



Development of a Podcast-Based Instructional Design for Indonesian Language Negotiation Texts in Vocational Education: An ADDIE and Project-Based Learning Approach

Marnilawati¹, Martono², Warneri³, Aunurrahman⁴, Henny Sanulita⁵, Aini Andria Shirin Anuarudin⁶
^{1,2,3,4,5} Universitas Tanjungpura, West Kalimantan, Indonesia; ⁶ Universiti Teknologi MARA, Selangor, Malaysia

ARTICLE INFO	ABSTRACT
Article history: Submitted: August 11, 2026 Final Revised: September 9, 2026 Accepted: October 11, 2026 Published: October 20, 2026	Purpose: This study developed a podcast-based instructional design for Indonesian-language negotiation texts in vocational secondary education and examined the evidence available for its content, media, and linguistic suitability.
Keywords: ADDIE; instructional design; negotiation texts; podcast; project-based learning; vocational communication.	Methods: Research and development was organized using the ADDIE framework and Project-Based Learning (PjBL). The school context was SMK Negeri 1 Simpang Hilir. A preliminary needs analysis reported achievement of 77% in listening, 76% in reading, 75% in writing, and 70% in speaking. Six experts, comprising two subject-matter, two media, and two language specialists, assessed the prototype. A limited trial was described for 15 Grade X Visual Communication Design students; a larger implementation was planned for 35 Grade X Food Crop and Horticultural Agribusiness students.
	Results: The reported expert assessments were 97.33% for content, 96.67% for media, and 95.71% for language, with 96.60% reported overall. The resulting instructional design comprised four meetings (eight lesson periods), vocational negotiation scenarios, podcast production, teacher scaffolding, and performance assessment. Student-practicality percentages and pretest–posttest statistics in the source manuscript were explicitly generated from simulated data; they are therefore not presented as observed outcomes.
	Conclusion: The development work documents a contextually aligned instructional prototype and favorable reported expert ratings. It does not establish empirical practicality, improvements in speaking proficiency, or the effectiveness of the intervention. Further implementation with observed performance and process evidence is needed before claims about educational impact can be made..
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INTRODUCTION

Vocational secondary education is expected to connect subject knowledge with communication practices encountered beyond school, yet this connection is not always visible in language instruction. In Indonesian vocational high schools, speaking tasks need to engage students in making proposals, interpreting responses, and reaching agreements rather than merely reproducing linguistic rules. Research on vocational competencies associates work preparation with the coordination of technical knowledge, communication, and collaborative capacities (Li & Rohayati, 2024; Lee & Lee, 2024; Widodo et al., 2025; Chan, 2021). Project-based approaches can provide opportunities for such competencies, although their quality depends on the design of tasks and teacher support rather than on the presence of a project alone (Pupik Dean et al., 2023; Farrow et al., 2024). Research on transitions to digital learning also emphasizes the need to match media choices to students' conditions (Bond et al., 2021). This tension motivates an instructional design in which the vocational purpose of language use is explicit in both student activities and assessment.

At SMK Negeri 1 Simpang Hilir, a preliminary needs analysis of 35 students in the Food Crop and Horticultural Agribusiness (ATPH) program reported achievement levels of 77% in listening, 76% in reading, 75% in writing, and 70% in speaking, against a stated mastery threshold of 75%. The figures were derived from an earlier cohort and

therefore characterize a specific initial instructional problem rather than the later implementation group. Speaking was the only reported domain below the threshold, suggesting that learners needed more structured opportunities to formulate and deliver oral messages. Teacher interviews and classroom observations in the source study also pointed to the dominance of explanations and written tasks over sustained, recorded speaking practice. These contextual observations justify developing learning activities in which spoken negotiation is rehearsed, produced, and assessed, without presupposing that the proposed product will improve performance.

Negotiation texts offer an appropriate curricular route for addressing this instructional need because negotiation requires participants to interpret positions, articulate arguments, respond to counterproposals, and use language respectfully. Within the Phase E Indonesian-language learning outcomes of the Merdeka Curriculum, these communicative processes can be practiced in both written and spoken forms (BSKAP, 2024). For ATPH students, plausible contexts include negotiating agricultural product prices, discussing delivery arrangements, responding to customer complaints, and coordinating business partnerships. These situations are pedagogically relevant because they translate text structure and linguistic conventions into interactions resembling vocational tasks. Audio-based information sharing has also been explored in agricultural extension, although it differs from a classroom negotiation project (Cinthia et al., 2025). Nevertheless, competence in a classroom simulation should not be equated with actual workplace readiness, which entails additional skills and conditions that were not measured here.

Audio production offers one way to make the process of oral negotiation observable and revisable. Podcasts allow learners to hear language models, script conversations, record their own speaking, and reconsider the clarity and appropriateness of their exchanges; however, benefits depend on how these resources are embedded in instruction. Evidence from language education has connected podcast use or creation with listening, speaking, motivation, and language-related performance in particular populations (Chaves-Yuste & de-la Peña, 2023; Suvarnaphaet & Suvarnaphaet, 2023; Perry, 2024; Mekheimer, 2025; Yeh et al., 2021). Reviews likewise identify opportunities for repeated exposure and independent practice alongside limitations in activity design and learner engagement (Ramirez, 2024; Musayeva et al., 2025; Woldemariam, 2023; Lim & Aryadoust, 2022; Ramadhani et al., 2023; Tymoshchuk, 2023; Larionova & Kapysheva, 2023). Research on cross-cultural podcasting and discourse additionally draws attention to the social organization of spoken messages (Sagitova et al., 2023; Khakimova, 2023). The present design therefore uses podcasts as both examples of negotiation discourse and learner-produced artifacts that can support performance feedback.

Studies of student-generated podcasts suggest that production can create authentic audiences and require learners to consider what their spoken messages communicate. Research in tertiary education has linked podcast assessment to students' communication confidence, peer collaboration, or motivation, although these findings arise in contexts different from Indonesian Grade X language classrooms (Wakefield et al., 2023; Vainieri et al., 2024; Qura et al., 2022; Carson, 2024; Fantini, 2024). Work on project-based podcast learning further positions recording and revision within a sequence of purposeful activities rather than as an isolated media exercise (Gudkova & Shadrina, 2025; Pratiwi et al., 2024; Darmuki et al., 2026; Safar et al., 2025; Yaqin & Al Halim, 2023). Related analyses emphasize linguistic interaction, task authenticity, and the instructional scaffolding needed for productive collaboration (Shen & Cheng, 2024; Salih & Omar, 2024; Pupik Dean et al., 2023). These studies offer design principles but do not establish that the same outcomes will occur in the particular ATPH context examined in this manuscript.

A further limitation of the available literature is the frequent separation of technological innovation from explicit competency assessment and vocational task requirements. Some studies concentrate on podcast listening or general speaking proficiency (Budiasningrum & Rosita, 2022; Efendi & Astutik, 2024; Karimova, 2024; Firdausiyah & Rohaniyah, 2024), whereas others address communication and employability through project work without focusing on Indonesian negotiation texts (Dias-Oliveira et al., 2024; Sau & Sudira, 2025; Hananingsih, 2026). Recent syntheses of project-based learning also caution that positive patterns across studies should be interpreted with attention to heterogeneity and methodological quality (Zhang & Ma, 2023; Farshad & Fortin, 2026). Thus, the specific gap addressed here concerns the instructional design of an assessable, podcast-based negotiation project linked to the demands of an agribusiness program. The gap is conceptual and developmental: available evidence in the source manuscript does not yet permit an effectiveness claim.

This study consequently aimed to design a podcast-based Indonesian-language learning package for negotiation texts and document its alignment with vocational communication needs and reported expert evaluations. The development process integrated the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) framework with Project-Based Learning (PjBL), performance rubrics, and online or offline audio access. The intended instructional product comprised four meetings over eight lesson periods and employed agribusiness-related negotiation scenarios. The study's practical contribution is an organized sequence connecting curriculum objectives, recorded oral

performances, feedback, and reflection; its conceptual contribution is to locate podcast production within a vocationally contextualized instructional system. Claims about learner improvement are expressly reserved for future investigation using observed data rather than the simulated analyses contained in the source manuscript.

METHOD

Research Design and Setting

This research used a research-and-development orientation organized around ADDIE (Analysis, Design, Development, Implementation, and Evaluation), with PjBL providing the instructional sequence for the product (Branch, 2009; LaMarca & LaMarca, 2024). ADDIE was treated as a development and revision framework rather than as evidence of treatment effectiveness. The evaluation addressed curriculum alignment, prototype specifications, and expert appraisal; the separate implementation and effectiveness procedures were described as planned activities where empirical records were not available. The methodological distinction matters because the source manuscript contained both reported expert scores and illustrative, simulated learner scores. These forms of evidence were not pooled or treated as equivalent in this revision.

Setting and Participants

The development context was SMK Negeri 1 Simpang Hilir in North Kayong Regency, West Kalimantan, Indonesia. The instructional design targeted Grade X students in the Food Crop and Horticultural Agribusiness (ATPH) program. The source manuscript identified a purposively selected group of 35 Grade X ATPH students for intended main implementation, 15 Grade X Visual Communication Design (DKV) students for a limited-scale trial, and six expert validators comprising two subject-matter, two media, and two language experts. A preliminary needs analysis was described for 35 students from an earlier ATPH cohort, who subsequently advanced to Grade XI. These groups had different roles in the development process and are not treated as one pooled participant sample.

Instruments and Product Evaluation

The source study described content, media, and language validation questionnaires, learner-response questionnaires, teaching and observation sheets, a workplace communication performance rubric, podcast assessment rubrics, and interview guides. Expert validation used a five-point rating scale, and scores were converted to percentages of the maximum possible score; the source document reported scores for three expert domains and an overall percentage. Proposed speaking indicators included argument organization, negotiation structure, diction, articulation, persuasive language, professional politeness, and oral presentation, while podcast criteria additionally addressed sound quality and group work. The limited-scale response questionnaire was described as using a four-point scale, but its numerical practicality results were generated from simulated responses. No instrument-level reliability coefficient or empirical learner-level dataset was provided in the source manuscript, and no such result is imputed here.

Development Procedure

The Analysis phase drew on the reported earlier-cohort language assessment, classroom observations, teacher interviews, and curriculum documentation. During Design, the learning objectives were linked to PjBL stages, agribusiness negotiation scenarios, group tasks, and assessment criteria. Development produced a four-meeting, eight-lesson-period module with sample dialogue podcasts, instructions for planning and recording audio, and ways to access materials online or through offline MP3 files. Six experts evaluated the prototype, after which the source document identified recommendations concerning instructional clarity, linguistic precision, the sequencing of podcast tasks, and assessment guidance. A limited DKV trial and a subsequent ATPH implementation were described, but the available record does not support interpreting the simulated response and performance matrices as observed trial outcomes. The Evaluation phase therefore emphasizes documented prototype refinement and proposed operational procedures instead of asserting completion of unobserved effectiveness testing.

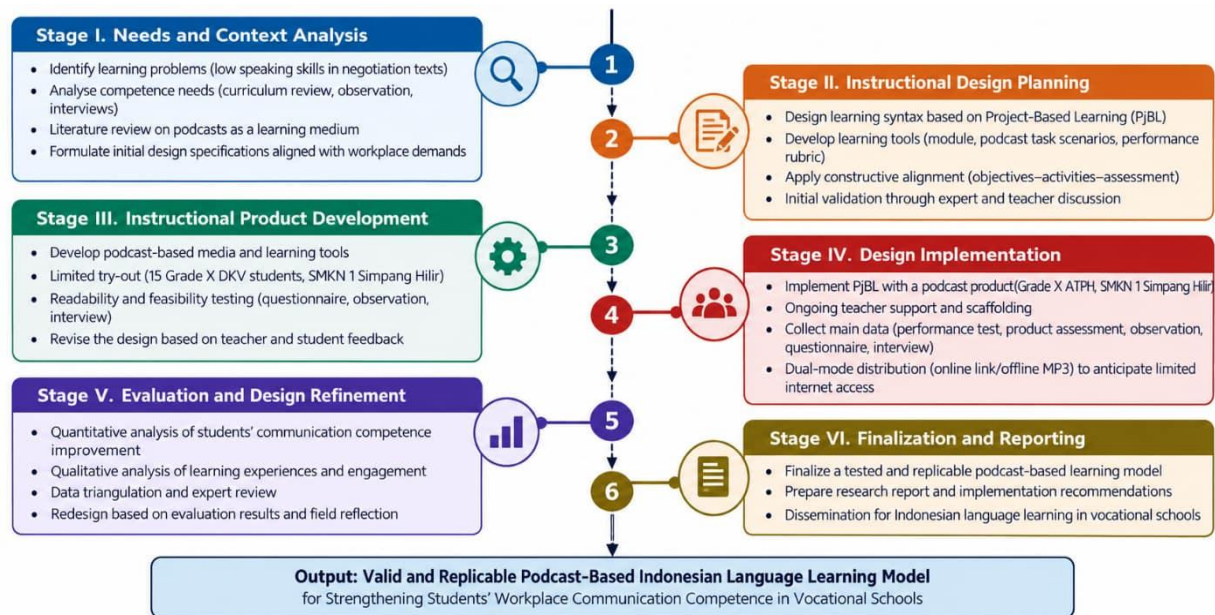


Figure 1. ADDIE-based development procedures and proposed evaluation pathway (adapted from the source manuscript).

Data Analysis and Boundaries of Inference

For the reported expert ratings, the stated analysis calculated percentage achievement as the obtained rating divided by the maximum possible rating, multiplied by 100, and used the categories excellent (85–100%), good (70–84%), satisfactory (55–69%), and poor (below 55%). The source manuscript also outlined descriptive statistics, a paired-samples t-test, and normalized gain for planned performance analysis, together with qualitative data reduction, display, and triangulation of observations and interviews (Miles et al., 2014). The numerical pretest–posttest and questionnaire results provided for these procedures were simulated and are not interpreted as student findings. The illustrative values are preserved, transparently labeled, in Appendix A to distinguish analytical demonstration from empirical results. Without observed performance scores and qualitative source materials, neither intervention effectiveness nor thematic convergence can be established.

RESULTS

Needs Analysis and Design Specifications

The preliminary analysis identified a contrast between speaking performance and the three other reported language domains: speaking reached 70%, whereas listening, reading, and writing reached 77%, 76%, and 75%, respectively. The stated mastery criterion was 75%. These values informed a design that prioritizes oral proposal-making, appropriate response to negotiation partners, and reflective recording. Because the scores came from an earlier group, they provide a development rationale rather than baseline performance for the subsequent Grade X participants. Table 1 translates the source analysis into a concise set of design requirements.

Table 1. Needs Analysis and Instructional Design Requirements

Source of design requirement	Reported need or specification	Instructional design response
Speaking assessment	70% speaking against 75% stated mastery criterion	Structured dialogue rehearsal and recorded oral performance
Negotiation-text curriculum	Negotiation structure, argumentation, and linguistic politeness	Price, marketing, service, and partnership scenarios relevant to ATPH
Vocational relevance	Work-related communication and collaboration	Group negotiation tasks requiring proposals and agreement
Access and media	Variable connectivity and need for repeatable oral models	Audio examples and MP3 distribution online or offline
Assessment	Need to assess process and oral product	Negotiation and podcast performance rubrics

Instructional Prototype and Learning Sequence

The product was specified as a four-meeting instructional package totaling eight lesson periods. The PjBL sequence progressed from understanding negotiation texts to designing a podcast project, producing and practicing recorded dialogues, and presenting and reflecting on the audio products. The planned final product was a negotiation podcast grounded in an agribusiness-related workplace situation. Learning assessments were described as diagnostic, formative, and summative, with criteria covering structural organization, linguistic accuracy, negotiation strategies, clarity, recording quality, and teamwork. This product specification demonstrates instructional alignment, not learner improvement.

Table 2. Instructional Sequence and Planned Learning Evidence

Meeting	Main activity	Planned evidence of learning
1 (2 lesson periods)	Read and listen to examples; identify structure, purpose, and linguistic features of negotiation	Diagnostic responses and negotiation-text analysis
2 (2 lesson periods)	Select a vocational scenario; assign group roles; write and revise a negotiation script	Project plan and draft script
3 (2 lesson periods)	Rehearse, record, review, and revise the negotiation podcast	Audio draft and formative feedback
4 (2 lesson periods)	Present the podcast; apply communication rubric; reflect on negotiation choices	Final audio product and reflection

Table 1 presents the instructional sequence of the podcast-based Project-Based Learning (PjBL) prototype, organized into four meetings comprising eight lesson periods. The sequence integrates negotiation-text comprehension, collaborative script development, podcast production, and reflective evaluation within an agribusiness-related vocational context. Each meeting specifies the principal learning activities and the corresponding evidence intended to support diagnostic, formative, and summative assessment. The progression from analyzing negotiation examples to producing and presenting a final podcast illustrates the alignment between learning objectives, instructional activities, and assessment procedures. Importantly, the table documents the intended instructional design and assessment opportunities rather than providing empirical evidence of students' learning gains or the effectiveness of the developed prototype. To further illustrate the instructional design, Figure 2 presents a schematic overview of the developed Indonesian language teaching module. The figure summarizes the key components of the module, including its general information, learning objectives, graduate profile, learner characteristics, learning material characteristics, and expected learning outcomes. These components provide a conceptual framework for implementing podcast-based Project-Based Learning (PjBL) in negotiation-text instruction.



Figure 2. Source manuscript schematic showing the instructional module and learning outcomes.

As illustrated in Figure 2, the module integrates curriculum-aligned learning objectives with learner characteristics, vocational contexts, and expected learning outcomes. The instructional design emphasizes negotiation skills, podcast production, collaboration, creativity, and critical thinking. This schematic represents the conceptual organization of

the developed module rather than empirical evidence of its implementation or effectiveness. To provide a more detailed representation of the instructional implementation plan, Figure 3 illustrates the four-stage learning sequence of the podcast-based Project-Based Learning (PjBL) model for negotiation-text instruction. The framework outlines the progression of learning activities across four meetings, integrating project development, podcast production, and reflection with diagnostic, formative, and summative assessment. It also identifies the expected final product and the assessment criteria designed to evaluate students' negotiation and communication skills.

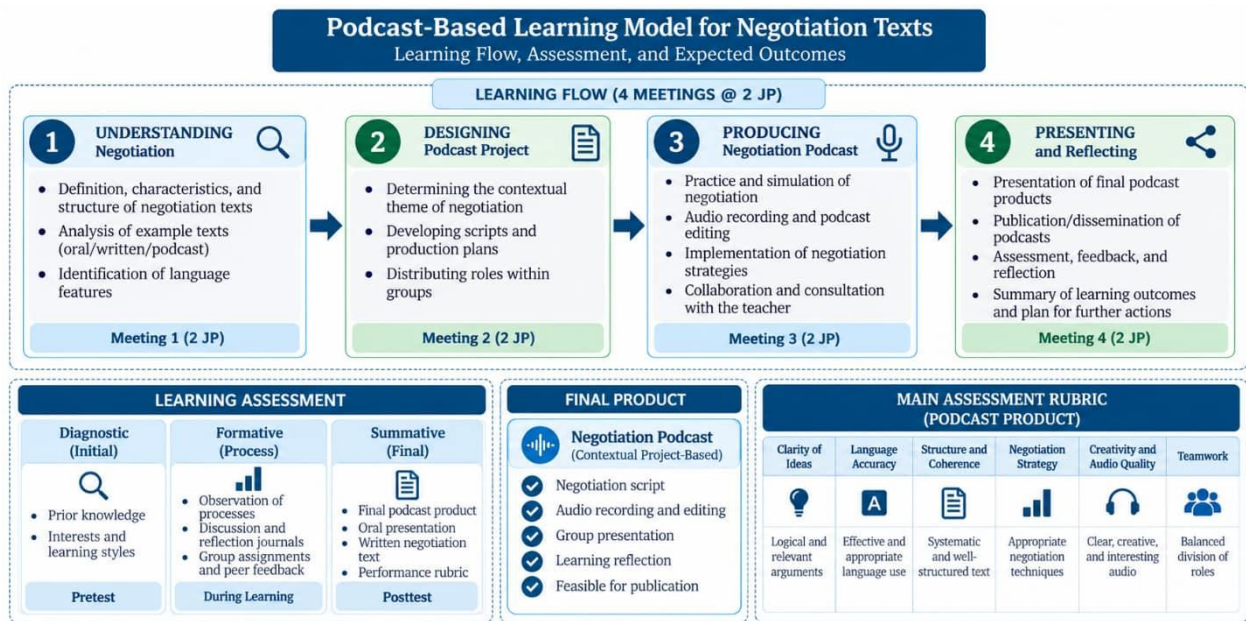


Figure 3. Four-stage podcast-based negotiation learning sequence from the source manuscript.

As shown in Figure 3, the proposed learning sequence consists of four interconnected stages: understanding negotiation texts, designing the podcast project, producing the negotiation podcast, and presenting and reflecting on the final product. The framework incorporates diagnostic, formative, and summative assessments, supported by a rubric addressing clarity of ideas, language accuracy, structural coherence, negotiation strategies, creativity, audio quality, and teamwork. This framework illustrates the intended alignment between instructional activities, assessment procedures, and expected learning products rather than demonstrating empirically verified learning outcomes.

Reported Expert Validation

The source manuscript reported evaluations by two subject-matter experts, two media experts, and two language experts. The resulting percentages were 97.33% for instructional content, 96.67% for media, and 95.71% for language; the reported overall value was 96.60%. Under the source manuscript's stated interpretation system, all domain scores fell within its highest category. These values support an account of favorable expert appraisal of the proposed design, but they do not measure how students performed after instruction. Table 3 preserves the ratings while keeping their evidentiary scope explicit.

Table 3. Expert Validation Results for the Podcast-Based Project-Based Learning (PjBL) Instructional Prototype Across Content, Media, and Language Domains

Expert domain	Validators	Reported rating	Interpretation under source criteria
Content / subject matter	2	97.33%	Excellent / highly valid
Media	2	96.67%	Excellent / highly valid
Language	2	95.71%	Excellent / highly valid
Overall (as reported)	6	96.60%	Excellent / highly valid

The reported overall value is reproduced as stated, rather than recalculated from domain percentages, because the underlying item totals and weighting are not provided. The validation comments described in the source emphasize clearer instructional steps, improved contextual negotiation examples, greater precision of language, and practical guidance for student podcast production. Such recommendations are consistent with formative product review, and

their relevance does not depend on claims about improved achievement. Figure 4 presents the source manuscript's expert-evaluation summary.

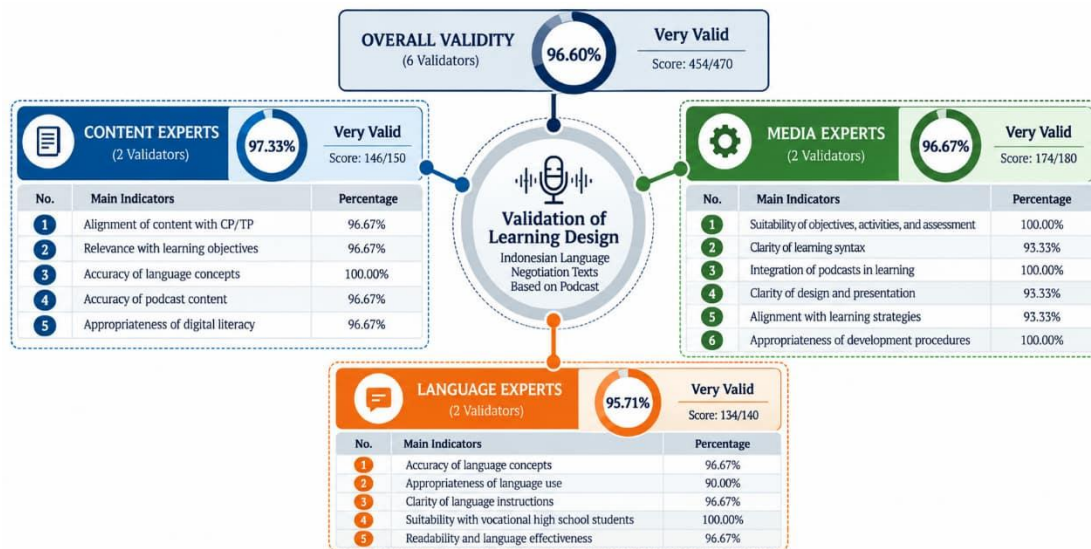


Figure 4. Expert validation summary reproduced from the source manuscript.

Limited-Trial Framework and Proposed Refinements

The manuscript specified a limited-scale evaluation involving 15 Grade X DKV students, addressing readability, comprehension, podcast accessibility, learning activity sequence, time allocation, participation, and user responses. The corresponding matrix mainly identifies aspects to be examined and possible revisions; it does not supply observed questionnaire records, interview excerpts, or classroom field notes. The numerical practicality indicator of 87.29%, with podcast attractiveness and perceived usefulness reported as 91.67% and time allocation as 81.67%, was explicitly derived from simulated questionnaire responses. Accordingly, these values are not empirical evidence of practicality and are retained only in Appendix A. Table 4 describes the refinement directions supplied in the source without treating them as demonstrated changes in user performance.

Table 4. Proposed Refinements Based on the Limited Trial Framework

Design aspect	Refinement direction given in the source
Language and instructions	Shorten directions and provide clearer step-by-step project guidance
Negotiation scenarios	Develop additional agribusiness-related examples and model scripts
Audio accessibility	Provide reusable MP3 audio through online and offline access
Project organization	Specify group responsibilities, recording steps, and teacher scaffolding
Time allocation	Balance analysis, rehearsal, production, review, and reflection
Assessment	Clarify speaking-performance and podcast-quality rubric descriptors

Implementation and Evaluation Status

The intended main implementation involved 35 Grade X ATPH students and a one-group pretest–posttest performance comparison, accompanied by observations and teacher and student interviews. In the source manuscript, however, the paired test scores, normality-related descriptive summaries, and qualitative findings matrices were illustrative. Therefore, this revision does not describe them as completed assessment, classroom observation, or interview results. The design remains a documented developmental product with reported expert ratings and a proposed testing protocol. Its evaluation can be extended by collecting actual learner performance, implementation records, and participants' responses while respecting the different evidentiary roles of each source.

Discussion

The most defensible outcome of the development process is a structured instructional prototype grounded in a specific language-learning difficulty. The earlier ATPH assessment identified speaking as the only domain below the local mastery criterion, providing a more focused rationale than a generic appeal to digital innovation. In turn, the product connects negotiation-text content with oral rehearsal, recording, and performance-based feedback. Research

on podcast use in language learning suggests that repeated listening and audio creation can support practice, but such opportunities should not be mistaken for observed learning gains in the present study (Chaves-Yuste & de-la Peña, 2023; Ramirez, 2024; Suvarnaphaet & Suvarnaphaet, 2023). The main implication is that the designed learning sequence is relevant to an identified instructional need and warrants actual classroom evaluation.

The expert percentages indicate favorable judgments about content, media, and language, although they measure product appraisal rather than participant outcomes. The reported ratings were close across domains, with linguistic evaluation marginally lower than content and media ratings, suggesting that the revision of clarity and wording is pedagogically reasonable. Without item scores, the overall index of 96.60% cannot be independently reconstructed, so its interpretation is limited to the level reported in the source. This cautious treatment reflects the distinction between a sound instructional design and evidence that a design works once enacted (LaMarca & LaMarca, 2024; Farrow et al., 2024). An appropriate next step is to examine whether teachers can implement the activities and criteria consistently, instead of deriving claims of effectiveness from expert scores.

Positioning podcast creation as the project outcome gives oral negotiation an object that students can replay and revise. This differs from using podcasts solely as ready-made listening materials because students must organize a message for an imagined negotiation partner, coordinate roles, and consider audience understanding. Investigations of learner-generated podcasts have described this potential for authentic assessment, collaborative work, and communicator confidence (Wakefield et al., 2023; Vainieri et al., 2024; Perry, 2024; Carson, 2024). Yet podcast production also introduces technical tasks that may consume time otherwise available for negotiation practice, a consideration consistent with the source's proposed refinements. Consequently, the value of the audio product lies in its alignment with language objectives and feedback, not in media production for its own sake.

Vocational contextualization strengthens the interpretability of negotiation tasks by giving students a defined setting for choosing language. Scenarios involving agricultural marketing, product prices, customer service, or partnerships create reasons to formulate proposals, disagree politely, and close an agreement. Work on project-based and vocational education has likewise stressed the relationship between authentic tasks, communication, teamwork, and discipline-relevant outcomes (Li & Rohayati, 2024; Dias-Oliveira et al., 2024; Lee & Lee, 2024; Sau & Sudira, 2025; Beigzadeh et al., 2024). At the same time, findings obtained in tertiary business courses or other vocational programs cannot establish the employability effects of a Grade X Indonesian-language module. The contribution here is thus a context-specific design connection between language curriculum and professional communication practices, not a demonstrated improvement in job readiness.

The project sequence is also consistent with research identifying teacher scaffolding, feedback, reflection, and student choice as components of enacted project-based learning. Experienced project-based teachers establish authentic questions while continually monitoring collaboration and supporting revision (Pupik Dean et al., 2023; Ikävalko et al., 2024). A related study found that designing project elements did not automatically guarantee high-quality classroom enactment (Farrow et al., 2024). For the proposed podcast activities, this means teachers would need to differentiate linguistic feedback from feedback on recording equipment, role distribution, or audio editing. The present manuscript specifies these design features, but no observed implementation record demonstrates how well teachers or students enacted them. That distinction is important when interpreting the revised product's practical contribution.

The literature supports a plausible basis for integrating digital audio into communication instruction without supplying a universal prediction of success. Empirical and synthesis studies across different educational settings report language-related or collaborative outcomes from podcast tasks, but the direction and magnitude depend on learners, activity structure, measures, and comparison conditions (Mekheimer, 2025; Gudkova & Shadrina, 2025; Fantini, 2024; Pratiwi et al., 2024; Zhang & Ma, 2023). The recent umbrella review by Farshad and Fortin (2026) further cautions that methodological limitations in project-based learning meta-analyses constrain certainty about effect sizes. For this reason, neither the class-mean normalized gain of 0.442 nor the simulated paired-test significance presented in the original draft can be invoked as support for this intervention. They illustrate a possible analytic procedure, not a classroom finding.

The evidence boundary also guides the next phase of development. A rigorous classroom study would need observed student scores, a transparent speaking rubric, documented implementation, and independently collected teacher or student responses before integrating qualitative and quantitative interpretations. A one-group pretest–posttest design could describe change over time, but it would not isolate podcast instruction from maturation, repeated testing, or other simultaneous learning experiences. Studies of communicative tasks and situated digital resources suggest examining participation and interaction as process outcomes in addition to test scores (Shen & Cheng, 2024; Salih & Omar, 2024; Eklund & Isotalus, 2024; Boobalan et al., 2024). Evidence from future implementation would

then determine whether the prototype is usable and educationally helpful in its specific vocational setting. Until then, its novelty should be stated as an instructional architecture linking ADDIE, PjBL, Indonesian negotiation texts, and podcast production, rather than as proven instructional effectiveness.

IMPLICATIONS, LIMITATIONS, AND FUTURE RESEARCH

For practitioners, the developed materials offer a coherent starting point for teaching oral negotiation through an accessible audio project in an agribusiness program. The module can be adapted by changing vocational scenarios while maintaining the learning outcomes, rehearsal sequence, assessment rubric, and reflection stage. Several limitations are substantive: the preliminary proficiency assessment concerned a preceding cohort; available expert results did not include underlying item-level ratings; the student-practicality values were simulated; and there were no observed pretest–posttest scores or interview transcripts to establish implementation quality or learner improvement. The planned effectiveness evaluation also lacked a comparison group. Subsequent research should report observed student-level speaking performances and qualitative implementation evidence, examine feasibility across vocational specialties, and use a more informative comparison design where possible. The manuscript therefore advances an evaluated design concept, not an empirical impact estimate.

CONCLUSION

This research developed a podcast-based instructional design for Grade X Indonesian-language negotiation texts at SMK Negeri 1 Simpang Hilir through the ADDIE framework integrated with PjBL. The four-meeting module organizes negotiation-text analysis, contextual script development, audio production, presentation, and reflection around workplace-related communication tasks. The source manuscript reported expert validity percentages of 97.33% for content, 96.67% for media, 95.71% for language, and 96.60% overall. These ratings are favorable as reported, but cannot substitute for observed evidence of student learning. Because the source's practicality ratings and pretest–posttest statistics were simulated, the present article makes no claim that the intervention has been empirically shown to improve speaking performance, practicality, or workplace readiness. Its contribution is a documented instructional prototype and a defined path for future empirical evaluation.

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AUTHOR CONTRIBUTION STATEMENT

Marnilawati contributed to conceptualization, instructional development, data organization, and manuscript drafting. Martono and Warneri contributed academic supervision and critical revision; Aunurrahman, Henny Sanulita, and Aini Andria Shirin Anuarudin contributed scholarly review, instructional considerations, and manuscript refinement, as described in the source statement. All authors reviewed the final manuscript. Martono is identified as corresponding author in the source's author-information section.

AI DISCLOSURE STATEMENT

Generative AI assistance was used for academic-language editing, organization, and editorial refinement of this manuscript. The authors remain responsible for checking the accuracy of the evidence, citations, analytical distinctions, and final scholarly claims. In particular, no simulated numerical outputs are represented as empirical student findings.

REFERENCES

- Badan Standar, Kurikulum, dan Asesmen Pendidikan (BSKAP). (2024). Capaian pembelajaran pada pendidikan anak usia dini, jenjang pendidikan dasar, dan jenjang pendidikan menengah pada Kurikulum Merdeka. BSKAP.
- Beigzadeh, A., Bazayr, H., Delzendeh, M., Razmi, M. H., & Sharifi, N. (2024). Comparing the effect of lecture method and cooperative teaching method on the learning, communication skills, and attitudes of students: A quasi-experimental study. *Frontiers in Education*, 9, Article 1449538. <https://doi.org/10.3389/feduc.2024.1449538>
- Bond, M., Bedenlier, S., Marín, V. I., & Händel, M. (2021). Emergency remote teaching in higher education: Mapping the first global online semester. *International Journal of Educational Technology in Higher Education*, 18, Article 50. <https://doi.org/10.1186/s41239-021-00282-x>

- Boobalan, R., Loganathan, S., & Gyamfi, A. (2024). Augmentation of communicative skills among rural high school students in India. *Frontiers in Education*, 9, Article 1413643. <https://doi.org/10.3389/feduc.2024.1413643>
- Branch, R. M. (2009). *Instructional design: The ADDIE approach*. Springer. <https://doi.org/10.1007/978-0-387-09506-6>
- Budiasningrum, R. S., & Rosita, R. (2022). Using podcasts to improve listening and speaking skills: Literature review. *JOLADU: Journal of Language Education*, 1(1). <https://doi.org/10.58738/joladu.v1i1.11>
- Carson, L. (2024). Extending the dialogic space: Developing interprofessional expertise through a student-created podcast. *Scandinavian Journal of Educational Research*, 68(5), 1039–1054. <https://doi.org/10.1080/00313831.2023.2196287>
- Chan, C. S. C. (2021). Helping university students discover their workplace communication needs: An eclectic and interdisciplinary approach to facilitating on-the-job learning of workplace communication. *English for Specific Purposes*, 64, 55–71. <https://doi.org/10.1016/j.esp.2021.07.002>
- Chaves-Yuste, B., & de-la Peña, C. (2023). Podcasts' effects on the EFL classroom: A socially relevant intervention. *Smart Learning Environments*, 10, Article 20. <https://doi.org/10.1186/s40561-023-00241-1>
- Cinthia, F. C., Hariraj, N., Karthikeyan, C., Thamaraiselvi, S. P., & Manivasakan, S. (2025). The role of podcasts in agricultural extension: Enhancing farmer-to-farmer learning. *Plant Science Today*. <https://doi.org/10.14719/pst.9504>
- Darmuki, A., Hidayati, N. A., & Esteban, A. M., Jr. (2026). Project-based learning podcast as pedagogical design: A case study of student speaking learning. *Jurnal Sastra Indonesia*, 15(1). <https://doi.org/10.15294/jsi.v15i1.44777>
- Dias-Oliveira, E., Pasion, R., Cunha, R. V. D., & Coelho, S. L. (2024). The development of critical thinking, team working, and communication skills in a business school: A project-based learning approach. *Thinking Skills and Creativity*, 54, Article 101680. <https://doi.org/10.1016/j.tsc.2024.101680>
- Efendi, A. Y., & Astutik, Y. (2024). Podcasts boost listening skills in vocational high school students. *Indonesian Journal of Education Methods Development*, 19(3). <https://doi.org/10.21070/ijemd.v19i3.845>
- Eklund, M., & Isotalus, P. (2024). Having it both ways: Learning communication skills in face-to-face and online environments. *Frontiers in Education*, 9, Article 1270164. <https://doi.org/10.3389/feduc.2024.1270164>
- Fantini, E. (2024). Podcasting for interdisciplinary education: Active listening, communication and interpersonal competencies. *Humanities and Social Sciences Communications*, 11, Article 1556. <https://doi.org/10.1057/s41599-024-04119-6>
- Farrow, J., Kavanagh, S. S., Samudra, P., & Pupik Dean, C. (2024). The promise of the project to student-centered learning: Connections between elements, curricular design, and practices of project based learning. *Teaching and Teacher Education*, 152, Article 104776. <https://doi.org/10.1016/j.tate.2024.104776>
- Farshad, S., & Fortin, C. (2026). An umbrella review of meta-analyses on project-based learning: Effects on academic achievement, higher-order thinking, and 21st-century skills. *Educational Research Review*, 52, Article 100809. <https://doi.org/10.1016/j.edurev.2026.100809>
- Firdausiyah, F., & Rohaniyah, J. (2024). Learning speaking through podcast for FLDP students of English department at IAIN Madura. *International Journal of English Education and Linguistics*, 6(2). <https://doi.org/10.33650/ijoeel.v6i2.9702>
- Gudkova, O. V., & Shadrina, O. V. (2025). Podcast design in EAL project-based learning: Interdisciplinary quasi-professional communication. *Journal of Teaching English for Specific and Academic Purposes*, 13(1). <https://doi.org/10.22190/JTESAP250125016G>
- Hananingsih, A. (2026). Project-based learning in higher vocational education: Bridging English communication and digital marketing competencies. *Journal of Literature Language and Academic Studies*, 5(1). <https://doi.org/10.56855/jllans.v5i1.2169>
- Ikävalko, T., Pernaa, J., & Haatainen, O. (2024). Promoting institutional collaboration through a joint project-based learning course: A case study of upper secondary school and university students' experienced relevance. *Frontiers in Education*, 9, Article 1347085. <https://doi.org/10.3389/feduc.2024.1347085>
- Karimova, Z. R. (2024). The use of podcasts and video casts to improve students' oral speech competence. *International Journal of Pedagogics*, 4(4). <https://doi.org/10.37547/ijp/volume04issue04-03>
- Khakimova, E. M. (2023). Russian-language podcasts as modern discursive practice and research subject. *Vestnik Tomskogo Gosudarstvennogo Universiteta, Filologiya*, 84. <https://doi.org/10.17223/19986645/84/4>
- LaMarca, V. J., & LaMarca, J. M. (2024). Using the ADDIE model of instructional design to create programming for comprehensive ABA treatment. *Behavior Analysis in Practice*, 17(2), 371–388.

- Larionova, I., & Kapysheva, G. (2023). Pedagogical conditions of creating podcasts as a means of developing language. *Bulletin Series of Philological Sciences*, 84(2). <https://doi.org/10.51889/2959-5657.2023.84.2.011>
- Lee, Y., & Lee, B. (2024). Developing career-related skills through project-based learning. *Studies in Educational Evaluation*, Article 101378. <https://doi.org/10.1016/j.stueduc.2024.101378>
- Lim, M. H., & Aryadoust, V. (2022). A scientometric review of research trends in computer-assisted language learning (1977–2020). *Computer Assisted Language Learning*, 35(9). <https://doi.org/10.1080/09588221.2021.1892768>
- Li, M., & Rohayati, M. I. (2024). The relationship between learning outcomes and graduate competences: The chain-mediating roles of project-based learning and assessment strategies. *Sustainability*, 16(14), Article 6080. <https://doi.org/10.3390/su16146080>
- Mekheimer, M. A. (2025). Beyond the textbook: A year-long exploration of VODcasts in EFL education. *Education and Information Technologies*, 30, 4777–4793. <https://doi.org/10.1007/s10639-024-12900-y>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE Publications.
- Musayeva, N., Sabirova, G., Xadjikurbanova, G., Yuldasheva, S., Akhmadaliyev, A., & Djumabaeva, J. (2025). Developing listening comprehension using podcasts in second language education: A systematic overview of recent pedagogical innovations (2019–2025). *Forum for Linguistic Studies*, 7(8), 482–497. <https://doi.org/10.30564/fls.v7i8.10287>
- Perry, S. (2024). Podcasting as a form of assessment: Increasing student motivation in academic English-speaking assessment. *Language Testing in Asia*, 14, Article 15. <https://doi.org/10.1186/s40468-024-00288-y>
- Pratiwi, S. A. A., Rukminingsih, R., & Mumtazah, L. D. (2024). The impact of project based learning using podcast on student speaking skill. *Scripta: English Department Journal*, 11(2), 177–186. <https://doi.org/10.37729/scripta.v11i2.5442>
- Pupik Dean, C. G., Grossman, P., Enumah, L., Herrmann, Z., & Kavanagh, S. S. (2023). Core practices for project-based learning: Learning from experienced practitioners in the United States. *Teaching and Teacher Education*, 133, Article 104275. <https://doi.org/10.1016/j.tate.2023.104275>
- Qura, U., Ibrahim, N., Yanti, P. G., & Baadilla, I. (2022). Pengaruh podcast (siniar) YouTube terhadap peningkatan keterampilan berbicara. *Ranah: Jurnal Kajian Bahasa*, 11(2). <https://doi.org/10.26499/rmh.v11i2.5147>
- Ramadhani, J. S., Firmansyah, M. B., Wilujeng, I. T., Putri, N. N., & Nafisah, D. (2023). Pemanfaatan podcast Spotify sebagai media pembelajaran Bahasa Indonesia. *Jurnal Ilmu Pendidikan (JIP) STKIP Kusuma Negara*, 14(2). <https://doi.org/10.37640/jip.v14i2.1588>
- Ramirez, M. G. (2024). The use of podcasts for language learning: A systematic review of literature. *International Journal of English Language Studies*, 6(1), 47–53. <https://doi.org/10.32996/ijels.2024.6.1.4>
- Safar, M., Masruddin, & Hartina, S. (2025). The impact of podcast video creation on students' speaking proficiency in project-based learning. *EDUTREND: Journal of Emerging Issues and Trends in Education*. <https://doi.org/10.59110/edutrend.495>
- Sagitova, R. R., Shakirova, A. A., Gizyatova, L. A., & Khanipova, R. R. (2023). Developing cross-cultural foreign language communication via mobile technologies: Podcasting. *Journal of Research in Applied Linguistics*, 14(3). <https://doi.org/10.22055/rals.2023.19377>
- Salih, A. A., & Omar, L. I. (2024). Enhancing EFL learners' engagement in situational language skills through clustered digital materials. *Frontiers in Education*, 9, Article 1439104. <https://doi.org/10.3389/educ.2024.1439104>
- Sau, S. S., & Sudira, P. (2025). Improving students' collaboration and communication skills through project-based digital learning in plantation and herbal. *International Journal of Research and Innovation in Social Science*, 9(10), 9766–9776. <https://doi.org/10.47772/IJRISS.2025.910000798>
- Shen, Z., & Cheng, C. (2024). Effects of communication mode on EFL learners' engagement and request learning. *Frontiers in Education*, 9, Article 1454387. <https://doi.org/10.3389/educ.2024.1454387>
- Suvarnaphaet, K. M., & Suvarnaphaet, P. (2023). Use of podcasts to develop students' speaking skills. *Humanities, Arts and Social Sciences Studies*, 23(1). <https://doi.org/10.14456/hasss.2023.1>
- Tymoshchuk, N. (2023). Podcast application in foreign language learning and teaching: Theoretical aspect. *Baltic Journal of Legal and Social Sciences*, 1. <https://doi.org/10.30525/2592-8813-2023-1-16>
- Vainieri, I., Thackeray, L., Hillman, S., Perez, A., Roberts, R., & Panagiotopoulou, E. (2024). Evaluating podcasts as a science communication assessment for postgraduate students. *Innovations in Education and Teaching International*, 61(6), 1446–1459. <https://doi.org/10.1080/14703297.2023.2267047>

- Wakefield, A., Pike, R., & Amici-Dargan, S. (2023). Learner-generated podcasts: An authentic and enjoyable assessment for students working in pairs. *Assessment & Evaluation in Higher Education*, 48(7), 1025–1037. <https://doi.org/10.1080/02602938.2022.2152426>
- Widodo, S. F. A., Munadi, S., Harjanto, C. T., Prasetya, T. A., & Muflih, B. K. (2025). Managing soft skills development in vocational higher education: A case study of institutional practices in Indonesia. *Jurnal Pendidikan Vokasi*, 15(2). <https://doi.org/10.21831/jpv.v15i2.73825>
- Woldemariam, A. Z. (2023). Selection and evaluation of podcasts in teaching listening comprehension. *Journal of the Faculty of Education*, 1(17). <https://doi.org/10.60037/edu.v1i17.1186>
- Yaqin, M. A., & Al Halim, M. L. (2023). The effectiveness of project-based learning through Spotify podcasts media in teaching speaking. *Reforma: Jurnal Pendidikan dan Pembelajaran*, 13(1), 126–138. <https://doi.org/10.30736/rf.v13i1.760>
- Yeh, H. C., Chang, W. Y., Chen, H. Y., & Heng, L. (2021). Effects of podcast-making on college students' English speaking skills in higher education. *Educational Technology Research and Development*, 69, 2845–2867. <https://doi.org/10.1007/s11423-021-10026-3>
- Zhang, L., & Ma, Y. (2023). A study of the impact of project-based learning on student learning effects: A meta-analysis study. *Frontiers in Psychology*, 14, Article 1202728. <https://doi.org/10.3389/fpsyg.2023.1202728>

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AUTHOR CONTRIBUTION STATEMENT

Mrn contributed to the research conceptualization, methodological design, data collection, formal analysis, and preparation of the original manuscript draft, and was responsible for coordinating the publication process and managing scholarly correspondence as the *corresponding author*. Mr and Wr provided academic supervision, methodological guidance, critical evaluation, and substantive review of the research findings and manuscript. Au, Aasa, and Hs contributed to research validation, critical analysis, and refinement of the manuscript's scholarly content, particularly regarding language instruction, instructional design, and academic writing quality. All authors participated in reviewing, revising, and approving the final version of the manuscript and accept responsibility for their respective contributions in accordance with the principles of research integrity and ethical scholarly publishing.

AI DISCLOSURE STATEMENT

The authors acknowledge the use of OpenAI's ChatGPT solely as an assistive tool during manuscript preparation, particularly for translating Indonesian text into academic English, refining academic language, correcting grammatical errors, ensuring terminological consistency, and supporting editorial improvements. The use of artificial intelligence was limited to language-related and editorial assistance and did not replace the authors' intellectual contributions, independent scholarly judgment, research design, methodological decisions, data collection, statistical analysis, or interpretation of findings. All AI-assisted outputs were critically evaluated, verified, and revised by the authors to preserve the accuracy of the research content, numerical data, citations, and scientific conclusions, including the distinction between simulated analytical results and empirical findings. AI was not used as an independent source of scientific evidence or as a substitute for human academic responsibility. The authors retain full responsibility for the originality, accuracy, transparency, research integrity, and final content of the manuscript.

Marnilawati

Email: f2151251008@student.untan.ac.id

Universitas Tanjungpura Pontianak

Jl. Prof. Dr. H. Hadari Nawawi, Pontianak, West Kalimantan, 78124, Indonesia.

*** Martono (Corresponding Author)**

Email: martono@fkip.untan.ac.id

Universitas Tanjungpura Pontianak

Jl. Prof. Dr. H. Hadari Nawawi, Pontianak, West Kalimantan, 78124, Indonesia.

Warneri

Email: warneri@fkip.untan.ac.id

Universitas Tanjungpura Pontianak

Jl. Prof. Dr. H. Hadari Nawawi, Pontianak, West Kalimantan, 78124, Indonesia.

Aunurrahman

Email: aunurrahman@fkip.untan.ac.id

Universitas Tanjungpura Pontianak.

Jl. Prof. Dr. H. Hadari Nawawi, Pontianak, West Kalimantan, 78124, Indonesia.

Henny Sanulita

Email: henny.sanulita@fkip.untan.ac.id

Universitas Tanjungpura Pontianak

Jl. Prof. Dr. H. Hadari Nawawi, Pontianak, West Kalimantan, 78124, Indonesia.

Aini Andria Shirin Anuarudin

Email: andria@uitm.edu.my

Universiti Teknologi MARA Malaysia

Jl. Jalan Ilmu 1/1, 40450 Shah Alam, Selangor Darul Ehsan, Malaysia.