E-ISSN : 2962-9713
P-ISSN : 2963-928X

Development Of Interactive Worksheet-Based Learning Media For English Lessons For Fourth-Grade Students At Alam Mutiara Umat Elementary School

Fairus Malika Khoirunnisa[1], Dina Kartikawati[2]
[1]Universitas Bhinneka PGRI , fairusmalika@gmail.com
[2]Universitas Bhinneka PGRI , dina.kartika.fuad@gmail.com

Abstrak

Lembar Kerja Interaktif adalah media pembelajaran digital yang dikembangkan untuk memfasilitasi partisipasi aktif peserta didik dalam proses pembelajaran melalui beragam aktivitas interaktif, meliputi pencocokan kosakata dengan gambar, latihan mendengarkan, pengisian kalimat, dan tugas berbasis konteks. Penelitian ini bertujuan untuk mendeskripsikan proses pengembangan dan mengevaluasi kelayakan media pembelajaran berbasis lembar kerja interaktif untuk pelajaran bahasa Inggris bagi siswa kelas IV di Sekolah Dasar Alam Mutiara Umat. Media tersebut dikembangkan menggunakan model ADDIE, yang terdiri dari tahap Analisis, Desain, Pengembangan, Implementasi, dan Evaluasi. Produk ini dirancang untuk mendukung pembelajaran bahasa Inggris melalui kegiatan interaktif seperti mencocokkan kosakata dengan gambar, latihan mendengarkan, melengkapi kalimat, dan tugas mencocokkan kata. Peserta yang terlibat dalam penelitian ini adalah 28 siswa kelas IV. Data dikumpulkan melalui validasi ahli, observasi kelas, wawancara siswa, kuesioner, dan hasil tes pasca-implementasi. Temuan menunjukkan bahwa lembar kerja interaktif yang dikembangkan dikategorikan sebagai sangat valid berdasarkan evaluasi ahli materi dan media. Selain itu, siswa menunjukkan respons positif terhadap media tersebut, yang ditandai dengan peningkatan partisipasi, motivasi belajar, dan keterlibatan selama kegiatan di kelas. Oleh karena itu, lembar kerja interaktif dianggap sebagai media alternatif yang layak dan efektif untuk mendukung pembelajaran bahasa Inggris di tingkat sekolah dasar.

Kata Kunci: *Media Pembelajaran Berbasis Lembar Kerja, Pembelajaran Bahasa Inggris, Partisipasi Siswa, Pembelajaran Interaktif*

Abstract

Interactive Worksheets are a digital learning tool designed to facilitate students' active participation in the learning process through a variety of interactive activities, including matching vocabulary with images, listening exercises, sentence completion, and context based tasks. This study aims to describe the development process and evaluate the feasibility of interactive worksheet-based learning media for English lessons for fourth-grade students at Alam Mutiara Umat Elementary School. The media was developed using the ADDIE model, which consists of Analysis, Design, Development, Implementation, and Evaluation stages. The product was designed to support English language learning through interactive activities such as matching vocabulary with pictures, listening exercises, completing sentences, and word-matching tasks. The participants involved in this study were 28 fourth-grade students. Data were collected through expert validation, classroom observations, student interviews, questionnaires, and post-implementation test results. The findings showed that the developed interactive worksheet was categorized as very valid based on material and media expert evaluations. In addition, students demonstrated positive responses toward the media, indicating increased participation, learning motivation, and engagement during classroom activities. Therefore, the interactive worksheet is considered a feasible and effective alternative medium for supporting English language learning at the elementary school level.

E-ISSN : 2962-9713
P-ISSN : 2963-928X

Keywords: *English Language Learning, Student Participation, Interactive Learning Worksheet-Based Learning Media.*

Corresponding Author:
Fairus Khoirunnisa

Universitas Bhinneka PGRI; e-mail@e-mail.com

INTRODUCTION

Since language is the key to communicating with others, it is the simplest way to do so. Our lives are greatly impacted by language. Language is a tool for information transfer and interpersonal communication. According to (Ratnawati et al., 2023), English is frequently taught as a foreign language. As a result, English is an international language that is essential to worldwide communication and education. To create a generation with global communication abilities, it is crucial to keep teaching English in elementary schools (Ismawati et al., 2023). Learning materials that are engaging, contextual, and consistent with the traits of children's growth and development can help primary school students acquire English language skills more successfully (Cahyani & Agustika, 2024).

However, the usage of traditional textbooks and Student Worksheets (LKS) provided by the local Education Office continue to dominate the passive English learning process in many elementary schools, including SD Alam Mutiara Umat. Due to this circumstance, students have limited vocabulary mastery and low levels of learning participation (Firdaus, 2025). This conclusion is consistent with the findings of a study by (Egatri et al., 2025), which shows that traditional student worksheets are typically less engaging and unable to encourage students' critical thinking and active learning.

Additionally, in order to adopt the *Merdeka Curriculum*, teachers must create learner-centered lessons and use cutting edge media to encourage active learning (Rahma, 2025). To make interactive content more engaging and suitable for elementary school pupils' cognitive development stage, many teachers are still unable to modify it to fit the learning preferences and traits of their students (Rahim et al., 2022). Because elementary school students have different learning styles visual, auditory, and kinesthetic interactive learning techniques and media are necessary to increase the efficacy of English language instruction (S. Rahayu et al., 2021).

One creative alternative that is pertinent to addressing these issues is interactive worksheet-based educational materials. One of the digital platforms that is frequently utilized in the creation of this educational material is Liveworksheets. Because students may study while playing and receive automatic and real-time corrective feedback, the use of Liveworksheets greatly boosts vocabulary acquisition and learning motivation, according to research by (Aditya, 2025). Fourth-grade students often have a visual learning style and like playing games and being active, according to school data. According to (Akramida et al., 2020), using visual and interactive media can maximize student engagement, promote active learning, and raise academic accomplishment.

The creation of interactive worksheet-based learning materials for English language courses is anticipated to satisfy students' demands for a more fulfilling and pleasurable educational experience in the context of English language instruction at Alam Mutiara Umat Elementary School. It is anticipated that this medium will assist teachers in promoting active learning. Additionally, because interactive worksheets incorporate visual and auditory components as well as reflection exercises that promote deep cognitive

E-ISSN : 2962-9713
P-ISSN : 2963-928X

engagement, they have been shown to improve students' focus and involvement in the learning process (Yonanda et al., 2024). Furthermore, according to study by (Hina, 2025), interactive learning materials not only maximize primary school students' enthusiasm to learn but also foster a collaborative, experience-based learning environment that enhances contextual English language proficiency.

According to the above definition, a development study is required to determine whether using Interactive Worksheet-based media is feasible and viable. Thus, the study's title, "Development of Interactive Worksheet-Based Learning Media for English Lessons for Fourth Grade Students at Alam Mutiara Umat Elementary School," describes the primary goal of the research, which is to create media based on interactive worksheets to enhance students' English learning. In addition to evaluating the viability and usefulness of these media in assisting English learning in the classroom, this study will incorporate the creation of interactive worksheet learning resources that are in line with the curriculum and characteristics of fourth-grade students. As a result, this research not only advances the development of more contemporary and dynamic instructional materials, but it also provides educators and educational institutions with practical ways to address the difficulties associated with teaching English at the elementary school level.

The educational resources now in use are still insufficient and incapable of encouraging pupils to participate actively in their education. These issues highlight how urgent it is to create interactive worksheet-based educational materials that promote student centered and active learning. The goal of this study was to outline the process of creating interactive worksheet-based educational materials for fourth-grade English classes at Alam Mutiara Umat Elementary School.

The goal of this interactive worksheet is to motivate Alam Mutiara Umat Elementary School fourth-graders to actively participate in enhancing their English comprehension. This medium guarantees active learning by involving students through interactive features that are customized to their characteristics and systematic direction for educators.

The following is a summary of the product specs' key points:

1. Interactive and Structure based
    a. In addition to delivering content, interactive worksheets created with the Liveworksheets platform enable teachers to actively monitor students' learning progress and provide comments.
    b. There are particular markers in the design of interactive worksheets created using the Liveworksheets platform that give teachers direction on how to continue talking and interacting with students after they have finished particular portions.
2. Liveworksheet Development Structure
    a. Worksheet Identity
       This contains the title of the worksheet, the name of the school, the grade or semester level, the subject matter, the teacher's name, and usage guidelines.
    b. Openng Section
       The purpose of this section is to introduce the learning topic and grab students' attention.
    c. Main Section
       Students must complete the exercises and learning resources in this part according to the given directions.
    d. Reflection Section
       The purpose of this part is to encourage students to consider their own learning experiences.

E-ISSN : 2962-9713
P-ISSN : 2963-928X

e. Closing Section
The purpose of this segment is to conclude the learning exercise and give pupils automatic feedback.

3. Features in Liveworksheet
These characteristics are very important for helping primary school students learn English, especially when it comes to making the learning process dynamic, interesting, and contextual.

a. Drag and Drops feature
By dragging and dropping objects to the proper spot, students can match pictures, words, or sentences.
b. Listening Exercise feature
Instructors can incorporate audio recordings so that students can hear English-language terms or conversations.
c. Multiple Choice and Short Answer feature
It easier to create interactive questions in both multiple choice and short answer forms.
d. Matching Exercise feature
Students make connections between two columns, such as words and images or questions and their replies.
e. Peaking Practice feature
In order to respond to questions or pronounce particular vocabulary words, students can record their voices.
f. Integrated Picture and Video Functionality
Instructors can incorporate instructional films and illustrations from local files or other online resources like YouTube.
g. Automatic Scoring and Feedback Function
The method offers automatic evaluation and correction once pupils finish the assignment.
h. Save and Submit feature
You can use Liveworksheets Classroom or email to send student work straight to the teacher's account.
i. Teacher’s Dashboard feature
It allows for display customisation based on teacher requirements and can be linked to other systems like Google Classroom.
j. Integration and Customization Features
Instructors can set up online classrooms, add student lists, give assignments, and keep a close eye on their students' work.

This study makes the assumption that fourth-graders already possess fundamental digital literacy skills, such as the capacity to use computers or other basic devices to access the Liveworksheets portal. It is anticipated that interactive worksheets with visual components will give students the chance to engage with the content on their own and comprehend the concepts, vocabulary, and instructions presented in a more methodical learning environment that is suitable for their individual characteristics. Additionally, this study makes the assumption that if the content is provided through engaging, interactive, and contextual media, students will be highly motivated and interested in learning English. It is anticipated that curriculum-aligned adaptive interactive worksheets will enhance students' comprehension and proficiency of English content.

Interactive worksheets are an innovation in educational materials that facilitate fourth-grade students' involvement and speed up their acquisition of English language skills. In addition to passively reading the content, students are expected to actively participate in

E-ISSN : 2962-9713
P-ISSN : 2963-928X

interactive worksheet-based learning by finishing the given tasks. In order to improve their comprehension of the subject matter, students are therefore encouraged to actively engage with the worksheets in addition to using them as a passive medium.

This study has a number of limitations that should be taken into account. The fact that only fourth-grade kids at Alam Mutiara Umat Elementary School were used as research subjects is one of the study's primary limitations. As a result, the results cannot be applied to other elementary schools with various student characteristics and learning environments. The scope of the English learning materials employed in this study is also restricted to fundamental subjects based on the *Merdeka Curriculum*, such as self-introduction, everyday activities, hobbies, and objects in our environment. The interactive worksheet content created is restricted to these units and does not address all fourth-grade English abilities. This implies that the assessment of the media's usefulness is restricted to these fundamental subjects. As a result, the material mastery research findings only apply to the tested units.

An invention that blends the benefits of traditional print media with digital interactive aspects is interactive learning media in the form of printouts based on Liveworksheets. Depending on the resources available at their school, students can complete the exercises online or in print thanks to this media's design as a printable worksheet that can be accessed digitally via a Liveworksheets link (Rahmayani, 2025). This approach allows for flexibility in the educational process while maintaining the ability to give students an engaging and flexible learning environment, particularly for schools with few digital devices. The employment of Liveworksheets in both print and digital formats might boost students' enthusiasm to learn, claim (Anggraini & Mustadi, 2024). Because it may boost student motivation, engagement, and learning experience in an interactive and flexible way, Liveworksheets based interactive print learning materials are a successful innovation for fusing traditional and digital learning.

The concepts of active, contextual, and student-centered learning are still applied in this interactive print media learning resource. For group learning exercises in the classroom, teachers can use printable worksheets that are digitally available through Liveworksheets connections. The mix of print and digital media, according to (Rahmayani, 2025), has a beneficial effect on students' learning independence since it makes it easier for them to gradually switch from traditional instruction to adaptive technology. The concepts of active, contextual, and student-centered learning are still applied in this interactive print media learning resource. For group learning exercises in the classroom, teachers can use printable worksheets that are digitally available through Liveworksheets connections. The mix of print and digital media, according to (Rahmayani, 2025), has a beneficial effect on students' learning independence since it makes it easier for them to gradually switch from traditional instruction to adaptive technology.

At the elementary school level, where the usage of digital-based media makes the learning process more participatory rather than one-way, interactive media plays a significant role in raising student involvement during the English language learning process. According to (Aulia et al., 2024), this media fosters a learning atmosphere where students are encouraged to actively participate in the process of learning. Through a variety of engaging digital activities, interactive platforms like Liveworksheets, Quizizz, and LearningApps have been shown to be successful in raising students' cognitive, emotional, and social engagement (Zainuddin et al., 2021). As a result, interactive media not only enhances teaching methods but also plays a significant role in raising students' general level of engagement, whether it be social, emotive, or cognitive.

Students in elementary school are more motivated and interested in studying when they use interactive technology, particularly when learning English. According to (Aditya, 2025), interactive resources like Liveworksheets give students instant feedback so they may

E-ISSN : 2962-9713
P-ISSN : 2963-928X

improve their comprehension of the subject and fix their own errors. The usage of interactive learning materials in primary classrooms greatly improves student motivation and learning results because it offers an enjoyable, cooperative, and contextual learning experience, according to that (Hina, 2025). Because interactive media can create an active, enjoyable, and meaningful learning experience by directly involving students in the learning process, it effectively contributes to improving elementary school students' motivation, interest, and learning outcomes, particularly in English language learning.

An innovation in education, interactive worksheets make use of digital technology to provide a more dynamic, contextual, and student-centered learning environment. Through a variety of multimedia based activities, this type of digital learning media development gives students the chance to engage directly with learning materials (Pinilih et al., 2024). Interactive worksheets incorporate a variety of multimedia components, including text, photos, audio, video, and drag and drop capabilities, to enable students to actively participate in the learning process, in contrast to traditional worksheets, which are typically passive and one way (Aulia et al., 2024). As a result, this is a crucial development in digital learning materials that drastically changes the learning process from being passive to being more dynamic, contextual, and student centered.

Digital platforms are crucial to the creation of contemporary educational materials, such as interactive worksheets for primary school English language instruction. Teachers may create more engaging, adaptable, and student-specific learning activities by using digital platforms like Quizizz, LearningApps, and Liveworksheets. In addition to presenting content, this platform functions as an assessment tool that gives students immediate feedback, enhancing the significance and introspection of the learning process (Hina, 2025). By using multimedia components such as text, music, and visuals that are presented in an engaging manner, digital platforms can help teachers of English improve vocabulary knowledge, communication skills, and active student involvement (Anggraini & Mustadi, 2024). To make learning English more engaging, flexible, and successful, it is crucial to leverage digital platforms to create interactive learning materials like Quizizz, LearningApps, and Liveworksheets. By combining immediate feedback with multimedia components, these platforms can boost student engagement, motivation, and comprehension of the subject matter. Additionally, teachers can create and modify learning materials for pupils with greater flexibility thanks to digital platforms. Teachers can modify, update, and track learning outcomes in real time using an online system, which improves the accuracy and efficiency of learning evaluation. The use of digital platforms in the production of interactive media has the potential to improve students' critical thinking abilities and learning independence, according to (Rahmayani, 2025). This platform makes it easier to gradually switch from traditional classroom instruction to technology based instruction. As a result, using digital platforms to create educational materials not only aids in achieving the goals of the *Merdeka Curriculum* but also serves as a calculated move to make English instruction more engaging, pertinent, and successful for elementary school pupils.

METHOD

In order to create and assess the efficacy of interactive worksheet-based learning materials in enhancing the English proficiency of fourth-grade students at Alam Mutiara Umat Elementary School, this study employed the Research and Development (R&D) method with the ADDIE model (Analysis, Design, Development, Implementation, Evaluation). Because it offers a methodical and organized framework for creating learning products, the ADDIE model was selected. The research objectives, which center on using technology-based learning to address difficulties in teaching language skills, particularly at the elementary school level, are consistent with this approach.

E-ISSN : 2962-9713
P-ISSN : 2963-928X

The most popular approach in instructional creation, according to (Branch, 2009), is the ADDIE paradigm, where each step is intended to provide effective learning materials. In order to enable students to participate more actively in the learning process, interactive worksheets that are both pertinent to the course subject and interactive are created during the design stage. The process of development entails designing and testing interactive worksheets. To guarantee that the usage of interactive worksheets will maximize English language learning, interactive worksheet media will also be incorporated into classroom learning activities throughout the implementation stage. Lastly, learning outcome tests and teacher and student comments will be used by researchers to assess the viability of learning media in the evaluation stage.

(Branch, 2009) claims that the ADDIE model offers an interactive approach that emphasizes evaluation and feedback for ongoing improvement, which is extremely pertinent to the creation of interactive worksheet-based media in the context of English language acquisition. This study intends to create interactive worksheet-based learning materials that are both effective in enhancing students' English learning and capable of addressing the issues that arise in English education in elementary schools by adhering to each explicit and methodical step in the ADDIE model.

In order to provide interactive worksheet-based learning materials for English language instruction for fourth-grade students at Alam Mutiara Umat Elementary School, this study will make reference to the processes in this approach.

1. Analysis

At this point, the learning needs of the pupils were determined, including the challenges they encountered in comprehending English-language content, particularly in the fourth grade at Alam Mutiara Umat Elementary School. In order to comprehend the typical obstacles that students encounter while learning English content as well as the difficulties that teachers encounter when instructing English content, this study employed literature analysis. According to earlier research by (T. Rahayu & Rosa, 2021), low learning motivation, trouble understanding grammar and pronunciation, and a lack of learning time were the main causes of students' difficulties mastering English material. In order to motivate pupils to actively participate in class, teachers also faced challenges in selecting engaging teaching strategies.

In order to personalize the media created to each student's learning preferences, this analysis also includes a study of the characteristics of the students, including their beginning talents and their varied learning styles (visual, auditory, and kinesthetic). This step also highlights how crucial it is to modify educational resources to fit the *Merdeka Curriculum*, particularly when identifying the fundamental skills and learning objectives that must be met. Additionally, the state of schools' digital infrastructure and instructors' and students' proficiency with interactive learning technologies are examined. A thorough needs analysis helps guarantee that the media created is practical and suitable for the abilities of users in the field, in addition to being in line with the curricular objectives (Santi et al., 2024).

2. Design

Through interactive and contextual digital activities, the design stage of interactive worksheet-based learning material utilizing digital platforms seeks to enhance English language acquisition. With the help of this worksheet's interactive capabilities, students can use a digital platform to link vocabulary with pictures, definitions, and real-world applications. Through these exercises, students can improve their vocabulary recall, become more motivated to learn, and get more involved in their English language studies (Anggraini & Mustadi, 2024). The worksheet's activities are organized in phases, from vocabulary introduction to interactive exercises to evaluation, resulting in a methodical and pleasurable learning process.

3. Development

E-ISSN : 2962-9713
P-ISSN : 2963-928X

A digital platform was used to construct interactive worksheets during the development phase. This platform was created to assist students in making dynamic connections between concepts they are learning, visuals or visualizations, and the context of the subject matter. Clear instructions and the use of powerful graphic components are part of this approach. In order to make sure that the interactive worksheets are interesting and consistent with the established English learning objectives, researchers will collaborate closely with educators throughout this process.

The learning materials will be ready for direct use in classroom teaching and learning activities after the production of the interactive worksheets based on digital platforms is finished. Refining the content, ensuring that it complies with the relevant curriculum, and making sure that all students can easily access the interactive worksheets are all part of this development process. A full product that is prepared for use by instructors in English learning activities in the classroom will be created by combining all of the designed components.

4. Implementation

The interactive worksheets created with the digital platform will be utilized in schools during the implementation phase to assess their applicability and validity for raising the standard of English language instruction. These interactive worksheets will be used by teachers in class, where students will follow the directions, complete matching tasks, and take part in activities like word matching challenges and matching vocabulary with pictures. Researchers will monitor how much kids engage with the interactive media and how teachers support learning during implementation. These observations will shed light on how well interactive media works to raise student engagement and accomplish learning goals.

5. Evaluation

The primary goal at this point is to assess the viability and validity of interactive worksheet-based learning materials for enhancing fourth-grade students' English language acquisition. After the interactive worksheets are used in the learning process, an assessment will be carried out to see how they affect the English language learning process. Teacher and student interviews will be the primary method used for the assessment.

The teacher interviews will cover a number of topics, such as how helpful they think the interactive worksheets are for enhancing English language acquisition, how simple it is to use the media in the classroom, and how the interactive worksheets impact student motivation and engagement. Additionally, teachers will be invited to comment on the interactive worksheets. The degree to which students find the interactive worksheets helpful in enhancing their English comprehension, the media's usability, and how the worksheets impact their motivation and involvement in learning are just a few of the topics that will be covered in the student interviews.

Interactive worksheets will be used in the classrooms that will be the focus of the study in order to implement the design of this product trial. The purpose of this trial is to gather information about the viability and validity of using interactive worksheets to teach students English. Interactive worksheets are tested in the classroom as part of the trial phase. Interactive worksheets built on a digital platform were utilized in the classroom to teach English throughout the trial period.

Students will be given interactive worksheets to follow directions and take part in activities like matching vocabulary and matching words with pictures. Teachers will assist students in using interactive worksheets and completing tasks that correspond with the exercises in their role as facilitators. To ascertain whether the learning objectives have been met, researchers will keep an eye on student responses and gather teacher input throughout the study. Additionally, they will determine if interactive worksheets based on digital platforms effectively boost vocabulary mastery and student engagement.

E-ISSN : 2962-9713
P-ISSN : 2963-928X

Lastly, fourth-grade children at Alam Mutiara Umat Elementary School engaged in the learning process using the created interactive worksheet as end users during product testing. The research attempts to create learning products that are not only theoretically valid but also useful and sensitive to the traits and learning requirements of kids at Alam Mutiara Umat Elementary School using a combination of expert validation and user testing.

Both qualitative and quantitative data will be gathered for this development study. Early on in the study, curriculum analysis, teacher and student interviews, input from validators, and conversion results were among the qualitative data collected. The quantitative data consists of student response questionnaires, post-implementation student tests, and assessments by media and subject area experts.

Expert validation sheets, observation sheets, student questionnaires, interview guidelines, and documentation were the five primary tools used in this study. Mobile phones were used to record the procedure, which was then transcribed as qualitative data. In the meantime, the primary data of the study at Alam Mutiara Umat Elementary School was supported and strengthened by documentation in the form of photographs of students' activities while working on interactive worksheets and their results, copies of student response questionnaires, interview transcripts, and observation notes.

The validity, usefulness, and efficacy of interactive worksheet-based learning materials in enhancing students' comprehension of English content are assessed in this study using a qualitative and quantitative data analysis technique. The Miles & Huberman (2014) paradigm, which has three primary stages Data Reduction, Data Presentation, and Conclusion Drawing/Verification is used to analyze qualitative data derived from validator input, interview findings, and observations.

FINDINGS AND DISCUSSION

The development of this interactive worksheet-based learning material was carried out in several stages: needs analysis, material development, expert validation, product revision, and product implementation results. The results obtained at each stage are as follows:

Need Analysis

After identifying and analyzing the problem, the researchers concluded that the learning materials needed are interactive worksheet-based resources capable of increasing student engagement and motivation, helping students understand English material more effectively, providing engaging and interactive learning activities, and creating an active and enjoyable learning environment in line with the developmental characteristics of elementary school students. The main need identified is for interactive worksheet learning materials that combine visual elements with interactive activities. These materials must be user friendly and easily accessible across various digital devices, as well as appropriate for the elementary school level. It is hoped that these materials will increase student participation, boost motivation to learn, and help students gain more confidence in completing English exercises through engaging and easy to understand interactive activities.

Material Development

During the material development phase, a preliminary design was created that took into account the suitability of the material for the ability levels and characteristics of fourth-grade students. At this stage, the resulting product was an interactive worksheet-based learning medium. The interactive worksheet took the form of an application that was validated by media experts and subject matter experts to obtain evaluations and suggestions for improvement, which were documented in a validation summary sheet. After that, the interactive worksheet was revised and subsequently implemented for use by fourth-grade students.

E-ISSN : 2962-9713
P-ISSN : 2963-928X

Expert Validation

The expert validation phase was conducted by involving media experts, material experts, and instrument validators to ensure the suitability of the developed product. The expert validation phase was conducted by involving material experts, media experts, and instrument validators to ensure the suitability of the developed product. The assessment by the media experts, material experts, and instrument validators was carried out by having them complete a questionnaire using a five category rating scale.

Tabel 1 Grading Line

No	Items	Criteria
1.	0% - 20%	Very Fail
2.	21% - 60%	Fail
3.	61% - 80 %	Good
4.	81% - 100%	Very Good

Tabel 2 Material Expert Validation Result

Validator	Percentage Media Experts
Material expert	98 %
Media expert	95 %

The subject matter expert validation score from the table above is 98%. Based on the validation criteria, this score falls into the "Very Good" category (81%–100%), which means the content is appropriate and can be used with or without minor revisions. The subject matter expert recommends improving the quality of the images in Section 1.

The media expert validation score from the table above is 95%. Based on the validation criteria, this score falls into the "Very Good" category (81%–100%), which means the content is appropriate and can be used with or without minor revisions. The media experts recommend correcting the grammatical errors found in the activity explanations, while also supplementing and refining the descriptions of learning objectives and the instructions for completing the learning materials.

Meanwhile, during the instrument validation process, all statements were marked "Yes," and the validators did not provide any additional suggestions, both instruments were deemed valid and ready for use in the data collection process without the need for modification.

Product Revision

Based on the results of the expert validation, the researchers made several minor revisions in an effort to improve the quality of the interactive worksheet-based learning materials they had developed. The purpose of these revisions was to refine the visual presentation of the materials and ensure that the explanations of activities, learning objectives, and instructions were presented with optimal readability and free of grammatical errors. After undergoing this refinement process, the learning materials were deemed more suitable for use, both in terms of content and the visual presentation of the material. It is hoped that this final product will provide a more effective learning experience tailored to the needs of elementary school students.

Product Implementation Results

This development project has resulted in an interactive worksheet-based learning resource designed to support English language learning for fourth-grade elementary school students through interactive and engaging digital activities, enabling students to participate more actively in the learning process.

E-ISSN : 2962-9713
P-ISSN : 2963-928X

Figure 1. Home Page Layout

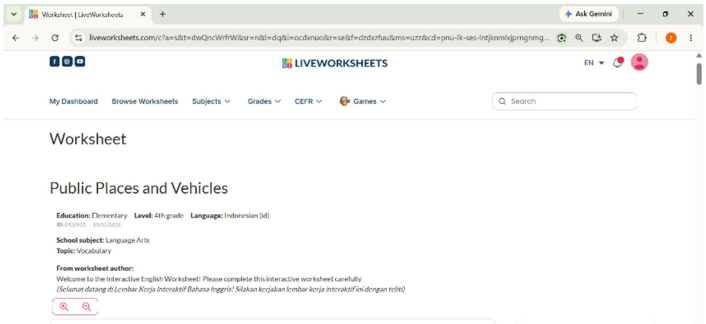


Figure 1 shows the home page displaying the "Public Places and Vehicles" worksheet. This page provides information about the worksheet title, grade level, subject, learning topic, and instructions that students must read before completing the activities provided.

Figure 2. Interactive Worksheet

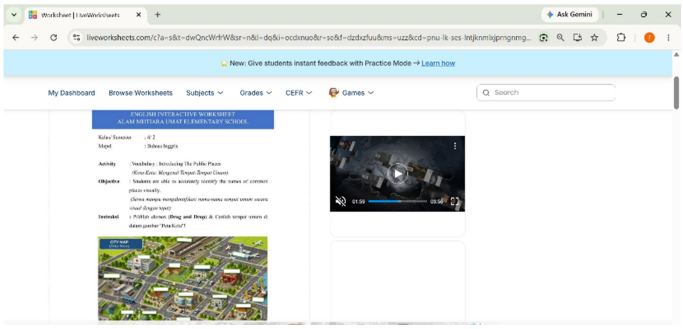


Figure 2 Shows an interactive worksheet that provides explanations of the activities, learning objectives, and instructions to support students' understanding and help them follow each stage of the learning process. Students can begin using this platform to work on the practice problems provided.

Figure 3. Worksheet Validation

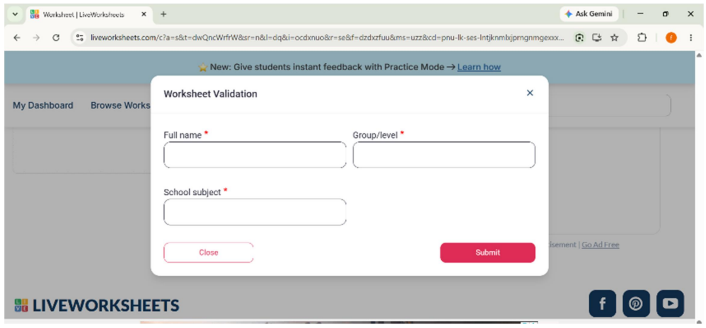


Figure 3. Shows the validation worksheet, which displays the Full Name, School Subject, and Group/Level columns. This page is used to collect student information.

E-ISSN : 2962-9713
P-ISSN : 2963-928X

Figure 4. Worksheet Validation

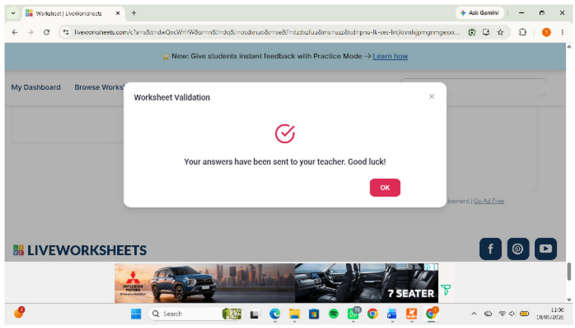


Figure 4. Displays a confirmation screen after the validation process has been successfully submitted. This message informs the user that the response has been received and saved in the system. Additionally, the screen indicates that the validation process has been completed.

Figure 5. Student Worksheet Result

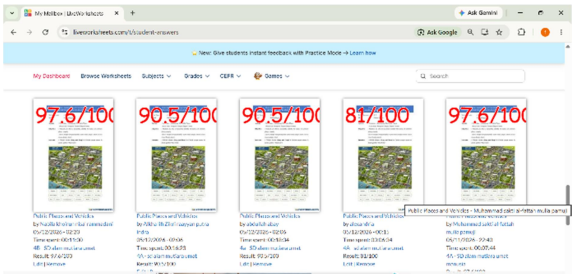


Figure 5. Displays a page showing students' work that has been automatically saved in the Liveworksheets system. The page displays the scores obtained along with the time taken to complete the work. In addition, educators can use this data to monitor and evaluate students' learning outcomes.

Tabel 3 Material Expert Validation Result

Responden	Total	Total Percentage
Student Test Results After Implementation	28	93
Student Questionnaire Result	28	83 %

These results indicate that students have a positive perception of the medium and consider it enjoyable, beneficial, and engaging. These findings suggest that students hold a positive view of the medium, regarding it as enjoyable, beneficial, and engaging in the learning process.

This research and development project has produced an interactive worksheet-based learning resource designed to support English language learning for fourth-grade elementary school students through interactive and engaging digital activities, allowing students to participate more actively in the learning process. This medium is designed to increase student participation (Aulia et al., 2024). Similarly, (Anggraini & Mustadi, 2024) emphasize that interactive learning media are considered effective in increasing students' learning motivation at the elementary school level through the presentation of visual displays and engaging digital activities.

In the development of this interactive worksheet, the evaluation was conducted by subject matter experts, media experts, and instrument validators. The evaluation by subject matter experts consisted of 1 aspect with 11 indicators, the evaluation by media experts covered 1 aspect with 8 indicators; and the evaluation by instrument validators consisted of 2 aspects, each with 4 indicators. The results of the assessment by material experts showed a

E-ISSN : 2962-9713
P-ISSN : 2963-928X

percentage of 98%, while media experts obtained a percentage of 95%, so that the interactive worksheet developed was categorized as very valid and suitable for use. This is reinforced by the results of the post-implementation student questionnaire with an average score of 83%, as well as the results of the post-implementation student test with an average score of 93.

To further support these findings, interviews were conducted with four students. The responses from these interviews indicated that the students felt more enthusiastic and found it more enjoyable to learn English using interactive worksheets. In addition, they were more active in answering the questions because the material was easy to understand and they felt that the worksheets were helpful for learning English, which made them eager to use them.

CONCLUTION

In order to improve student engagement, motivation, and comprehension of English language content through an interactive, pleasurable learning experience catered to the characteristics of elementary school students, specifically at Alam Mutiara Umat Elementary School, this study intends to develop and evaluate engaging interactive worksheet-based learning materials. The ADDIE model, which comprises the steps of analysis, design, development, implementation, and evaluation, was adhered to during the development process. The analysis phase uncovered a number of problems with English language learning, such as the fact that the school's English education still follows a traditional method that frequently uses print media as the main teaching instrument.

The interactive worksheet-based learning resources are divided into six sections, each with its own set of instructions and a variety of features, including text fields, checkboxes, single choice, drag and drop, and listening exercises. Subject matter and media experts gave this product a "Very Valid" rating based on expert validation, scoring 98% and 95%, respectively. Questionnaires and observation sheets are examples of student assessment tools that have been approved and validated.

This medium was successful in boosting student engagement, motivation, and self-confidence when used in the classroom. The findings of the post-implementation student assessment revealed an average score of 93, and the questionnaire results showed an average percentage of 83%, indicating a highly good student reaction. Students were actively and interactively involved in their English language acquisition, according to observations and interviews. Thus, it can be said that the interactive worksheet-based learning materials created here are appropriate, useful, and practical for usage in English language schools to improve English language acquisition.

BIBLIOGRAPHY

Aditya, R. W. T. (2025). Enhancing Vocabulary Mastery in Elementary Students through Liveworksheets. *Journal of Educational Study (JoES)*, *5*(2), 110–120. https://doi.org/https://doi.org/10.36663/joes.v5i2.976

Akramida, H., Distrik, I. W., & Suntoro, I. (2020). The Development of Multiple Epresentations Based Student Worksheet to Improve Learning Results of Grade V Elementary School Students. *International Journal of Research -GRANTHAALAYAH*, *8*, 42–48. https://doi.org/https://doi.org/10.29121/granthaalayah.v8.i8.2020.873

Anggraini, D. T., & Mustadi, A. (2024). Interactive Learning Media Assisted by Adobe Flash to Improve Students ' Motivation and Story -reading Skills at the Third Grade of Elementary School. *International Journal of Elementary Education*, *8*(1), 20–29. https://doi.org/https://doi.org/10.23887/ijee.v8i1.67646

Aulia, H., Hafeez, M., Mashwani, H. U., & Careemdeen, J. D. (2024). The Role of Interactive Learning Media in Enhancing Student Engagement and Academic

E-ISSN : 2962-9713
P-ISSN : 2963-928X

Achievement. *International Seminar on Student Research in Education, Science, and Technology*, *1*, 57–67. http://journal.ummat.ac.id/index.php/issrestec Universitas

Branch, R. M. (2009). *Instructional Design : The ADDIE Approach*. Springer Netherlands. https://doi.org/10.1007/978-0-387-09506-6

Cahyani, K. N., & Agustika, G. N. S. (2024). Contextual-based Interactive Economic Learning Media Effectively used in Science and Social Learning of Fifth Grade Elementary School. *Journal for Lesson and Learning Studies*, *7*(2), 345–355. https://doi.org/https://doi.org/10.23887/jlls.v7i2.82608

Egatri, D., Rusminto, N. E., & Samhati, S. (2025). Development of Problem-Based Learning-Based Student Worksheets to Improve Elementary School Student Learning Outcomes. *Edubase : Journal of Basic Education*, *6*(2), 262–271. https://jurnal.uibbc.ac.id/index.php/edubase/index%0ADevelopment

Firdaus, M. (2025). Blending Traditional and Digital Approaches in English Learning at MIN 1 Palembang : a Practical Overview. *Education Journal of Indonesia*, *6*(1), 31–39. https://publication.umsu.ac.id/index.php/eji 32

Hina, S. (2025). Developing interactive learning media to enhance elementary school students ' learning motivation. *EDUCARE: Journal of Primary Education*, *6*(1), 81–96. https://doi.org/10.35719/educare.v6i1.291

Ismawati, I., Parmiti, D. P., & & Sudatha, I. G. W. (2023). Interactive Learning Media in Fifth-Grade Indonesian Elementary School Subjects. *International Journal of Elementary Education*, *7*(1), 143–153. https://doi.org/https://doi.org/10.23887/ijee.v7i1.57911

Pinilih, Y., Rejekiningsih, T., & Musadad, A. A. (2024). Development of Digital Learning Media in Interactive Multimedia Based on Inquiry Approach for Sociology Learning in High Schools. *Jurnal Teknologi Pendidikan*, *26*(2), 438–454. https://doi.org/http://dx.doi.org/10.21009/JTP2001.6

Rahayu, S., Ladamay, I., Wiyono, B. B., Susanti, R. H., & & Purwito, N. R. (2021). Electronics Student Worksheet Based on Higher Order Thinking Skills for Grade IV Elementary School. *International Journal of Elementary Education*, *5*(3), 453–460. https://doi.org/https://ejournal.undiksha.ac.id/index.php/IJEE

Rahayu, T., & Rosa, R. N. (2021). Problems in Learning English Faced by Elementary School Students in Jambi City. *Advances in Social Science, Education and Humanities Research*, *539*(Icla 2020), 262–266. http://creativecommons.org/licenses/by-nc/4.0/.

Rahim, F. R., Sari, S. Y., Sundari, P. D., Aulia, F., & & Fauza, N. (2022). Interactive design of physics learning media : The role of teachers and students in a teaching innovation. *Journal of Physics: Conference Series*. https://doi.org/10.1088/1742-6596/2309/1/012075

Rahma, N. (2025). Implementation of the Merdeka Curriculum in a Pioneer Elementary School : A Qualitative Study of Planning , Pedagogy , and Assessment Practices. *Journal Of Innovation and Research in Primary Education*, *4*(4), 3221–3234. https://doi.org/https://doi.org/10.56916/jirpe.v4i4.2322

Rahmayani, R. D. (2025). Development of Interactive E-LKPD Based on Live-Worksheets for Reading and Viewing Skills. *Al-Ishlah: Jurnal Pendidikan*, *17*, 73–89. https://doi.org/10.35445/alishlah.v17i1.6451

Santi, T., Haenilah, E. Y., Rohman, F., & Firdaus, R. (2024). Electronic Student Worksheet Based on Problem Based Learning to Improve Critical Thinking of Elementary School Students. *Jurnal Ilmiah Sekolah Dasar*, *8*(4), 739–751. https://doi.org/https://doi.org/10.23887/jisd.v8i4.54698 Electronic

Yonanda, D. A., Islahudin, I., Ramadhani, F. A., Febriyanto, B., Saputra, D. S., Yuliati, Y.,

E-ISSN : 2962-9713
P-ISSN : 2963-928X

& & Nurhidayat, E. (2024). Improving Motivation and Learning Outcomes of Elementary School Students with Multimedia-Based Interactive Media. *Profesi Pendidikan Dasar*, *11*(3), 197–210. https://doi.org/10.23917/ppd.11i3.5761

Zainuddin, Z., Farida, R., Keumala, C. M., Kurniawan, R., & & Iskandar, H. (2021). Synchronous online fl ip learning with formative gami fi cation quiz : instruction during COVID-19. *Interactive Technology and Smart Education*. https://doi.org/10.1108/ITSE-01-2021-0002