

Development of Students' Worksheet based on Integrated Language Skills for Elementary School Level

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Abstract. English instruction in elementary schools still faces challenges in integrating the four language skills—listening, speaking, reading, and writing. Existing student worksheets often emphasize these skills in isolation, failing to reflect a holistic approach to language learning. This study aims to develop an English student worksheet based on integrated language skills tailored to the needs and characteristics of elementary school students. A Research and Development (R&D) method using the ADDIE model was employed. The stages of the study included: (1) Analysis—identifying teacher and student needs and reviewing the curriculum; (2) Design—structuring and formatting the worksheet; (3) Development—drafting and validating the worksheet through expert review; (4) Implementation—conducting limited and field trials; and (5) Evaluation—formative and summative evaluation to produce the final product. This paper focuses on the validation and initial testing of the integrated worksheet concept. The findings are expected to contribute to the development of more effective English teaching materials at the elementary level.

Keywords: R&D; Student Worksheet; Integrated Language Skills; English Language; Elementary School.

1 Introduction

In the current era of globalization, English proficiency has become an essential skill, even for elementary school students. English instruction at the primary level plays a strategic role in laying the foundation for introducing a foreign language to young learners. However, classroom realities reveal that English language teaching at this level still faces various challenges, particularly in developing effective and integrated learning materials.

A fundamental issue lies in the scarcity of teaching resources that comprehensively integrate the four language skills—listening, speaking, reading, and writing. English learning in elementary schools tends to be fragmented, where each language skill is taught in isolation without a clear connection to the others. This condition contradicts the holistic and integrated nature of language learning.

Student Worksheets, which are commonly used teaching materials in elementary schools, are often not designed based on an integrated language skills approach. Most existing worksheets still emphasize vocabulary and grammar mastery in isolation, providing limited opportunities for students to use language communicatively in meaningful contexts. According to Arsyad (2011), worksheets consist of task sheets that students are required to complete. These typically contain instructions or steps to accomplish a task and must clearly reflect the basic competencies to be achieved. Similarly, Majid (2013) defines worksheets as task sheets containing instructions and steps for completing assignments provided by teachers to students.

Effective English instruction should allow students to develop the four language skills simultaneously and interdependently. When learning a particular topic, students should be engaged in activities that naturally integrate listening, speaking, reading, and writing. For instance, after listening to a story (listening), students might discuss its content (speaking), read a related text (reading), and then write a response to the story (writing).

The cognitive development and learning characteristics of elementary students are also vital considerations in instructional material design. At this age, children tend to have a high level of curiosity and learn best through direct, concrete experiences. Therefore, any developed worksheet should accommodate these needs by offering engaging, interactive, and contextually relevant learning activities.

Moreover, the implementation of the Curriculum, which emphasizes a thematic-integrative approach to learning, provides a timely opportunity to develop English worksheets based on integrated language skills. This approach aligns with the principles of holistic and meaningful language learning, where language is acquired not merely as a linguistic system but also as a tool for communication within authentic contexts.

A needs analysis conducted in several elementary schools revealed that English teachers require worksheets that not only contain age-appropriate content but also facilitate the integrated development of language skills. Existing worksheets are perceived to fall short in meeting these needs.

2 Method

This study aimed to improve the English language skills of fourth-grade elementary school students by developing teaching materials based on integrated language skills. The research employed a Research and Development (R&D) approach, which involves a series of systematic steps to create new educational products (Gall, Gall, & Borg, 2003).

The study adopted the ADDIE model—Analyze, Design, Develop, Implement, and Evaluate. According to Hidayat (2021), the ADDIE framework is widely used to establish instructional

design and to develop effective learning products. Generally, the ADDIE model consists of five stages:

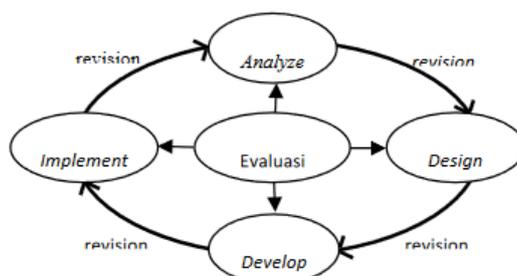


Fig. 1. The Stage of Research by ADDIE

Analysis Stage

The analysis phase was a fundamental step to obtain a comprehensive understanding of the needs related to the development of an integrated English worksheet for elementary students. Two main types of analysis were conducted: needs analysis and content analysis.

The needs analysis involved surveys with elementary school English teachers to identify the specific requirements for worksheet development based on current classroom conditions. This was followed by an analysis of elementary learners' characteristics to understand their cognitive, psychological, and social development stages, which were then used as a foundation for instructional material design. The curriculum and core competencies outlined in national education standards were also reviewed to identify the gaps between existing worksheets and the actual classroom needs.

Content analysis was conducted to identify essential English learning materials appropriate for elementary students. The researchers mapped the integration of the four language skills—listening, speaking, reading, and writing—to ensure a holistic and connected learning experience. Attention was also given to determining appropriate difficulty levels and selecting real-life contexts that could enhance meaningful learning.

Design Stage

The design stage was a creative phase where the analysis results were translated into a blueprint for worksheet development. The conceptual design began with outlining the integrated language skills structure, incorporating communicative and contextual learning approaches.

The format and layout of the worksheet were designed to be user-friendly and visually appealing to young learners, in accordance with instructional design principles. Integrated learning activities were planned to support the simultaneous development of the four language skills, along with the preparation of comprehensive evaluation tools to assess learning objectives.

The technical design included creating a consistent and easy-to-use worksheet template for both teachers and students. Visual elements and illustrations were carefully designed to aid conceptual understanding and enhance student motivation. Detailed user guides were included to ensure optimal implementation, and assessment rubrics were developed to provide clear, objective, and measurable evaluation criteria.

Development Stage

The development stage involved turning the worksheet design into an actual product ready for implementation. The process began with creating a draft worksheet based on the established design, supplemented by relevant supporting media to enrich students' learning experience. Comprehensive usage instructions were developed to assist teachers in implementation, and assessment tools were created to measure product effectiveness.

The product underwent a rigorous validation process to ensure its quality. Content validation was conducted by English language experts to verify the accuracy and appropriateness of the material. Media validation involved educational technology experts who assessed the layout, design, and media alignment with learning goals. Language validation ensured the use of clear, communicative, and level-appropriate language for elementary students. Feedback from all validators was thoroughly analyzed and used as a basis for revising the product before moving on to the implementation phase.

Implementation Stage

The implementation phase was conducted in stages to ensure the product's readiness for broader use. A small-scale pilot test involving 6–10 students was conducted to collect preliminary feedback on the worksheet's usability, appeal, and effectiveness. The results were analyzed to identify areas for improvement, which were then revised accordingly.

A full-scale field test was then carried out in a complete class setting. During this phase, data on the worksheet's effectiveness were gathered through classroom observations, learning outcome tests, and questionnaires distributed to both students and teachers. The implementation outcomes were analyzed to evaluate the attainment of learning objectives and identify aspects needing refinement. Based on this analysis, final revisions were made to produce a fully optimized and ready-to-use worksheet.

Evaluation Stage

Evaluation was an essential and continuous process to ensure the product's quality and effectiveness. Formative evaluation was conducted at each development stage to monitor progress and identify issues early. Feedback from both teachers and students was systematically analyzed to understand user experiences and perceptions.

Summative evaluation was carried out at the end of the development process to assess the product comprehensively. Effectiveness was analyzed using multiple indicators, such as improvements in student learning outcomes, user satisfaction, and ease of implementation. All evaluation results were documented in a final report, including the development process, validation results, implementation findings, and recommendations for further development. This report serves as a basis for future dissemination and replication of similar educational products.

3 Results and Discussion

3.1 Needs Analysis for English Worksheet Development

A needs analysis was conducted involving 30 students from the Elementary Teacher Education Study Program. The findings provided a comprehensive picture of the need for an integrated

English language worksheet. The results showed that the majority of students (87%) expressed a need for an integrated English worksheet, while 76% reported difficulty in integrating the four language skills. These findings indicate a gap between learning needs and the availability of appropriate instructional materials.

Further analysis of existing worksheets revealed several fundamental weaknesses. Data indicated that 65% of the current worksheets focused only on a single language skill, while 73% lacked guidelines for integrating the four skills. Moreover, 58% of the worksheets were deemed irrelevant to the elementary school context, and 69% did not include comprehensive assessment rubrics. These gaps provided a strong rationale for developing a more suitable student worksheet based on integrated language skills to meet the specific needs of PGSD students.

3.2 Design and Characteristics of the Developed Worksheet

The developed English worksheet, based on integrated language skills, features a comprehensive structure that includes a cover and identity page, an introductory section, and eight thematic learning units. Each unit is designed around themes relevant to the elementary school context, including:

- Introduction and Greetings
- Family and Daily Activities
- School Environment
- Food and Drinks
- Animals and Nature
- Transportation
- Hobbies and Free Time
- Community Helpers

This structure ensures that students are exposed to various communicative contexts they may encounter during teaching practice in elementary schools.

The key feature of the worksheet lies in its systematic integration of the four language skills using diverse instructional strategies. Listening and speaking are integrated through interactive dialogues supported by audio, role-play activities, information gap tasks, and pronunciation practice. Reading and writing skills are developed through pre-reading, while-reading, and post-reading activities, summary writing, creative writing using visual and textual stimuli, and text reconstruction exercises.

Full integration of all four skills is realized through project presentations, storytelling with visual aids, interview-based report writing, and communication-based problem-solving tasks. These activities are carefully crafted to foster holistic language development within meaningful learning scenarios.

3.3 Validation of Worksheet Quality by Experts

The worksheet underwent content validation by a team of three English language lecturers with an average teaching experience of 12 years. The overall average score was 4.1 out of 5.0,

categorized as "Excellent." Among the evaluated aspects, language quality received the highest score (4.3), followed by curriculum alignment (4.2), and integration of language skills (4.1). These results indicate that the worksheet meets high content quality standards and is appropriate for English language learning in teacher education programs.

Media validation was conducted by two educational technology lecturers with an average of 10 years of experience. The average score obtained was 4.02, categorized as "Good." The highest ratings were given to font and color usage (4.2), followed by ease of navigation (4.1), demonstrating that the worksheet was user-friendly and accessible. Nevertheless, the reviewers provided constructive suggestions, including improving image resolution, ensuring consistency in icons and symbols, and adding QR codes for access to audio materials.

3.4 Practicality of the Worksheet in Learning Implementation

A limited trial was conducted with 15 fourth-semester PGSD students, which revealed a high level of practicality. The results showed that 93% of the students found the worksheet instructions easy to understand, and 87% were able to follow the learning sequence smoothly. Moreover, 89% stated that the worksheet was very easy to use, 92% reported that the instructions were very clear, and 85% believed that the worksheet was efficient in terms of learning time. These findings confirm that the worksheet can be effectively implemented in real classroom settings without significant technical issues.

Motivation and engagement levels were also high: 91% of the students found the worksheet interesting and motivating, while 80% felt challenged by the difficulty level of the exercises. These findings suggest that the worksheet is not only practical but also capable of creating an engaging and appropriately challenging learning experience for students.

3.5 Effectiveness of the Worksheet in Enhancing Language Proficiency

The effectiveness of the worksheet was tested using a quasi-experimental design with a pretest-posttest control group involving 60 students. The experimental group (30 students) used the developed worksheet, while the control group (30 students) used conventional materials.

Pretest results showed no significant difference in the initial language proficiency between the two groups ($t = 0.158$, $p = 0.875$), ensuring internal validity. Posttest results, however, showed a significant difference between the groups ($t = 6.241$, $p < 0.01$), with the experimental group achieving an average score of 84.67 compared to the control group's 72.13.

Gain score analysis revealed that the experimental group experienced a high level of improvement ($N\text{-Gain} = 0.72$), while the control group showed only a low level of improvement ($N\text{-Gain} = 0.26$). The worksheet proved effective across all four language skills, with speaking showing the highest gain (0.75), followed by reading (0.71), writing (0.69), and listening (0.68). This balanced improvement confirms that the integrated language skills approach successfully enhances students' comprehensive language competence.

3.6 Student Responses and Perceptions of the Worksheet

Student responses collected through a questionnaire indicated very high satisfaction with the developed worksheet. About 77% of students strongly agreed that the integration of language skills was clearly evident in the worksheet, while 73% strongly agreed that it helped them understand language concepts better. Regarding engagement, 67% strongly agreed that the

activities were interesting, and 63% strongly agreed that the worksheet increased their learning motivation.

Qualitative feedback also provided valuable insights. Students appreciated the variety of activities, the contextual relevance of examples to elementary school teaching, and the inclusion of assessment rubrics that facilitated self-evaluation. They also suggested further improvements, such as adding audio materials, clarifying certain instructions, and providing answer keys for independent practice.

3.7 Theoretical and Practical Discussion

The success of the worksheet based on integrated language skills in improving student performance aligns with the principles of integrated language learning as proposed by Brown (2007). These theories emphasize that integrating language skills creates a more holistic and meaningful learning process, in which learners can understand the interconnectedness among listening, speaking, reading, and writing. This leads to a deeper and more comprehensive understanding of the language. The findings of this study provide empirical support for these theories, especially in the context of teacher education for elementary school.

The most significant improvement was observed in speaking skills, indicating the effectiveness of the integrated language skills approach in developing oral communication. This can be explained through the principle of contextual learning, in which speaking activities were consistently connected with inputs from listening, reading, or writing tasks. As a result, students had a meaningful context for communication, unlike in traditional language teaching which often presents skills in isolation and decontextualized formats.

3.8 Implications for the Professional Development of Pre-service Teachers

The developed worksheet not only functioned as a learning medium for English language instruction, but also served as a model for lesson design that student teachers could adopt when teaching in real elementary school settings. Feedback from students indicated that the examples used in the worksheet were highly relevant to elementary classroom contexts, which implies that the product effectively bridged the gap between theoretical learning and practical teaching preparation. This is in line with the concept of pedagogical content knowledge, which emphasizes the importance of mastering both subject matter and effective teaching strategies.

Moreover, by engaging with the integrated worksheet, student teachers experienced firsthand how to combine various language skills into cohesive classroom activities. This experience will serve as a valuable foundation for their future teaching practices, where they can adapt the principles of skills integration not only for English, but for other subjects as well. Thus, the worksheet contributes not only to students' language proficiency but also to their pedagogical competence as future elementary educators.

4 Conclusion

The development of an English Student Worksheet based on integrated language skills for students in the Elementary Teacher Education Program (PGSD) has successfully met the criteria of being valid, practical, and effective. The content validation achieved an excellent rating with

an average score of 4.1 out of 5.0, while the media validation was rated good with an average score of 4.02.

In terms of practicality, 89% of students found the worksheet easy to use, and 92% provided positive feedback regarding the clarity of its instructions. The worksheet's effectiveness was confirmed by a significant difference in learning outcomes between the experimental and control groups ($t = 6.241$, $p < 0.01$), with a high gain score of 0.72 for the experimental group compared to 0.26 for the control group. The highest improvement was observed in speaking skills (0.75), followed by reading (0.71), writing (0.69), and listening (0.68), indicating balanced development across all four language skills.

Student responses were overwhelmingly positive, with 100% stating that the worksheet was useful for understanding language concepts, 97% finding the activities engaging, and 96% feeling more motivated to learn. Additionally, the worksheet contributed to students' teaching readiness by modeling an integrated and practical learning approach suitable for elementary education.

This study provides valuable insights for future efforts in designing integrated instructional materials and serves as a reference for improving language instruction in both pre-service teacher education and elementary classrooms.

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