Creating English Letter and Announcement Applications as Learning Tools for High School Students

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ABSTRACT

The purpose of this research was to develop ELENA, an Android learning application to promote independent learning and advance student writing abilities specifically regarding letters and announcements. The researcher utilized the Research and Development methodology to build the application, following Maribe Branch's ADDIE model of analysis, design, development, implementation, and evaluation during the creation process. The intended users were 11th grade students at SMK Ar-Rahman Peterongan Jombang. Data collection involved interviews and questionnaires. Expert media evaluation indicated a 97.91% suitability score, meaning the application provided an interesting and interactive platform to learn English. The material expert's 87.5% score confirmed appropriate educational content for the learning objectives. The 87.7% implementation score showed increased student engagement and activity applying letter and announcement writing skills. Students were more motivated to write in English on those topics while using the technology. Final assessment demonstrated the application's success at elevating writing proficiency in the target formats of letters and announcements for the participant group based on the metrics utilized in the study. In summary, this customized mobile learning solution enabled independent study and led to measurable writing gains related to the specified skills of letters and announcements for the sample 11th grade vocational high school students.

KEYWORDS: Learning Media; ELENA; Writing; Letters and Announcements; Senior High School.

ABSTRAK

Penelitian ini bertujuan untuk mengembangkan ELENA, sebuah aplikasi pembelajaran berbasis ICT yang dirancang untuk mempromosikan pembelajaran mandiri dan meningkatkan kemampuan menulis siswa, khususnya dalam menulis surat dan pengumuman. Penelitian ini menggunakan metodologi Penelitian dan Pengembangan, mengikuti model ADDIE dari Maribe Branch yang mencakup analisis, desain, pengembangan, implementasi, dan evaluasi dalam proses pembuatannya. Aplikasi ini ditujukan untuk siswa kelas XI di SMK Ar-Rahman Peterongan Jombang. Data dikumpulkan melalui wawancara dan kuesioner. Evaluasi oleh ahli media menunjukkan skor kesesuaian sebesar 97,91%, yang mengindikasikan bahwa aplikasi ini menawarkan platform yang menarik dan interaktif untuk belajar bahasa Inggris. Skor 87,5% dari ahli materi menunjukkan bahwa konten edukasi yang disediakan sesuai dengan tujuan pembelajaran. Skor implementasi sebesar 87,7% menunjukkan peningkatan keterlibatan dan aktivitas siswa dalam menerapkan keterampilan menulis surat dan pengumuman. Siswa lebih

termotivasi untuk menulis dalam bahasa Inggris mengenai topik-topik tersebut saat menggunakan aplikasi ini. Penilaian akhir menunjukkan bahwa aplikasi ini berhasil meningkatkan kemahiran menulis siswa dalam format surat dan pengumuman sesuai dengan metrik yang digunakan dalam penelitian. Secara keseluruhan, solusi pembelajaran mobile yang disesuaikan ini memungkinkan pembelajaran mandiri dan memberikan peningkatan kemampuan menulis yang terukur dalam keterampilan surat dan pengumuman bagi siswa kelas XI di sekolah menengah kejuruan.

KATA KUNCI: Media Pembelajaran, ELENA, Writing, Surat dan Pengumuman, SMA.

INTRODUCTION

Language is an essential tool for communication globally. As the predominant international language, English is highly important and beneficial for daily life interactions (Crystal, 2003). We use language to convey information, express emotions, provide feedback, and more. With globalization, English plays a major role across sectors like business, technology, culture, and schooling. In Indonesia specifically, English is the primary foreign language taught from elementary through higher education and in the workplace. Indonesian English education aims to build proficiency in the four core language skills: listening, speaking, reading and writing. Mastering English is critical for Indonesians to thrive in our interconnected world and access opportunities. Despite its status as a foreign language, English skills pave the way for socioeconomic mobility and success in Indonesia given the language's far-reaching significance (Ma'arif & Agustina, 2018).

Learning media is used as a tool and material to aid and obtain materials in the learning process. Learning media can motivate the students to learn the lesson and help them to understand the materials (Elmunsyah et al., 2018). Teaching media is anything that can convey or distribute messages from a learning source in a planned manner, so that there is a supportive learning environment where the recipient can carry out the learning process effectively and efficiently. Media in the education perspective is very strategic instrument in determining the success of the teaching and learning process because its existence can directly provide its own dynamics against learners (Crystal, 2003). (media can be interpreted as a tool to obtain information and knowledge so that in the interaction that takes place between educators and students. Based on the explanation above, it is concluded that learning media is a tool used for teaching or a tool used to

convey information, stimulate thoughts, feelings, attention and encourage the willingness of learners to learn.

Information and communication technology (ICT) has become an integral part of education, providing new opportunities for students to learn and teachers to educate (Ahmadi, 2018; Ghavifekr & Rosdy, 2015). For the English subject, ICT can be a useful tool to engage students and help them build their language skills. This paper will explore the potential of using ICT to design English learning media for 11th grade students, specifically on the topics of letters and announcements.

Effective learning media leverages technology to present materials in interactive and stimulating ways (Berk, 2010; Sarker et al., 2019). For teaching letter and announcement writing, multimedia resources like videos, audio clips, and visual aids can provide contextualized examples and guide students in proper formatting. Web-based applications could allow students to practice writing and receive automatic feedback on grammar, style, and structure. Games and simulations could provide a fun way for students to absorb key concepts.

In designing these learning media, it is crucial to consider the unique needs and interests of 11th grade students. The materials should balance challenging students' language abilities with building confidence. As today's digital natives, 11th graders may especially appreciate platforms that connect learning to technology they use in daily life. The goal is to boost engagement and supplement face-to-face instruction. This paper will delve deeper into principles of instructional design and best practices to craft optimal ICT-based learning media for 11th graders on letters and announcements. Effective integration of technology and pedagogy can modernize English instruction and equip students with 21st century skills. This project provides an opportunity to explore new mediums that capture the imagination of digitally immersed youth.

METHOD

Research Design

This research employs research and development (R&D) methodology. R&D in education is a process used to develop and validate educational products (Borg & Gall, 1984). Development models provide a framework for creating the intended product. In this R&D, a procedural model is utilized because it aligns with the development goals - to produce and test the feasibility of the resulting product (Puslitjaknov, 2008). The researchers aim to develop a new android application product called ELENA (English Letter and Announcement) as a learning medium. The purpose is to create a tool that makes it easier for students to learn English letters and announcements.

Research procedure

In general, several experts have developed R&D models, including the ADDIE model which has multiple stages. Dick and Carey (1996) stated that the ADDIE model was developed for designing learning systems. Similarly, others have noted that the ADDIE research model illustrates the fundamental stages of learning system design in a simple and straightforward manner. This model utilizes 5 steps:
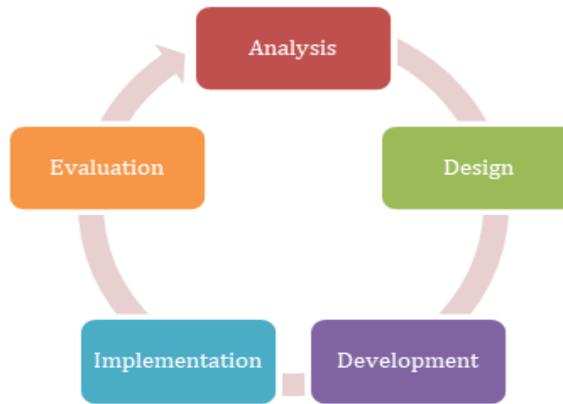

Figure 1. Steps of ADDIE's model

Data analysis

To measure the importance of various factors in determining the feasibility of the developed product was utilized. The scale ranged from 1 to 5, with 1 being "very poor", 2 being "poor", 3 being "fair", 4 being "good" and 5 being "very good" (Nuryadi & Astuti, 2018). To calculate the overall score from the questionnaire data, the researcher applied a Likert scale formula. This allowed the questionnaire responses to be quantified for analysis (Hanifah et al., 2023; Irhamna, 2017). The interpretation score is shown in the following table:

Table 1. Index Interpretation Criteria of Linkert Scale

PERCENTAGE SCORE	CATEGORY
81%-100%	Very good
61%-80%	Good
41%-60%	Fair
21%-40%	Poor
≤ 20%	Very poor

In order to interpret the percentage indexes from the questionnaire data, the researcher utilized a formula proposed. This formula allowed the researcher to categorize

the percentage indexes into standardized criteria for analysis (Irhamna, 2017).

$$P = \frac{N}{Y} \times 100$$

Descriptions:

P : Percentage of Index

N : Total Score

Y : Maximum Score/Total Items

The percentage indexes were applied to determine the final results of both the validation process and implementation process. This allowed the researcher to ascertain the overall feasibility and suitability of the developed product in relation to the research objectives. By categorizing the percentage indexes into standardized criteria, the final results clearly indicated whether the developed product met the desired goals that were defined at the start of the research.

RESULT AND DISCUSSION
Need Analysis

In this stage, the researcher needed an instrument to conduct analysis. The researcher used interviews with teachers and questionnaires for students to gather data. The interviews and questionnaires, administered via Google Forms, aimed to understand how students learn English and any difficulties they face. The results showed some students comprehend English better with interactive media like videos or apps. Students struggled with writing due to limited vocabulary and inability to express meanings in English. The questionnaires and observations revealed some students had trouble communicating in English overall. This signified a need for media to help students understand material more easily and enjoy learning English. As such, the researcher decided to develop the ELENA learning media as an alternative way to support English education in the classroom. ELENA was designed to address the specific English learning needs identified through interviews and questionnaires.

Design

The design process involved creating a flowchart and determining the necessary applications. The flowchart in Appendix 1 outlines the sequence of ELENA's content and navigation. PowerPoint, Hyperlinks, and iSpring Suite 10 were used to develop the interactive ELENA application. PowerPoint allowed creating slides to present the learning content. Hyperlinks connected the slides so users could easily navigate between them. iSpring Suite 10 was used to convert the PowerPoint with hyperlinks into HTML

format for web deployment. This combination of commonly-used Microsoft Office tools created an interactive and engaging English learning experience through ELENA. The flowchart provided a blueprint for the order of lessons and activity progression. PowerPoint formed the core content delivery system, Hyperlinks enabled nonlinear navigation, and iSpring Suite 10 facilitated web access for unlimited use. Together, these applications allowed building ELENA to address the English learning needs identified earlier in the study.

Development

The researcher conducted assessments of the ELENA learning media by having it evaluated by media experts and material experts. The questionnaire responses gathered from students, media experts, and material experts were analyzed using a Likert scale. The percentages were converted into criteria to determine the feasibility of the media. This analysis was important to identify whether the media needed to be revised (Irhamna, 2017). The expert questionnaires provided crucial feedback on ELENA's instructional design, content accuracy, ease of use, and overall quality. Quantifying the responses allowed systematic determination of ELENA's strengths and any areas needing improvement. This evaluative process was vital to refine and validate the learning media before implementation.

According to (Yani et al., 1995), the following guidelines were used for assessment with a Likert scale:

Table 2. Guidelines for Assessment

SCALE	QUALITY
4	Very good
3	Good
2	Poor
1	Very poor

- *Expert Validation and Revision*

These are expert validation and revision based on expert judgment. Validating through experts allowed identifying and correcting issues to improve the instrument/materials to better meet the research objectives and needs of the study. The part of expert validation discussed media validation and material validation

- *Media Validation*

This assessment was focused on the media aspect of ELENA learning media. The

expert validator of this research is Mrs. Kaeffi Natalia D, S.Kom as an expert in the field of media development and who teacher the subject of developing media at the SMK Ar-Rahmah. The researcher used the validation sheet or questionnaires to evaluate ELENA learning media based on media.

Table 3. The Result of Media Validation

No	Aspect	Total Score
1	Design layout	4
2	Text typography	12
3	Image	20
4	Packing	8
5	Navigation	3
SUM		**47**
TOTAL SCORE		**97,91**

The calculate of percentage of the feasibility of media experts was as follows:

$$P = \frac{47 \times 100\%}{48} = 97{,}91\%$$

The researcher received a score of 97.91 from the media expert validation, which fell into the "very good" category. This meant that the results of the media validation questionnaire indicated that the ELENA learning media was assessed to be at the "Can be Tested" stage based on its media aspects. However, the high score did not mean the application was finalized. Based on the validator's feedback, further revisions were still required before testing could begin. Specifically, the media expert suggested adding voice narration to dub each slide with audio.

In summary, while the overall media design and development of ELENA was highly rated, the validation process identified key improvements to integrate voice-over audio narration. This demonstrates the value of expert validation to thoroughly evaluate the learning media and recommend enhancements even for high scoring products. The constructive feedback will help refine ELENA further before pilot testing.

- *Material Validation*

This assessment focused on evaluating the instructional content aspects of ELENA, learning media. The expert validator was Syamsul Arifin, S.Pd, an English teacher at SMK

Ar-Rahmah. To assess the quality of the ELENA media's instructional materials, the researcher used a validation questionnaire completed by the expert. The questionnaire enabled the material expert to thoroughly evaluate the ELENA media based on key criteria related to instructional content and materials.

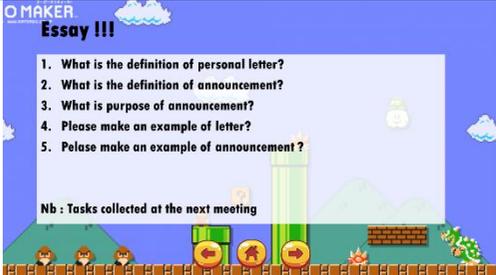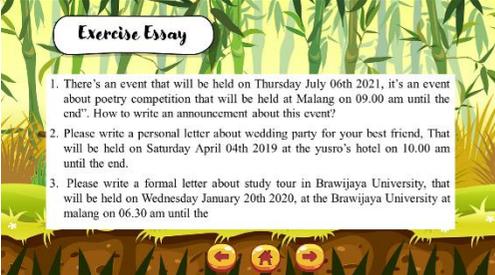**Table 4.** Criteria Related to Instructional Content and Materials

NO	ASPECT	TOTAL SCORE
1	Relevance	11
2	Accuracy	11
3	Basic concept of material	7
4	Suitability	13
	SUM	**42**
	TOTAL SCORE	**87,5**

The instructional materials in the ELENA, learning media, received a score of 87.5 from the expert validator. This score falls in the "very good" category, indicating the materials are highly appropriate but need some minor revisions before being tested. Specifically, the validator suggested the assessment sections could be improved and perfected. Overall, the high score and constructive feedback indicate the ELENA media's instructional content is very good quality and feasible to use, pending revisions to the assessments. The researcher will incorporate the expert's suggestions to further refine the materials before testing the ELENA media with students.

- *Revision Based on Expert Judgment*

Despite the ELENA media receiving a "can be tested" score during the expert validation, the validator provided constructive feedback and suggestions for improvement. After reviewing and analyzing this input, the researcher revised the media prior to testing. Some key revisions made based on the validation feedback included:

Table 5. Result of Media Validation Based on the Table

Before	After
The expert validator provided feedback suggesting the addition of audio pronunciations for vocabulary words. This enhancement would allow students to both see and hear the terms, supporting learning through multiple modalities.	Following this advice, the researcher added voice pronunciations to reinforce vocabulary acquisition and provide vital auditory learning opportunities through the multimedia ELENA platform.
The image shows an example activity before revisions were made. In this initial version, the researcher used questions that were unclear and difficult for students to understand. Based on feedback from the expert validator, it was suggested to modify the questions to make them more comprehensible.	The image shown demonstrates the revised version of the activity questions in following the expert feedback. Based on the validator's suggestions to improve clarity and comprehension, the researcher modified the questions to make them easier to understand and more straightforward.

Implementation

The ELENA media was piloted with 10 eleventh grade students at SMK Ar-Rahmah in Peterongan Jombang. After using the ELENA media to learn English, the students completed questionnaires to provide feedback. This section discusses the results of this implementation stage. To conduct the pilot, the researcher utilized a computer, mobile phone, and LCD projector to deliver the ELENA media content. The 10 participating students filled out the questionnaires following their experience with the learning media. The questionnaire responses provided insights into the students' perception of using the ELENA media for English instruction. Analyzing this data was crucial for evaluating the feasibility and educational impact of the ELENA media after its design and development.

The student questionnaires yielded a score of 87.7 for the ELENA learning media. This score falls into the "Very Good" classification range. It indicates that the students' responses on the questionnaires strongly support the effectiveness of the ELENA media in assisting with English learning, particularly developing writing skills. The high questionnaire score provides evidence that the ELENA media product successfully served its intended purpose of facilitating English acquisition for the target student group. The students' "Very Good" rating and positive feedback on the questionnaires affirmed the ELENA media's benefits for enhancing their English proficiency.

Evaluation

This section covers the evaluation of the ELENA media based on analysis of the student questionnaire responses. The results from the Google Form and paper questionnaires demonstrate the benefits and usefulness of the ELENA media for the target students. The questionnaire included various questions to garner feedback on factors such as: (a) The effectiveness of the ELENA media in improving English proficiency. (b) Its ability to enhance specific skills like writing letters and announcements. (c) The quality and usefulness of the instructional content. (d) Ease of use and navigation and (e) Student enjoyment and motivation to learn with the media.

The students' responses to these questionnaire items provided insights into the strengths and weaknesses of the ELENA media from the learner perspective. By aggregating and examining this questionnaire data, the researcher could thoroughly evaluate the educational impact of the ELENA media on the sample of students. The positive results validate the media's success in assisting students to improve their English.

Final Product

This section illustrates the final product of ELENA media. The images below showcase examples from the multimedia educational resource that was developed through this research. The ELENA media combines text, graphics, videos, and interactive activities to teach English letter and announcement writing skills. Key components and features of the final product shown include:

Table 6. Final Result of the Product

1. Main menu layout

5. Material of formal letter

2. Table of content

6. Exercise

3. Kind material from ELENA

7. Exercise Essay

4. Matrial of announcement

The various screenshots demonstrate the multi-modal nature and dynamic components incorporated in the interactive ELENA media. Through this innovative instructional resource, students can build their mastery of English writing skills in an accessible digital format. The images provide a representation of the completed ELENA product in its final refined form after cycles of validation, revision and improvement during the development process.

CONCLUSION

The researchers determined that ELENA as the media developed in this study was successful in assisting students at SMK Ar-Rahmah in enhancing their English writing abilities. This conclusion was supported by several pieces of evidence from the study:

First, expert evaluations of the ELENA media itself resulted in a very high score of 97.91 out of 100, signaling that the quality and design of the media was exceptionally good. Second, the instructional materials that supplemented the ELENA media were also validated by experts and received a score of 87.5 out of 100, again denoting they were very good. Finally, when students used the ELENA media and materials themselves, their questionnaires showed they responded very positively, granting a score of 87.7 out of 100.

In summary, the experts judged the ELENA media and accompanying materials to be well-designed and appropriate, while the students themselves also reacted very favorably after directly interacting with them. This consistency across the objective expert reviews and subjective student feedback signifies that the ELENA media was a high-quality tool that students enjoyed using for improving English writing proficiency. The researchers can feel confident that the evidence supports the feasibility and effectiveness of the ELENA media for enhancing written English skills among the student population tested.

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