text, *West Java local wisdom—including local tourist attractions, traditional foods, traditional clothing, traditional houses, traditional dances, and traditional musical instruments—*provides authentic topics that help students describe familiar cultural objects in English. Previous studies revealed that integrating local wisdom into Descriptive Text learning created more contextual and engaging classroom activities (Damayanti et al., 2026; Sari et al., 2026; Jaelani et al., 2026). Furthermore, combining local wisdom and Project-Based Learning created opportunities for students to explore cultural topics collaboratively while practicing English speaking activities (Shofyana et al., 2022; Rosmayanti et al., 2024).

Although previous studies have discussed Project-Based Learning (PjBL), speaking activities, technology integration, and local wisdom in EFL learning, most of them examined these aspects separately. Several studies investigated the implementation of PjBL in speaking instruction, while others explored the integration of local wisdom into teaching materials and language learning activities (Fadhli, 2020; Shofyana et al., 2022; Jaelani et al., 2026). However, limited research has developed a Project-Based Learning (PjBL) E-module integrating West Java local wisdom specifically for Descriptive Text speaking instruction at the senior high school level. Therefore, this study aimed to develop a Project-Based Learning (PjBL) E-module integrating West Java local wisdom for Descriptive Text learning, examine its feasibility through expert validation and students' responses, and support students' speaking-learning activities.

METHOD

This study employed a Research and Development (R&D) design aimed at developing and evaluating a Project-Based Learning (PjBL) E-module integrating local wisdom in Descriptive Text learning. Research and Development was used to produce an instructional product and to examine its feasibility in real classroom implementation. The model used in this study was adapted from Borg and Gall (1983) and Sugiyono (2017), which provide systematic procedures for developing educational products. The use of R&D in developing digital learning media and E-modules has also been widely applied in recent studies (Rahawarin & Ghufron, 2025; Sari et al., 2025; Sari et al., 2026; Septiyana et al., 2026). Therefore, the R&D approach was considered appropriate for developing and evaluating the proposed E-module.

The development procedure consisted of several stages, namely: (1) identifying potential and problems, (2) data collection through needs analysis, (3) product design, (4) design validation, (5) product revision, (6) preliminary field testing, (7) product revision, (8) main field testing, and (9) final product revision. These stages were conducted sequentially to ensure that the developed E-module was feasible and aligned with students' needs.
The development procedure used in this study is illustrated in figure 1.

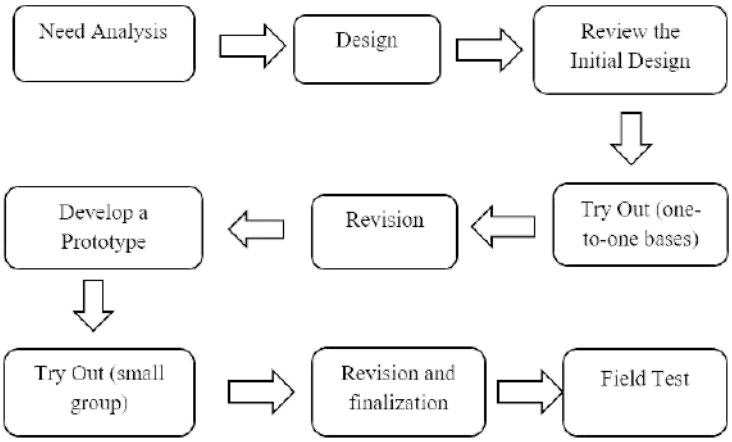

Figure 1. Research and Development Procedure

In the initial stage, In the initial stage, the authors conducted a needs analysis through questionnaires and documentation on January 15th, 2026, at one of the senior high schools in West Bandung Regency. The findings revealed that students experienced difficulties in speaking English, particularly in expressing ideas in Descriptive Text. Furthermore, the teaching materials used in the classroom were still limited and less engaging, which reduced students' motivation and participation in the learning process.

After identifying the problems, the authors designed a PjBL-based E-module integrating local wisdom, which can be accessed through this link: https://canva.link/zibz0etg4h9d7yu. The E-module consisted of several components, including learning objectives, explanations of Descriptive Text, examples based on local wisdom, project instructions, and speaking activities. The integration of local wisdom was reflected in topics related to traditional foods (e.g., Nasi Timbel, Karedok, and Surabi), traditional clothing (e.g., Sundanese Kebaya and Pangsi), traditional houses (e.g., Imah Jolopong and Imah Julang Ngapak), traditional dances (e.g., Jaipong Dance and Peacock Dance), and traditional musical instruments (e.g., Angklung, Calung, and Kecapi). These topics were selected because they were familiar to students and

closely related to their cultural background, thereby supporting meaningful learning and encouraging students to develop their speaking skills through authentic and contextual learning experiences.

The designed product was then validated by experts to evaluate its feasibility. The validation process involved material experts and media experts who assessed the E-module in terms of content, language, presentation, and design. The results of expert validation were used as the basis for revising the product before it was implemented in the classroom.

The implementation of the product was carried out through six meetings in Grade X of a senior high school in West Bandung Regency. The research was conducted on January 23rd, January 26th, January 29th, February 4th, February 5th, and February 12th, 2026. During these meetings, the authors applied the PjBL E-module in teaching Descriptive Text and speaking activities. The learning process included introducing Descriptive Text, integrating local wisdom topics, conducting individual and group tasks, developing project-based activities, and presenting the final project in the form of a video.

The preliminary test involved 6 students to obtain initial responses toward the E-module. Based on the results, several revisions were made to supported the design and clarity of the material. After revision, the product underwent main field testing involving 20 students to evaluate its feasibility and gather students' responses in a broader classroom setting.

The data were collected through questionnaires and documentation. The needs analysis questionnaire was distributed on January 15th, 2026, to identify students' needs, difficulties, and preferences in learning Descriptive Text. In addition, a student response questionnaire consisting of 10 Likert-scale items was distributed at the end of the implementation to evaluate the attractiveness, clarity, usefulness, ease of use, support for speaking activities, project effectiveness, confidence, and overall responses toward the developed E-module.

The data were analyzed using percentage calculations to determine the level of feasibility and students' responses. The formula used in this study was:

$$P = (F / N) \times 100$$

Source. Sudijono, A (2010)

The results were categorized into four levels, namely Strongly Agree, Agree, Disagree, and Strongly Disagree. The highest percentage indicated the dominant response from students. The analysis aimed to determine the feasibility of the developed PjBL E-module integrating local wisdom and students' responses to its use in supporting speaking activities.

RESULTS AND DISCUSSION

Results

1. The process of developing a Project Based Learning (PjBL) E-module for teaching Descriptive Text

The needs analysis was conducted as the initial stage of the research to identify students' needs, problems, and preferences in learning speaking through Descriptive Text. This stage was essential to determine the direction of the product development. The data were collected through

a questionnaire distributed to students at one of the senior high schools in West Bandung Regency.

The questionnaire consisted of 10 items in the form of multiple-choice questions covering students' experiences, difficulties, motivation, and learning preferences. The data were analyzed using percentage calculations, in which the highest percentage was interpreted as the dominant representation of students' needs. The results of the needs analysis are presented in Table 1.

Table 1. Result of Students Needs Analysis

No	Question	Yes	No	Maybe
1	Have you ever learned Descriptive Text?	20 (100%)	-	-
2	Do you find it difficult to speak in English?	13 65%	3 (15%)	4 (20%)
3	Do you understand how to describe object orally?	8 (40%)	6 (30%)	6 (30%)
4	Are the current learning materials interesting?	7 (35%)	9 (45%)	4 (20%)
5	Do learning materials relate to your daily life?	6 (30%)	10 (50%)	4 (20%)
6	Do you feel more motivated when learning uses media?	18 (90%)	1 (5%)	1 (5%)
7	Do you like learning through projects?	15 (75%)	2 (10%)	3 (15%)
8	Do you know about local wisdom in your area?	17 (85%)	1 (5%)	2 (10%)
9	Do you find it easier to speak using familiar topics?	16 (80%)	2 (10%)	2 (10%)
10	Do you need more interesting and interactive materials?	19 (95%)	-	1 (5%)

Table 1, showed that although students were familiar with Descriptive Text, many of them (65%) still experienced difficulties in speaking English. Most students (60%) found it challenging to express ideas and describe objects orally. In addition, the existing learning materials were considered less interesting and not relevant to students' real-life context, which affected their motivation.

The findings also indicated that students (90%) preferred interactive learning using media and project-based activities. Most students (80%) felt more confident when speaking about familiar topics related to their environment. Therefore, integrating local wisdom into learning materials was considered appropriate to supported students' speaking skills.

The product developed in this study was a PjBL-based E-module integrating local wisdom in Descriptive Text learning. The E-module was designed to support students' speaking skills through interactive and contextual learning activities. The integration of local wisdom was reflected in materials related to traditional foods, traditional clothing, traditional houses, traditional dances, and traditional musical instruments familiar to students. These topics were selected to provide meaningful learning experiences and to help students describe objects and cultural elements within their own environment.

The design of the E-module included colorful visuals, images, and simple layouts to enhance students' motivation and engagement. The E-module can be accessed at: https://canva.link/zibz0etg4h9d7yu



Figure 2. Cover of developed E-module

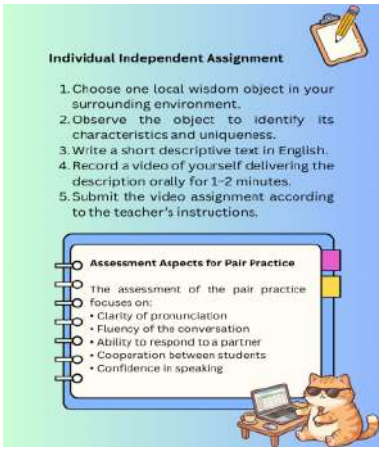

Figure 3. Individual speaking assignment activity

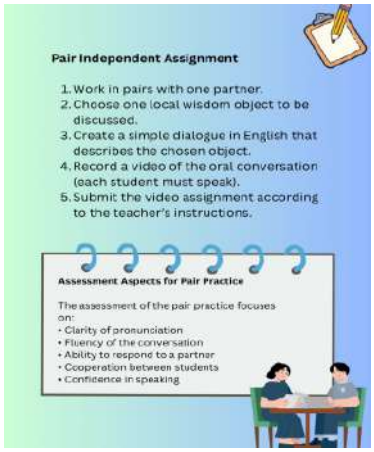

Figure 4. Pair speaking practice activity



Figure 5. Group presentation assignment activity

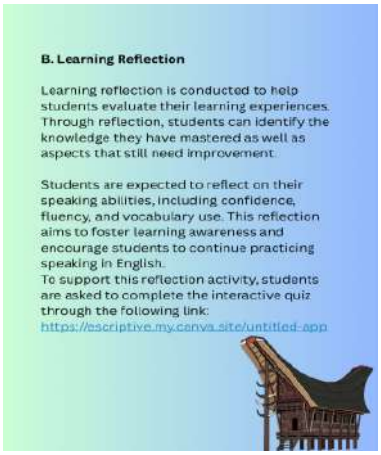

Figure 6. Learning reflection Section



Figure 7. Local wisdom quiz

This E-module consisted of several components, including learning objectives, material explanations, examples, project-based activities, and evaluations. The material is based on local wisdom, such as local tourist attractions, traditional foods, and cultural environments familiar to students at one of the senior high school in West Bandung Regency.

The project activities required students to work individually, in pairs, and in groups. Students were asked to describe local objects and present their ideas orally. The final project involved creating a video presentation, which helped supported students' speaking fluency and confidence.

2. The feasibility of developing a Project Based Learning (PjBL) E-module for teaching Descriptive Text

After the development stage was completed, the developed Project-Based Learning (PjBL) E-module integrating West Java local wisdom was evaluated to determine its feasibility before being implemented in classroom learning. The validation process involved two expert validators, both of whom were university lecturers in English Education, and one practitioner validator, an English teacher at the research site. The expert validators assessed the E-module in terms of content, language, presentation, and media design, while the practitioner validator

evaluated its practicality and suitability for classroom implementation. The results of the expert validation are presented in Table 2.

Tabel 2. Expert Validation Result

No	Statement	Total Score	Percentage	Category
A	**Content Suitability**			
1	Material according to Descriptive Text competency	6	75%	Good
2	E-module content according to the characteristics of high school student	7	87.5%	Very Good
3	Examples of relevant and accurate Descriptive Texts	7	87.5%	Very Good
4	Project activities support speaking skills	8	100%	Very Good
B	**Language Eligibity**			
5	Languages that are easy for student to understand	6	75%	good
6	Clear instructions	7	87.5%	Very good
7	There are no spelling or grammar errors	6	75%	Good
C	**Precentation (Layout Design)**			
8	Attractive and neat E-module display	6	75%	Good
9	Ilustrations support learning	7	87.5%	Very Good
10	Systematic presentation of material	8	100%	Very Good
D	**Appropriateness of Speaking Skills**			
11	E-module help student speak Descriptive Text	8	100%	Very Good
12	E-module to increase speaking confidence	6	75%	Good
Total		82	85.42%	Very Good

As presented in table 2 , the developed PjBL E-module obtained an overall feasibility score of 90.97%, which was categorized as Very Good. This result indicated that the E-module met the required criteria in terms of content accuracy, language use, instructional presentation, and media design. The expert validators agreed that the developed E-module was appropriate for classroom implementation. They also provided several suggestions regarding language clarity, layout consistency, and instructional presentation, which were incorporated into the revised version before the product was implemented in the classroom.

In addition to the expert validation, the developed E-module was also reviewed by a practitioner validator, namely an English teacher from the research site. The practitioner validation focused on the practicality, usability, and suitability of the E-module for classroom learning. The practitioner confirmed that the developed E-module was relevant to the learning objectives, easy to implement during classroom instruction, and capable of supporting students' speaking activities through contextual Project-Based Learning tasks. Several practical suggestions were also considered to further improve the final version of the E-module before the classroom trials.

After the revision process based on the recommendations of both the expert validators and the practitioner validator, the final version of the developed PjBL E-module was implemented in the preliminary field testing. This stage aimed to examine the practicality of the E-module and obtain students' initial responses and speaking performance before conducting the main field testing.

Results of Preliminary Field Testing

After the expert validation and subsequent product revisions, the developed Project-Based Learning (PjBL) E-module integrating West Java local wisdom was implemented in the preliminary field testing involving six tenth-grade students at one of the senior high schools in West Bandung Regency. This stage aimed to obtain initial information regarding the implementation of the developed E-module, evaluate students' speaking performance during the learning activities, and collect students' responses before conducting the main field testing.

Students' speaking performance was assessed during the project presentation activities using an analytic speaking rubric consisting of five aspects: clarity of pronunciation, fluency of speech, accuracy of vocabulary and grammar, confidence in speaking, and the ability to express ideas clearly. The assessment results showed an average speaking score of 2.70 out of 4.00 (67.50%), which was categorized as Good. Overall, students demonstrated satisfactory speaking performance across the five assessed aspects and actively participated in the Project-Based Learning activities. These findings indicate that the developed PjBL E-module provided meaningful opportunities for students to practice speaking through contextual learning activities integrating West Java local wisdom.

Following the learning activities, students completed a response questionnaire to evaluate the attractiveness, clarity, usefulness, and practicality of the developed E-module. The results are presented in Table 3.

Table 3. Students' Responses in the Preliminary Field Testing

No	Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
		f%	f%	f%	f%
A	**The Attraction of E-Modules**				
1	The E-Module is interesting and enjoyable to use	4 (67%)	2 (33%)	-	-
2	The design of the E-Module increases learning motivation	3 (50%)	2 (33%)	1 (17%)	-
B	**Ease of Use**				
3	The E-Module is easy to understand	3 (50%)	3 (50%)	-	-
4	The E-Module instructions in the E-Module are clear	4 (67%)	2 (33%)	-	-
C	**Benefits for Speaking Skills**				
5	The E-Module helps me speak Descriptive Texts	2 (33%)	4 (67%)	-	-
6	Project activities help me express ideas	3 (50%)	3 (50%)	-	-
7	The E-Module supported my speaking confidence	2 (33%)	4 (67%)	-	-
D	**General Student Response**				
8	The E-Module suits my learning needs	-	5 (83%)	1 (17%)	-
9	I want the E-Module to be used again	1 (17%)	4 (67%)	1 (17%)	-
10	I give a positive response to the E-Module	4 (67%)	2 (33%)	-	-

Table 3, students showed positive responses toward the developed E-module. Overall, 43.3% of the responses were categorized as Strongly Agree, while 51.7% were categorized as Agree.

Only 5% of the responses were categorized as Disagree, and no responses were categorized as Strongly Disagree. These findings indicate that the developed E-module was considered attractive, easy to understand, useful, and appropriate for supporting speaking-learning activities. Students also appreciated the integration of West Java local wisdom, including local tourist attractions, traditional foods, traditional clothing, traditional houses, traditional dances, and traditional musical instruments, which provided meaningful contexts for speaking practice.

Based on the suggestions and feedback obtained during the preliminary field testing, several revisions were made before implementing the E-module in the main field testing. The revisions included improving the layout design, simplifying several learning instructions, refining project activities, and making minor adjustments to the visual presentation to enhance students' learning experience. These revisions were intended to improve the practicality and usability of the developed E-module for broader classroom implementation.

Results of Main Field Testing

Following the revisions made after the preliminary field testing, the final version of the developed Project-Based Learning (PjBL) E-module was implemented in the main field testing involving twenty tenth-grade students at one of the senior high schools in West Bandung Regency. This stage aimed to evaluate the implementation of the revised E-module in a larger classroom setting, assess students' speaking performance, and examine students' responses toward the developed learning media.

Students' speaking performance was assessed using the same analytic speaking rubric employed during the preliminary field testing. The assessment covered clarity of pronunciation, fluency of speech, accuracy of vocabulary and grammar, confidence in speaking, and the ability to express ideas clearly. The results showed an average speaking score of 2.80 out of 4.00 (70.00%), which was categorized as Good. Overall, students demonstrated good speaking performance during the Project-Based Learning activities. The contextual projects integrating West Java local wisdom encouraged students to communicate more confidently while describing familiar cultural topics, thereby supporting meaningful speaking-learning activities.

After completing the learning activities, students responded to the evaluation questionnaire. The results are presented in Table 4.

Table 4. Students' Responses in the Main Field Testing

No	Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
		f%	f%	f%	f%
A	**The Attraction of E-Modules**				
1	The E-Module is interesting and enjoyable to use	10 (50%)	10 (50%)	-	-
2	The design of the E-Module increases learning motivation	5 (25%)	14 (70%)	1 (5%)	-
B	**Ease of Use**				
3	The E-Module is easy to understand	4 (20%)	16 (80%)	-	-
4	The E-Module instructions in the E-Module are clear	10 (50%)	10 (50%)	-	-
C	**Benefits for Speaking Skills**				

5	The E-Module helps me speak Descriptive Texts	5 (25%)	15 (75%)	-	-
6	Project activities help me express ideas	6 (30%)	14 (70%)	-	-
7	The E-Module supported my speaking confidence	4 (20%)	16 (80%)	-	-
D	**General Student Response**				
8	The E-Module suits my learning needs	3 (15%)	16 (80%)	1 (5%)	-
9	I want the E-Module to be used again	1 (5%)	18 (90%)	1 (5%)	-
10	I give a positive response to the E-Module	6 (45%)	14 (55%)	-	-

Table 4, students demonstrated highly positive responses toward the developed E-module. The majority of the responses were categorized as Agree (71.5%), followed by Strongly Agree (27%), while only 1.5% of the responses were categorized as Disagree, and none were categorized as Strongly Disagree. These findings indicate that the developed E-module was attractive, easy to use, useful, and relevant to students' learning needs. Furthermore, the integration of West Java local wisdom through local tourist attractions, traditional foods, traditional clothing, traditional houses, traditional dances, and traditional musical instruments provided meaningful learning contexts that encouraged students to participate actively in speaking-learning activities.

To obtain an overall evaluation of the developed E-module, the student responses from both the preliminary field testing (6 students) and the main field testing (20 students) were combined. The overall analysis showed an average response score of 89.31%, which was categorized as Very Positive. This finding indicates that the developed PjBL E-module was well accepted by students and was feasible from the students' perspective for classroom implementation.

Discussion

The findings of this study indicated that the developed Project-Based Learning (PjBL) E-module integrating West Java local wisdom was feasible for classroom implementation based on the expert validation results and the positive responses obtained from students during the preliminary and main field testing. The speaking assessment also demonstrated that students were able to participate satisfactorily in the speaking-learning activities, suggesting that the developed E-module provided meaningful opportunities for students to practice speaking within contextual learning situations.

The positive responses obtained from students suggest that the developed E-module successfully created a more engaging learning environment. By integrating Project-Based Learning with familiar cultural contexts, students were encouraged to participate actively in classroom discussions, collaborative projects, and oral presentations. The contextual nature of the learning materials enabled students to relate the lesson content to their everyday experiences, making speaking activities more meaningful and enjoyable. These findings are consistent with previous studies reporting that Project-Based Learning promotes student-centered learning, collaboration, and communicative interaction in English speaking classrooms (Nuninsari et al., 2020; Widiyati & Pangesti, 2022; Muzri et al., 2024).

The integration of West Java local wisdom, including local tourist attractions, traditional foods, traditional clothing, traditional houses, traditional dances, and traditional musical instruments, also contributed to meaningful speaking-learning activities. Based on the students' questionnaire responses, these cultural topics were perceived as relevant and engaging because

they reflected students' own cultural backgrounds and daily lives. Consequently, students found it easier to generate ideas and express information during project presentations. This finding supports previous studies suggesting that integrating local wisdom into English language learning enhances students' engagement, learning motivation, and cultural awareness (Fadhli, 2020; Safitri, 2020; Ratri et al., 2024).

Another important finding was related to collaborative learning during the Project-Based Learning activities. Throughout the project completion process, students worked together by discussing project ideas, sharing information, preparing presentation materials, and practicing speaking before presenting their projects. These collaborative learning experiences encouraged more frequent communication among group members and created greater opportunities for students to participate actively throughout the learning process. Similar findings were reported by Imbaquingo and Cárdenas (2023), Zhong et al. (2025), and Syafryadin et al. (2024), who found that interactive project-based activities positively support students' classroom engagement and communication.

The speaking assessment further indicated that students demonstrated satisfactory performance in clarity of pronunciation, fluency of speech, accuracy of vocabulary and grammar, confidence in speaking, and the ability to express ideas clearly. The project presentation activities provided students with opportunities to organize ideas, rehearse collaboratively, and communicate their project outcomes in meaningful contexts. The documentation data also supported these findings by showing students' active involvement during project discussions, preparation of presentation materials, and speaking presentations. These activities provided students with opportunities to organize ideas, rehearse collaboratively, and communicate their project outcomes in meaningful contexts.



Figure 8. Preliminary field test Documentation



Figure 9. Main field test documentation

Rather than merely completing speaking exercises, students practiced using English for authentic communication throughout the learning process. This result is consistent with previous studies conducted by Purwati et al. (2024), Sari et al. (2025), Rampeng et al. (2026), and Azzahra et al. (2025), which reported that Project-Based Learning and PjBL-based E-modules support speaking practice, communication skills, confidence, and critical thinking in EFL classrooms.

The incorporation of technology into the developed E-module also contributed to students' positive learning experiences. Interactive digital learning materials, project-based assignments, and presentation activities encouraged students to become more actively involved during

classroom learning. Based on the students' responses, these technological features made the learning activities more attractive, practical, and engaging while supporting communication and creativity throughout the learning process. This result is in line with Benlaghrissi and Ouahidi (2024), Zhao (2025), and Fikria et al. (2025), who emphasized that technology-assisted Project-Based Learning enhances students' engagement, creativity, and interaction in English language learning.

Despite these positive findings, several challenges were identified during the implementation of the developed E-module. The needs analysis and classroom implementation indicated that some students still experienced difficulties related to pronunciation, vocabulary usage, grammar accuracy, and confidence during speaking activities. These findings suggest that although the developed E-module provided meaningful opportunities for speaking practice, continuous teacher guidance and regular speaking practice remain necessary to further support students' speaking performance. Similar challenges have also been reported by Syafryadin et al. (2024) and Zhong et al. (2025), who discussed learners' speaking difficulties and communication anxiety in Project-Based Learning environments.

Overall, the findings demonstrate that the developed Project-Based Learning (PjBL) E-module integrating West Java local wisdom was feasible for classroom implementation and was positively received by students. The combination of contextual cultural content, collaborative project activities, and technology-supported learning created meaningful opportunities for students to engage in speaking-learning activities within authentic classroom contexts. Unlike previous studies that mainly investigated Project-Based Learning or local wisdom as separate instructional approaches, this study integrated both into a digital PjBL E-module specifically designed for Descriptive Text speaking instruction at the senior high school level. This integration represents the novelty of the study and provides an alternative instructional medium for promoting contextual, technology-supported, and student-centered English learning..

CONCLUSION

This study successfully developed a Project-Based Learning (PjBL) E-module integrating West Java local wisdom for Descriptive Text learning to support students' speaking-learning activities. The developed E-module incorporated local tourist attractions, traditional foods, traditional clothing, traditional houses, traditional dances, traditional musical instruments, and other cultural objects to provide contextual and meaningful learning experiences. The results of expert validation indicated that the developed E-module achieved a feasibility score of 85.42%, which was categorized as Very Good, indicating that it was feasible for classroom implementation. In addition, the speaking assessment showed that students demonstrated satisfactory performance in clarity of pronunciation, fluency of speech, accuracy of vocabulary and grammar, confidence in speaking, and the ability to express ideas clearly during project presentations. Students also provided highly positive responses toward the developed E-module, with an overall response percentage of 89.31%, indicating that the E-module was attractive, clear, useful, and engaging for classroom learning. The integration of Project-Based Learning, West Java local wisdom, and digital learning materials represents the novelty of this study by providing a contextual instructional medium specifically designed for Descriptive Text learning at the senior high school level. Overall, the developed PjBL E-module was considered feasible for supporting students' speaking-learning activities through contextual and meaningful Project-Based Learning.

Nevertheless, this study has several limitations. The classroom trials involved a relatively small number of participants and did not employ a pre-test and post-test design to measure changes in students' speaking performance. Therefore, future research is recommended to involve larger and more diverse samples, employ experimental designs with pre-test and post-test measures to evaluate students' speaking performance and learning outcomes, and conduct longitudinal studies to examine the long-term instructional effects of the developed E-module. Future studies may also explore the implementation of the E-module across different text types and educational contexts while incorporating multiple sources of qualitative and quantitative data to provide more comprehensive findings.

ACKNOWLEDGMENTS

The authors would like to express their sincere gratitude to Mrs. Lilih Sofia, S.Pd., for her valuable support as the partner teacher and practitioner validator throughout the development and implementation of this study. The authors also extend their appreciation to the tenth-grade students at one of the senior high schools in West Bandung Regency for their active participation, cooperation, and valuable feedback during the research process. Their contributions played an important role in the successful completion of this study.

REFERENCES

Benlaghrissi, H., & Ouahidi, L. M. (2024). The impact of mobile-assisted project-based learning on developing EFL students' speaking skills. *Smart Learning Environments,* 11(1), 1–30. https://doi.org/10.1186/s40561-024-00303-y

Damayanti, P., Syamsuddin, S., & Yunidar, Y. (2026). Integrating Morowali local wisdom into multiliteracy pedagogy: An intervention study on elementary descriptive writing. *Journal of Innovation and Research in Primary Education,* 5(2), 2582–2592. https://ejournal.papanda.org/index.php/jirpe/article/view/3569

Fadhli, M. (2020). Indonesian folktales in English: Media to integrate local wisdom in EFL classroom. *Lingual: Journal of Language and Culture,* 10(2). https://doi.org/10.24843/LJLC.2020.v10.i02.p05

Fikria, A., et al. (2025). A systematic review of technology-enhanced project-based language learning: Theoretical frameworks, project types, and implications for future research and practice. F1000Research. https://doi.org/10.12688/f1000research.165491.2

Imbaquingo, D., & Cárdenas, M. (2023). Student engagement in EFL project-based learning contexts: Observations and questionnaire data. *Asian EFL Journal.* https://pmc.ncbi.nlm.nih.gov/articles/PMC12239396/

Jaelani, S. R., Suryati, N., Basthomi, Y., Yannuar, N., Handini, B. S., & Munawir, A. (2026). EFL teachers' experiences in teaching reading texts incorporating local wisdom. *International Journal of Language Education,* 10(1). https://doi.org/10.26858/ijole.v10i1.83713

Muzri, A., Abdullah, A., & Sunra, L. (2024). The implementation of project-based learning in teaching speaking in Indonesian EFL classroom. *ARRUS Journal of Social Sciences and Humanities.* https://doi.org/10.35877/soshum2589

Nuninsari, D. F., Sutopo, D., & Bharati, D. A. L. (2020). The implementation of project-based learning strategy in teaching spoken English. *English Education Journal,* 10(1). https://doi.org/10.15294/eej.v10i1.33952

Purwati, T., Setyarini, S., Waly, M. M., & Sumanto, E. (2024). Project-based learning integrated with higher-order thinking skills (HOTS) assessment to enhance students' speaking skills in the EFL classroom. *Issues in Language Studies.* https://doi.org/10.33736/ils.6090.2024

Rahawarin, H. W. J., & Ghufron, A. (2025). Developing a local wisdom-based e-module to enhance English learning motivation and outcomes: An ADDIE-driven study in Merauke Regency. *Journal of Innovation and Research in Primary Education,* 5(1). https://ejournal.papanda.org/index.php/jirpe/article/view/2735

Rampeng, R., Hamid, R. J., Maing, R. A., & Sujariati, S. (2026). Integrating project-based learning and deep learning principles to foster speaking fluency and critical thinking in EFL. Jo-ELT *(Journal of English Language Teaching)*. https://doi.org/10.33394/jo-elt.v12i2.17578

Ratri, D. P., Widiati, U., Astutik, I., & Jonathans, P. M. (2024). A systematic review on the integration of local culture into English language teaching in Southeast Asia: Current practices and impacts on learners' attitude and engagement. *Pegem Journal of Education and Instruction,* 14(2), 37–44. https://doi.org/10.47750/pegegog.14.02.05

Rosmayanti, V., Sukmawati, S., Mohamed, S., Sujarwo, S., & Amin, S. (2024). Fostering self-directed learning through local wisdom project-based learning. *Journal of Language Learning and Assessment,* 2(2), 52–72. https://doi.org/10.71194/jlla.v2i2.115

Safitri, L. (2020). Material development for English tourism subject based on local wisdom. *Education and Linguistics Knowledge Journal,* 2(2), 1–13. https://doi.org/10.32503/edulink.v2i2.1199

Sari, D. M., Fitri, D. M., Firdaus, R., Oktaria, S. D., & Herpratiwi. (2025). Development of an interactive e-module based on project-based learning to improve English speaking skills for seventh grade junior high school students. IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature, 13(2). https://ejournal.iainpalopo.ac.id/index.php/ideas/article/view/8721?utm_source=chatgpt.com

Sari, F. K., Asnawi, A., & Sarianto. (2026). Developing descriptive text teaching material based on local wisdom for students of SMPN 2 Setia Janji. *SOSIOEDUKASI: Jurnal Ilmiah Ilmu Pendidikan dan Sosial,* 15(1), 56–68. https://doi.org/10.36526/sosioedukasi.v15i1.7138

Septiyana, L., Suprihatin, Y., & Ninsiana, W. (2026). An ethnopedagogical approach in developing inferential reading materials in EFL contexts: Integrating Lampung local wisdom. Pedagogy: *Journal of English Language Teaching.* https://doi.org/10.32332/joelt.v13i2.11577

Shofyana, M. H., Aditama, M. G., Nugroho, H. I., & Asmoro, H. T. (2022). Integrating local wisdom in project-based learning to improve post-pandemic English learning. *ENGLISH FRANCA: Academic Journal of English Language and Education,* 6(2), 291–306. https://doi.org/10.29240/ef.v6i2.5418

Siregar, F. S., Ramadhan, A., & Daulay, E. (2024). Project-based learning: Enhancing EFL students' speaking skill through vlog. *Jurnal Nakula: Pusat Ilmu Pendidikan, Bahasa dan Ilmu Sosial,* 2(5), 346–361. https://doi.org/10.61132/nakula.v2i5.1109

Syafryadin, et al. (2024). Unveiling students' challenges and attitudes towards project-based learning in English-speaking tertiary classrooms. *LLT Journal: A Journal on Language and Language Teaching,* 27(1). https://doi.org/10.24071/llt.v27i1.8181

Widanta, I. M. R. J. (2023). Enhancing learners' speaking ability in project-based learning (PjBL): How does the inside-outside circle technique work? *Jurnal Pendidikan dan Pengajaran,* 56(2), 265–273. https://doi.org/10.23887/jpp.v56i2.65775

Widiyati, E., & Pangesti, W. (2022). Project-based learning in teaching speaking to young learners: Is it effective? *EduLite: Journal of English Education, Literature and Culture,* 7(1), 71–81. https://doi.org/10.30659/e.7.1.71-81

Wijaya, K. F. (2026). Exploring the benefits of project-based learning in contemporary EFL speaking instruction. *Magister Scientiae,* 54(1). https://doi.org/10.33508/mgs.v54i1.7351

Zhao, M. (2025). Technology-enhanced project-based language learning in postgraduate English courses: Effects on language use and technological literacy. *Humanities and Social Sciences Communications*. https://doi.org/10.1057/s41599-025-05519-y

Zhong, J., Ismail, L., & Lin, Y. (2025). Investigating EFL students' engagement in project-based speaking activities: From a multi-dimensional perspective. *Frontiers in Psychology,* 16, Article 1598513. https://doi.org/10.3389/fpsyg.2025.1598513