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Empowering Teachers at Sekolah Rakyat in South Sulawesi to Design Hybrid Bilingual Learning Modules

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ABSTRACT

Teachers at Sekolah Rakyat Menengah Atas (SRMA) 27 Takalar face challenges in preparing learning materials that combine classroom and online activities with Indonesian-English instructional content. Preliminary school discussions indicated that approximately 80% of teachers had not attended training on hybrid or bilingual module development. This community partnership program used participatory workshops and mentoring to support 15 teachers in designing technology-supported bilingual modules. Activities included needs identification, design training, collaborative module production, implementation support, evaluation, and plans for a teacher learning community. An evaluation involving 11 teachers used ten five-point items assessing conceptual and technopedagogical understanding. Reported mean scores increased from 37.55 to 44.09 out of 50; an additional N-Gain summary was 0.44 (moderate). The digital-readiness chart recorded an increase in module-design readiness from 54.55% to 100% and in bilingual-content confidence from 72.73% to 90.91%. Teachers also practiced using digital learning platforms and artificial intelligence tools, including ChatGPT and NotebookLM. The program produced interactive hybrid bilingual module prototypes incorporating offline and online activities, multimedia, and digital assessment. The findings suggest promising short-term changes in the evaluated teachers' reported readiness and scores, while providing a context-specific model for continuing professional support.

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INTRODUCTION

Digital transformation has expanded the range of teaching resources available to schools, but access to platforms does not automatically produce well-designed learning experiences. The central challenge is to connect instructional objectives, learning activities, language choices, and digital tools within a coherent module. Hybrid learning can support this alignment by combining face-to-face participation with online access, provided that the two modes are pedagogically complementary (Santandreu Calonge et al., 2023; Schmid et al., 2023). Reviews of teachers' digital practices show that professional competence and instructional design are often more consequential than the availability of devices alone (Wohlfart & Wagner, 2023; Lohr et al., 2024). Consequently, a community-service initiative aimed at teachers should focus on the practical design decisions required to convert available technology into usable teaching materials (Afonso et al., 2025).

This challenge is visible at Sekolah Rakyat Menengah Atas (SRMA) 27 Takalar, a secondary-level school in Sentra Pangurangi, Pattoppakang Village, Takalar Regency, South Sulawesi. Preliminary observations indicated that classroom instruction largely relied on conventional materials and teacher-directed activities, despite teachers having access to laptops, smartphones, and school internet facilities. Conversations with school representatives suggested that approximately 80% of the teachers had not received training in developing hybrid or bilingual materials. The school had 15 teachers from different subject areas, creating a practical need for resources that could be adapted across disciplines. The situational assessment therefore identified a mismatch between the school's available digital infrastructure and the teachers' experience in creating

structured technology-supported lessons (Boonmoh & Sanmuang, 2024; Hadi et al., 2025; Theodorio et al., 2024). Figure 1 documents the classroom setting observed during the initial assessment of learning practices at SRMA 27 Takalar.



Figure 1. Existing classroom learning activities at SRMA 27 Takalar

The photograph shows the physical setting in which instruction ordinarily takes place. It situates the partnership within an existing face-to-face teaching environment. The visual record provides context for the proposed integration of online activities. It does not measure student engagement or learning achievement. Its relevance is to clarify the setting addressed by the teacher-development program.

A hybrid bilingual module is more demanding than a digital reproduction of a printed worksheet because learning activities must remain connected across environments while presenting subject content in Indonesian and English. Teachers need to determine which concepts require bilingual explanation, when digital media add instructional value, and how classroom and online tasks relate to one another (Roig et al., 2025; Zou & Jiang, 2025). Studies of multilingual pedagogy also caution that language integration depends on teacher understanding and classroom context rather than mechanical translation alone (Hamman-Ortiz & Romero, 2025; Lyon, 2025). Multimedia and interactive elements may support access to information, yet they need to serve clearly defined learning purposes (Firdaus & Pahlevi, 2022; Monib et al., 2025; Rowe & Pennington, 2025). The practical implication for SRMA 27 Takalar was the need to guide teachers through the complete process of structuring, creating, and refining learning modules. Figure 2 illustrates the types of instructional resources encountered during the early school assessment.

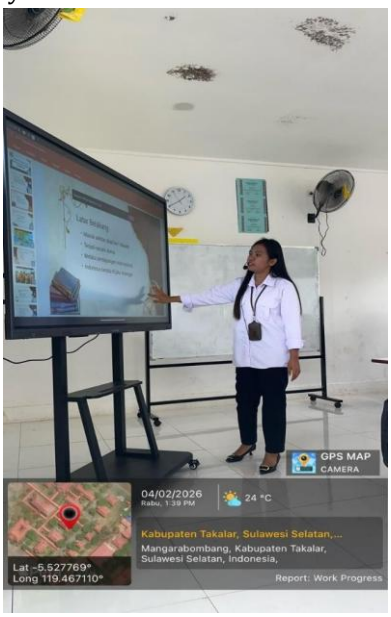


Figure 2. Example of the teaching resources used at SRMA 27 Takalar

The photograph records an example of technology used in a teaching setting. It indicates that the school was not operating without digital equipment. However, the availability of a display does not in itself establish a systematic hybrid learning design. The program therefore focused on how resources could be integrated into structured instructional modules. The image contextualizes the capacity-building need rather than serving as an outcome measure.

Digital competence also includes teachers' capacity to select learning-management systems, develop accessible multimedia, and use tools responsibly in lesson preparation. Reviews identify substantial variation in how teachers' digital competence is defined and assessed, suggesting that claims about improvement must be linked to the particular tasks being evaluated (Claro et al., 2024; Nguyen & Habók, 2024). Professional development is more useful when it connects explicit instruction with modeling, practice, collaborative feedback, and opportunities to apply the resulting knowledge (Huang et al., 2024; Norvia et al., 2023; Tondeur et al., 2025). Generative artificial intelligence adds another design option, including support for drafting or adapting materials, but its outputs still require professional judgment (Tan et al., 2025; Daher, 2025; Ermanto et al., 2025). These considerations informed the selection of hands-on training and mentoring rather than a presentation-only intervention. The initial mapping of facilities and learning conditions is represented in Figure 3.



Figure 3. Learning environment and available technological facilities at SRMA 27 Takalar

The image portrays teachers working in the setting of the partner school. It complements the description of available devices and internet access. Existing infrastructure provided a starting point for technology-supported module design. The principal gap addressed by the program concerned instructional use rather than the mere presence of equipment. This distinction guided the emphasis on pedagogical planning and teacher practice.

Research on professional development provides a basis for such a practical approach, while also showing that results depend on training design and the measures used. Meta-analytic evidence favors well-structured blended professional learning over relying on a single instructional format, although effects vary across programs and outcomes (Schmid et al., 2023; Stavermann, 2025). Studies of digital lesson design emphasize aligning technology with pedagogy instead of treating software features as learning goals (Børte & Lillejord, 2024; Chiu et al., 2024). In multilingual education, professional learning can also affect teachers' confidence in selecting language-support strategies, but those changes need not translate immediately into established classroom practice (Briceño et al., 2025; Moradi et al., 2026). The evidence therefore supports a school-specific intervention that assesses both the development process and teachers' immediate readiness without assuming that student outcomes will necessarily improve.

A second strand of research addresses AI-assisted instructional preparation and its limitations. Studies suggest that teachers can use generative AI to generate ideas, review lesson plans, and produce supporting

resources, while risks related to accuracy, overreliance, and ethical judgment remain important (Lee & Zhai, 2024; Moorhouse et al., 2024). Research on teacher development further distinguishes basic familiarity with AI applications from the pedagogical competence required to use their outputs appropriately (Ebrahimi et al., 2025; Huang et al., 2025). Programs that combine AI support with feedback and purposeful instructional design offer useful points of comparison for shorter community partnerships (Wang et al., 2025; Fernández Cerero et al., 2025). Nevertheless, the literature does not remove the need to understand how such practices can be introduced within the particular resources, subject demands, and teacher experiences of SRMA 27 Takalar.

Against this background, the community partnership program addressed three related needs: teachers' limited experience designing hybrid bilingual modules, the limited availability of suitable models, and the underuse of existing learning technology. Its primary objective was to support the teachers of SRMA 27 Takalar in planning and producing modules that link face-to-face activities, online learning, bilingual content, multimedia, and assessment. The implementation combined participatory workshops, collaborative design, practical mentoring, and a sustainability-oriented teacher-learning-community plan. Program outcomes were documented through developed module prototypes, descriptive pretest and posttest summaries, and reported digital-readiness indicators. The practical contribution is a locally situated account of how teachers can be supported to move from access to instructional technology toward purposeful design and initial implementation.

METHOD

Program Design, Setting, and Participants

The activity was implemented as a community partnership empowerment program using participatory training and mentoring at Sekolah Rakyat Menengah Atas (SRMA) 27 Takalar, South Sulawesi. The school served as the partner institution, and 15 teachers from different subject areas participated in the program. Descriptive pretest and posttest summaries were available for 11 participants. Program activities focused on teachers' design and use of hybrid bilingual learning modules rather than testing students' academic achievement. The partnership was organized around the school's identified needs and the teachers' participation in module development.

Implementation Procedure

The work followed an ordered sequence of school outreach and needs mapping, module-design training, collaborative development, implementation-oriented mentoring, evaluation, and sustainability planning. The project team introduced its objectives and discussed the teachers' needs during the orientation stage. Workshops then addressed hybrid instructional principles, bilingual content development, digital media production, and learning management tools. Participants worked in subject-related groups to prepare module drafts, after which consultations and practical simulations supported refinement. The final stage emphasized sharing practices and maintaining a teacher learning community beyond the organized training sessions. Figure 4 summarizes the sequence used to organize the partnership activities from school outreach to sustainability planning.

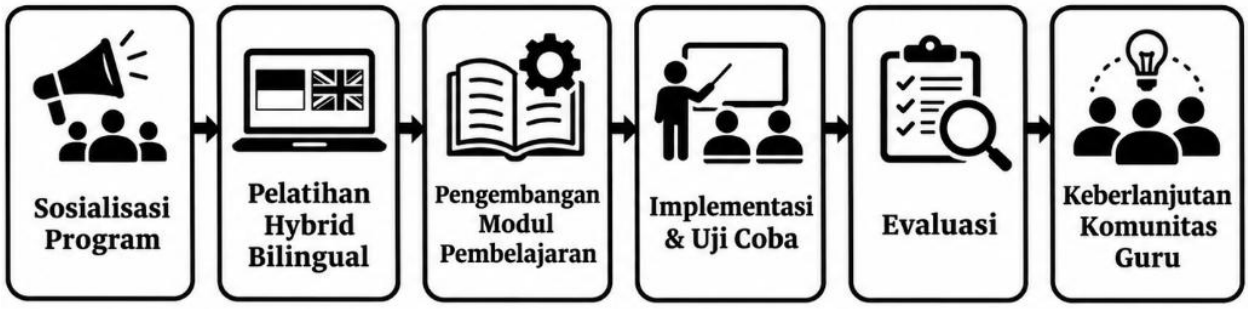


Figure 4. Operational stages of the community partnership program

The flowchart begins with program socialization and proceeds to hybrid bilingual training. It then shows module development followed by classroom-oriented implementation and evaluation. The final component concerns the continuity of teacher collaboration. The sequence illustrates the procedural logic of the program

rather than separate experimental treatment groups. Each stage supports the subsequent development and use of the teaching modules.

Training Materials and Module Development

The workshops introduced strategies for coordinating classroom and online tasks and for preparing Indonesian-English learning resources. Participants were introduced to Canva Education, Book Creator, and Google Docs for producing modules; CapCut and Canva for video or visual media; Quizizz and Kahoot for interactive assessment; and Google Classroom, Moodle, or Padlet as digital learning environments. The prototype design described in the program included learning objectives, instructions, bilingual instructional materials, offline and online activities, digital media, and assessments. Teachers developed materials collaboratively while facilitators provided pedagogical and technical feedback. The program also introduced ChatGPT and NotebookLM as tools to support content preparation, with teachers retaining responsibility for the instructional material. The integrated module concept and the tools introduced to participating teachers are illustrated in Figure 5.



Figure 5. Digital tools and instructional components included in the module design

The diagram places the hybrid bilingual module at the center of face-to-face and online learning. It depicts digital authoring, media editing, and learning-management applications as supporting tools. The represented instructional product combines Indonesian and English content with interactive learning activities. The diagram conveys the intended technical and pedagogical structure rather than a direct measurement of learning outcomes. Its purpose is to clarify what was transferred to teachers during the workshops.

Evaluation Instruments and Data Analysis

Program evaluation used pretest and posttest questionnaires, a module-quality assessment rubric, learning-process observations, and participant-perception surveys as described in the activity report. The quantitative instrument comprised ten items scored from 1 to 5, giving a maximum total score of 50, and covered conceptual understanding, technopedagogical skills, and the use of digital tools in hybrid bilingual module design. Descriptive statistics were presented for the 11 teachers included in the quantitative comparison, including sample size, minimum and maximum, mean, standard deviation, and variance. The evaluation also presented percentage-scale pretest/posttest summaries, an N-Gain classification, and a chart of digital-readiness indicators. Interpretations in this article remain descriptive and do not treat a change in group means as a formal test of statistical significance.

Implementation Support and Sustainability

After initial module production, the team provided in-person and online mentoring to support refinement and limited classroom-oriented trials. Teachers discussed the organization of bilingual materials, the

combination of offline and online tasks, and the use of interactive assessment. The program encouraged teachers to collaborate in subsequent module development and professional exchange. Guidance for subsequent preparation of hybrid bilingual modules was developed as a reference for teachers. These actions were included in the program design, while sustained changes in school practice were not evaluated as long-term outcomes.

RESULTS AND DISCUSSION

Results

Program Implementation and Module Production

The community partnership program engaged teachers of SRMA 27 Takalar in the development of hybrid bilingual learning materials through orientation, practical training, collaborative work, and mentoring. The early needs assessment informed the choice of activities, including workshops on hybrid instructional planning, bilingual material writing, interactive media production, and digital-platform use. Rather than asking teachers to adopt a single application, facilitators introduced several tools that could serve distinct instructional tasks. Participants then organized their work around subject-related learning materials, preparing drafts that combined classroom and online activities. Documentation of the workshop and practical sessions is presented in Figure 6.



Figure 6. Training, practical design activities, and teacher mentoring sessions

The photographs show program participants and facilitators during organized training activities. They place the module-development work within a participatory setting. The images support the account that the program included practical engagement rather than lectures alone. They do not provide a quantitative measure of teachers' competencies. Their principal function is to document the mode of implementation reported in the program.

The development process yielded an e-book or interactive PDF module prototype of approximately 20 to 30 pages. Its described components included learning objectives, bilingual content, face-to-face and online tasks, linked digital media, and learning activities or assessments. The team used consultations, simulations, and classroom-oriented mentoring to support revisions to module drafts. Module drafts were reviewed for content suitability, bilingual presentation, and interactive elements before further refinement. The principal documented output was an instructional prototype rather than evidence of improved student achievement. Figure 7 documents the participation of the university team and school partners in the community-service activity.



Figure 7. Group documentation of the SRMA 27 Takalar partnership activity

The photograph shows a group associated with the partnership program. The visible banner identifies the community-service context of the event. It is useful as documentation of program delivery and institutional collaboration. The photograph does not depict the pages or interactive functions of the finished learning module. Product characteristics are therefore described in the accompanying text rather than inferred from this image.

Pretest, Posttest, and Normalized-Gain Summaries

Teachers' reported conceptual and technopedagogical competencies were assessed with ten five-point questionnaire items before and after the workshop activities. The quantitative summary contained paired descriptive information for 11 of the 15 teachers involved in the wider community partnership. Each instrument allowed a maximum total score of 50. Table 1 presents the descriptive results of the assessment. The distribution and central tendency of the reported pretest and posttest scores are summarized in Table 1.

Table 1. Descriptive pretest and posttest scores of evaluated participants

Descriptive statistic	Pretest	Posttest
Sample size	11	11
Maximum possible score	50	50
Highest observed score	45	50
Lowest observed score	32	40
Mean score	37.55	44.09
Standard deviation	4.27	4.72
Variance	18.27	22.29

Table 1 includes 11 observations at each time point. The mean increased from 37.55 to 44.09 on a scale with a maximum of 50. The minimum increased from 32 to 40, while the maximum increased from 45 to 50. The reported standard deviation was slightly higher after training than before it. These are descriptive group summaries and do not establish that every participant improved. A participant-level visualization of the reported percentage-scale scores is provided in Figure 8.

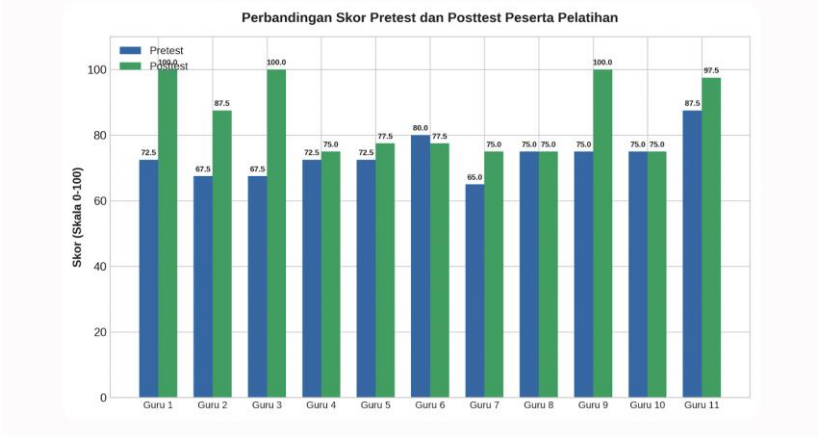


Figure 8. Participant-level pretest and posttest percentages shown in the activity report

The chart presents individual pretest and posttest bars for 11 teachers. Most posttest bars are higher than their corresponding pretest bars. Some bars appear unchanged, and at least one posttest bar is lower than the matching pretest bar. The figure therefore illustrates variation in individual trajectories rather than uniform improvement. Its percentage-scale presentation should be distinguished from the raw total-score summary in Table 1. The evaluation also included percentage-scale pretest and posttest scores and the normalized-gain classification shown in Table 2. These percentage figures are presented separately from the ten-item raw-score means in Table 1. The normalized-gain value was classified as moderate. Because these summaries use numerically different score presentations, their interpretations are kept distinct. Table 2 provides an additional summary of the percentage-scale scores and normalized gain.

Table 2. Reported percentage-scale summary and normalized-gain classification

Reported pretest score (%)	Reported posttest score (%)	Reported mean N-Gain	Category
73.64	85.45	0.44	Moderate

Table 2 lists percentage-scale summaries of 73.64 before training and 85.45 after training. The reported N-Gain is 0.44 and falls into the moderate category. These percentage entries are not direct conversions of the raw means presented in Table 1. The two displays should therefore not be merged into one score series without an established common basis. The category is reported descriptively and is not a substitute for a statistical significance test.

Digital Learning Platforms, Bilingual Readiness, and AI Use

The program also summarized participants' readiness and use of digital resources across five indicators. The visual comparison included readiness to design hybrid modules, confidence in bilingual content development, use of AI tools, development of digital learning media, and use of digital platforms. The strongest change displayed was in module-design readiness, from 54.55% to 100%, whereas digital-media development was reported at 100% at both measurement points. Figure 9 presents these indicators and makes the pattern of uneven changes visible. The pretraining and posttraining percentages for five technology- and language-related indicators appear in Figure 9.

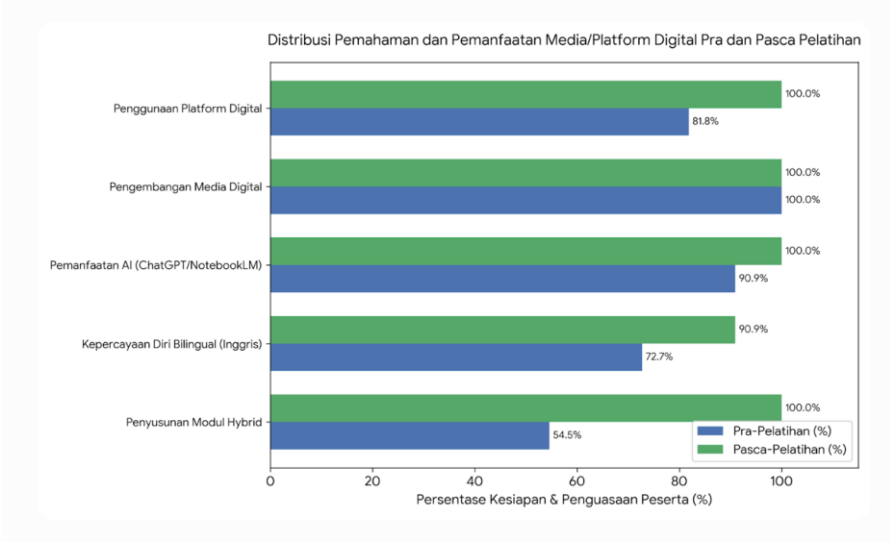


Figure 9. Reported digital-readiness indicators before and after training

Reported readiness to develop a hybrid module increased from 54.55% to 100%. Confidence in using Indonesian and English for teaching materials increased from 72.73% to 90.91%. The reported AI-use indicator rose from 90.91% to 100%, and digital-platform use rose from 81.82% to 100%. The digital-media-development indicator was already at 100% before training and remained at that level afterward. Thus, the chart shows different starting conditions and different changes across indicators.

During practical activities, teachers used or were introduced to Canva Education, Book Creator, Google Classroom, Moodle, CapCut, Quizizz, Kahoot, ChatGPT, and NotebookLM. The software tools served different purposes, from composing pages and interactive resources to preparing quizzes and supporting the organization of online learning. Participants expressed positive views about AI use during the activities, but

the percentages in Figure 9 reflect reported indicators rather than independent measures of AI-generated output quality. The documentary photographs in Figures 10 and 11 illustrate the participation-oriented nature of this component of training. Figure 10 offers documentary evidence of teachers' participation in the technology-supported training sessions.



Figure 10. Teachers participating in digital-module training activities

The photograph shows participants working in a shared training environment. It complements the narrative of guided activities with digital devices. The image indicates an opportunity for participants to interact with the program content. It does not quantify changes in platform skills or establish mastery. Those aspects are instead represented by the descriptive indicators in Figure 9. Figure 11 records another training session involving teachers working with digital learning resources.



Figure 11. A further view of hands-on participation during the program

The photograph adds context to the reported practice-oriented approach. Participants are visible using computers during an organized activity. The image is consistent with the program's emphasis on teacher engagement with digital tools. It does not serve as a pretest-posttest comparison or a measure of competency. Accordingly, it is retained as implementation documentation rather than labeled as a statistical figure.

Discussion

The central outcome of the SRMA 27 Takalar partnership was the movement from an identified need for structured hybrid bilingual materials toward the collaborative production of module prototypes. This matters because the school already possessed digital devices and internet access, but those resources were not being integrated systematically into lesson planning. Similar distinctions between infrastructure and teachers' pedagogical skills have been observed in broader research on educational digitalization (Wohlfart & Wagner, 2023; Lohr et al., 2024). The program responded by connecting technological decisions to learning objectives, bilingual content, and classroom-based activities, an approach consistent with the instructional alignment emphasized by Børte and Lillejord (2024) and Afonso et al. (2025). Within this particular school context, the most defensible claim is that a facilitated design process produced usable prototypes and opportunities for practice, not that school-wide learning quality had already been established to improve.

The increase in the reported mean questionnaire score from 37.55 to 44.09 suggests a positive short-term change in the assessed teachers' conceptual and technopedagogical responses. The shift is consistent with research indicating that explicit instruction supported by practical tasks and feedback can develop aspects of teachers' digital competence (Huang et al., 2024; Chiu et al., 2024). Nevertheless, the quantitative evidence remains descriptive, covers 11 evaluated teachers rather than the full 15-person activity group, and does not include a formal statistical test. The participant-level percentage chart also reveals that improvement was not uniform across individuals, cautioning against claims of a consistent gain for every teacher. Related work on teacher-development programs likewise reports different patterns across competencies, reinforcing the need to distinguish overall group trends from individual development (Hirt et al., 2025; Rahden et al., 2025).

The N-Gain of 0.44, classified as moderate, adds a descriptive perspective on the training evaluation, although it appears alongside percentage summaries that are not directly interchangeable with Table 1. For this reason, the category is most useful as a characterization of the reported normalized summary rather than as independent confirmation of intervention effectiveness. This distinction is important in a field where digital-competence assessment practices differ across instruments, constructs, and scoring conventions (Claro et al., 2024; Nguyen & Habók, 2024). The pattern of descriptive improvement remains relevant to local program evaluation, yet stronger comparative claims would require a consistently defined outcome measure and analytical framework. The present article therefore emphasizes observable program outputs and the direction of reported score changes rather than statistical or causal assertions.

The bilingual component made the intervention more specialized than general training on presentation software or digital classroom tools. Teachers were asked to combine Indonesian and English explanations while connecting online and classroom activities within the same instructional module. Research on multilingual teaching shows that professional learning involves decisions about language support, teacher confidence, and subject-specific adaptation, rather than simply adding a second language to existing materials (Hamman-Ortiz & Romero, 2025; Lyon, 2025). Findings on bilingual teachers' professional development similarly suggest that shifts in beliefs and confidence can precede changes in classroom implementation (Briceño et al., 2025; Moradi et al., 2026). Consequently, the increase in the reported bilingual-confidence indicator at SRMA 27 Takalar should be interpreted as an early readiness outcome, while the quality of bilingual interaction during sustained student instruction remains outside the available evaluation.

The readiness indicators reveal that participants entered the program with different levels of prior experience. Module-design readiness began comparatively low, while digital-media development was already reported at 100%, and the other indicators occupied intermediate positions. This pattern suggests that familiarity with general digital products may coexist with difficulty organizing those tools into an integrated instructional sequence, a concern also raised by studies of technology-aligned lesson design (Tondeur et al., 2025; Wang et al., 2025). It also helps explain why the program focused on producing coherent modules rather than repeatedly teaching basic software access. The program's practical implication is that future teacher workshops should distinguish between application familiarity, instructional design competence, and the capacity to sustain classroom use.

The introduction of ChatGPT and NotebookLM was a relevant aspect of training because teachers were exploring ways to prepare bilingual content and supporting resources. International studies describe opportunities for generative AI in drafting, analyzing, and refining educational materials, but also identify problems with factual accuracy, educational fit, and overreliance (Ali et al., 2024; Lee & Zhai, 2024; Lo et al., 2024; Mai et al., 2024; Marzano, 2026). Research on initial teacher education further indicates that guided

training can improve professional AI literacy, although gains in pedagogical judgment may differ from gains in technical familiarity (Moorhouse et al., 2024; Huang et al., 2025; Ebrahimi et al., 2025). In the SRMA program, the reported AI indicator reached 100% after training, but that figure alone cannot establish whether AI-supported materials were accurate or pedagogically suitable. Continued teacher review and subject-specific adaptation are therefore central to the responsible use of these applications (Biagini, 2025; Fernández Cerero et al., 2025).

The instructional prototype linked bilingual explanations, learning objectives, offline and online tasks, multimedia, and digital assessment in a single design. This combination is consistent with scholarship on blended instruction that emphasizes purposeful learning architecture rather than the number of technologies employed (Santandreu Calonge et al., 2023; Schmid et al., 2023; Zou & Jiang, 2025). Multimedia research and digital book-composition studies indicate that such formats can broaden the representational resources available to learners, but their benefits depend on the tasks and learners involved (Jauhiainen & Garagorry Guerra, 2024; Monib et al., 2025; Rowe & Pennington, 2025; Mangasak et al., 2025). The module model offers a concrete reference that teachers can adapt to different subject areas at SRMA 27 Takalar. However, the program did not measure subsequent student achievement or long-term classroom use, so benefits for learners remain prospective rather than demonstrated outcomes.

Sustainability was addressed through a proposed teacher learning community, continued collaboration, and guidance for developing additional modules. This orientation is consistent with research suggesting that professional development is strengthened when teachers receive collegial support, feedback, and opportunities to revisit their practices after formal workshops (Le et al., 2025; Stavermann, 2025; Shi et al., 2025; Yeh et al., 2026). It is also relevant to the barriers identified in studies of teachers' technology integration, where institutional support and instructional capacity interact (Chen et al., 2026; Theodorio et al., 2024). At the same time, a proposed community should not be treated as evidence that sustained collaboration has already occurred. The local contribution of this program lies in documenting a practical support model and its immediate outputs; future monitoring of module use and teacher collaboration would provide a stronger basis for understanding durability.

CONCLUSIONS

The community partnership program at SRMA 27 Takalar addressed a documented need for teacher support in designing hybrid bilingual learning modules. Through participatory training, collaborative production, and mentoring, teachers developed interactive module prototypes that brought together Indonesian-English content, classroom and online activities, digital media, and technology-supported assessment. The program involved 15 teachers, while the reported quantitative pretest and posttest evaluation covered 11 participants. Their mean questionnaire score increased from 37.55 to 44.09 out of 50, and an additional normalized-gain summary was reported as 0.44 (moderate). The documented changes support a cautious conclusion of improved short-term readiness and reported competency among the evaluated participants.

The outcomes suggest practical value in connecting existing school infrastructure with structured instructional design support rather than technology training alone. Further work at SRMA 27 Takalar can build on the developed prototypes through subject-specific adaptation, review of bilingual content, continued mentoring, and collaborative teacher exchange. Because the available evaluation did not measure sustained use or student learning, these remain important questions for subsequent implementation and program assessment. The broader relevance of the experience is the context-sensitive organization of teacher professional learning around tangible module development and iterative support.

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