

DEVELOPING MULTIMODAL ENGLISH LEARNING MEDIA USING ANIMAKER FOR RURAL JUNIOR HIGH SCHOOL STUDENTS

Nurul Afiyattena^{1*}, Siti Hanna Sumedi², Nadilla Dwi Haerani³

^{1,2,3}La Tansa Mashiro University, Indonesia

(nurulsaid2311@gmail.com)

Received: November 2025; Revised: March 2026; Accepted: June 2026

ABSTRACT

Developing multimodal media based on the Genre-Based Approach (GBA) is important to support the remote students' interest in learning English. This study aims to design and develop multimodal English learning media using Animaker for rural junior high school students in Lebak Regency, Banten Province. The study employed a Design-Based Research (DBR) method involving eighth-grade students. Data were collected through questionnaires, interviews, document analysis, and focus group discussions (FGD). Quantitative data were analyzed descriptively, whereas qualitative data were interpreted thematically. The findings revealed that students showed positive engagement and attitudes toward the multimodal learning media. The combination of visual animation, audio narration, and contextualized content helped students grasp the material more easily and encouraged active participation in the classroom. Expert evaluation also indicated that the developed media was appropriate for instructional use in terms of content, design, and learning suitability. This study highlights the significance of multimodal learning media in supporting more contextualized English learning in rural educational settings. Hence, future researchers are encouraged to conduct longitudinal studies investigating teachers' ability to integrate multimodal approaches in English learning and their long-term effects on students' academic achievement and language proficiency.

Keywords: animaker application; design-based research; English learning media; multimodal approach

ABSTRAK

Pengembangan media multimodal berbasis Genre-Based Approach (GBA) penting untuk mendukung minat belajar bahasa Inggris siswa di pedesaan. Studi ini bertujuan untuk merancang dan mengembangkan media pembelajaran bahasa Inggris multimodal menggunakan Animaker untuk siswa di daerah pedesaan Kabupaten Lebak, Provinsi Banten. Metode yang digunakan yaitu Penelitian Berbasis Desain (DBR) yang melibatkan siswa kelas delapan. Data dikumpulkan melalui kuesioner, wawancara, analisis dokumen, dan diskusi kelompok (FGD). Data kuantitatif dianalisis secara deskriptif, sedangkan data kualitatif diinterpretasikan secara tematik. Hasil penelitian menunjukkan bahwa siswa menunjukkan keterlibatan dan sikap positif terhadap media pembelajaran multimodal. Kombinasi animasi visual, narasi audio, dan konten kontekstual membantu siswa lebih mudah memahami materi dan mendorong partisipasi aktif di kelas. Evaluasi ahli juga menunjukkan bahwa media yang dikembangkan sesuai untuk penggunaan instruksional dalam hal konten, desain, dan kesesuaian pembelajaran. Studi ini menyoroti pentingnya media pembelajaran multimodal dalam mendukung pembelajaran bahasa Inggris yang lebih kontekstual di lingkungan pedesaan. Oleh karena itu, para peneliti di masa mendatang didorong untuk melakukan studi longitudinal yang menyelidiki kemampuan guru dalam mengintegrasikan pendekatan multimodal dalam pembelajaran bahasa Inggris dan pengaruh jangka panjangnya terhadap prestasi akademik dan kemampuan berbahasa siswa.

Kata Kunci: aplikasi animaker; penelitian berbasis desain; media pembelajaran bahasa Inggris; pendekatan multimodal

How to Cite:

Afiyattena, N., Sumedi, S. H., & Haerani, N. D. (2026). Developing Multimodal English Learning Media Using Animaker for Rural Junior High School Students. *IJEE (Indonesian Journal of English Education)*, 13(1), 17–30. <https://doi.org/10.15408/ijee.v13i1.48793>

*Corresponding author

IJEE (Indonesian Journal of English Education), 13 (1), 2026

P-ISSN: 2356-1777, E-ISSN: 2443-0390 | DOI: <https://doi.org/10.15408/ijee.v13i1.48793>

This is an open access article under CC-BY-SA license (<https://creativecommons.org/licenses/by-sa/4.0/>)

INTRODUCTION

In EFL learning environments, learning using media is needed in fostering active, meaningful, and effective language learning processes. This issue becomes more crucial at the junior high school level, especially for rural area schools, where students often require concrete modeling, contextualized exposure, and interactive experiences to comprehend language meaning beyond verbal explanation. In accordance with technological advancements nowadays, learning media have evolved into digital forms that integrate multimedia elements such as text, visuals, sound, video, and animation (Duha et al., 2026; Perales & Ulla, 2025). However, recent studies have revealed that rural schools still experience limited integration of multimedia and educational technology in classroom practices, particularly in EFL learning contexts. One of the major problems is the lack of material and digital resources, limited internet access, inadequate technological infrastructure, and insufficient institutional support (Mustafa et al., 2024; Supriadi et al., 2023). Based on the current research context, these problems affect the quality of language learning since students infrequently obtain meaningful language learning and input.

The prior studies by Mustafa et al. (2024) and Supriadi et al. (2023) are in line with the researchers' pre-observation, where language instruction still relies heavily on teacher-centered explanation and single media, such as textbook-oriented activities, which frequently limit students' opportunities to actively engage with authentic language use. As a result, teaching is still dominated by conventional methods rather than interactive multimedia learning. Moreover, studies on the digital divide between urban and rural schools indicate that rural students have less exposure to classroom technologies and ICT-based English learning compared to students in urban areas (Safira et al., 2024). Hence, this disparity creates unequal opportunities for students to develop digital literacy and communicative English skills through digital media. Moreover, students may experience difficulties in understanding linguistic concepts, maintaining learning motivation, and connecting classroom materials with real-life communication contexts. In response to these challenges, the integration of multimedia is critically required as it exposes students to be more interactive, contextual, and engaging in language learning (Kiviahho & Einolander, 2023; Tang et al., 2024). Multimedia allows students to receive information through multiple modes simultaneously, such as visual, auditory, textual, and interactive elements (Dewdney & Ride, 2014, p. 118; Martin & Betrus, 2019). Correspondingly, one of the approaches that relates to the combination of multimedia is the multimodal approach.

A multimodal approach is an approach that involves various signs or symbol systems to communicate meaning by integrating different modes simultaneously. As Kress and Leeuwen (2001) emphasize, multimodality entails utilizing multiple semiotic modes such as verbal, visual, auditory, and spatial that can support learning styles. Due to its complete combination, several studies, such as Kummin (2020), Afiyattena and Pravitasari (2022), and Haerani, Afiyattena, and Sumedi (2025), integrate this into teaching practice and found that multimodal approaches create more meaningful and engaging classroom experiences for students in learning contexts. Hence, a multimodal approach is required for students in rural areas because they provide more accessible, engaging, and contextualized learning experiences. Although earlier studies emphasized that multimodality enables learners to construct meaning through multiple semiotic modes, most studies have primarily focused on the theoretical benefits of multimodal learning rather than the practical process of developing accessible digital media for underprivileged educational settings. Nevertheless, designing digital learning media that effectively applies multimodality requires careful adherence to established principles and techniques. To implement this approach successfully, educators must use platforms that support multiple semiotic modes. One of the platforms that supports these semiotic modes is Animaker.

Animaker is a platform that supports multiple semiotic modes because it integrates visual, auditory, textual, and animated elements into one comprehensive platform that provides interactive features, is user-friendly, and encourages creative and collaborative learning (Bansong et al., 2023;

Paino & Hutagalung, 2022). It also supports learner-centered instruction by promoting engagement, creativity, and contextualized language learning. Such integration allows teachers to deliver instructional materials more effectively while helping students understand abstract language concepts through contextualized and visually supported explanations (Tamba & Simanjuntak, 2023). As several previous studies asserted that multimodal animated media positively influence students' involvement, learning achievement, and language mastery (Sartini et al., 2024), not to mention Sumedi et al. (2025), who found that digital textual features within multimedia platforms improve students' reading comprehension, critical thinking, and reading experiences. Therefore, Animaker can be considered as an appropriate platform for designing digital learning media because it not only embodies multimodal and constructivist principles theoretically, but also demonstrates strong pedagogical relevance in promoting contextualized language learning (Pattemore & Muñoz, 2020; Salemink et al., 2025).

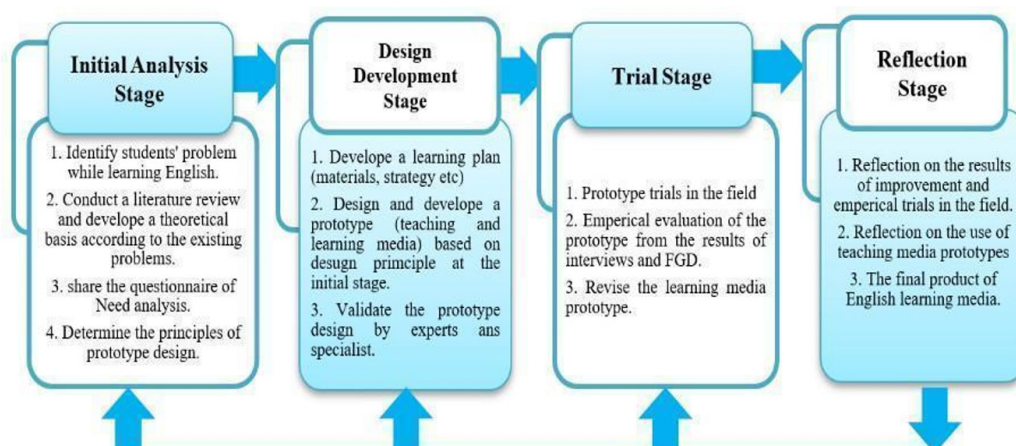
The aforementioned studies have predominantly investigated the effectiveness and implementation of animated and multimedia platforms in teaching and learning activities. However, limited studies have investigated how to design English learning media using Animaker through the Genre-Based Approach (GBA) (Hyland, 2024) and using the Decide, Design, Develop, and Evaluate (DDD-E) model by Ivers & Barron (2002) to construct the English learning media prototype. Hence, the novelty of this study lies in creating English multimodal learning media based on the Genre-Based Approach (GBA). This study combines multimodal digital media with the stages of GBA, namely 1) Building Knowledge of the Field, 2) Modeling of Text, 3) Joint Construction of Text, 4) Independent Construction of Text, and 5) Linking Related Text. Thus, Animaker is positioned not only as a technological tool, but also as a pedagogical medium that supports creating animated teaching media that enhance students' understanding of language features and contextual meaning-making in EFL learning. This study is also expected to contribute to the development of learning media and the adaptation of technological advancements in rural schools. Aligning with this research background, the research questions are formulated: 1) How is the English multimodal learning media-based GBA designed using Animaker? and 2) What are the students' perceptions of the multimodal English learning media? Thus, this study proposes to design and develop multimodal English learning media using Animaker and to explore students' insights into multimodal-based animation used in Learning English.

METHODS

Research design

This study applied the Design-Based Research (DBR) method adapted from Reeves (2006). There are 4 stages that must be carried out in this research, including: (1) initial analysis stage, (2) prototype design development stage, (3) trial stage, and (4) reflection stage.

Figure 1. Research Method Flowchart Adapted from Reeves (2006)



The first stage is *the initial analysis stage*. In this initial analysis stage, the researchers carried out several steps, including identifying English language learning problems students faced, evaluating the existing English learning media, and carrying out a needs analysis to evaluate and identify students' learning needs through a questionnaire and interview. The second stage is *the development stage*. Based on the data obtained from the first stage, researchers utilized the DDD-E model by Ivers and Barron (2002) to design the prototype. This model offers a structure for a multimedia project's phases, which consist of 4 stages including 1) Decide, the stage for determining the multimedia product framework; 2) Design, a stage to design the prototype; 3) Develop, a stage to develop the multimedia project which includes the production of media components (text, graphics, animation, audio, text color composition), and checking the animation quality; and 4) Evaluate, checking and validating the prototype by the expert. The third stage is *the trial phase*. At this stage, the prototype (product) is implemented in class, where students are taught English using the Animaker application media numerous times. The product is then evaluated by students through FGD and corrected by researchers to develop a final product that possesses high quality. Evaluation is carried out to obtain student reactions to the product or prototype being created. The fourth stage is *the reflection stage*. In this stage, the researchers evaluated the improvements and performance of the revised prototype, assessing whether the initial issues had been addressed. The reflection also included an evaluation of how the media was implemented in classroom activities, particularly observing students' engagement and use. Based on this reflection and evaluation, the researchers finalized the English multimodal learning media for wider use.

Research site and participants

The study was conducted for about one semester at a junior high school located in a rural area of Lebak Regency, Banten. It was chosen due to its limited digital exposure and technological dissemination. The total population consisted of 121 students, of whom 32 eighth-grade students were chosen as participants through purposive sampling. The participants were 13 to 14 years old and had no prior experience learning English through digital multimodal media. Additionally, their selection was based on the teacher's recommendation. The following is the participants' demographic table.

Table 1. Demographic Data of Participants

Class	Participants	Gender	Class	Participants (Students)	Gender
8 th A	RG (S1)	Female	8 th C	SN (S17)	Female
	MK (S2)	Male		NK (S18)	Male
	RP (S3)	Female		SK (S19)	Female
	M (S4)	Male		A (S20)	Male
	DN (S5)	Female		YD (S21)	Male
	MH (S6)	Female		DT (S22)	Female
	OW (S7)	Male		FH (S23)	Female
	UP (S8)	Male			
8 th B	HJ (S9)	Female	8 th D	SN (S24)	Female
	JF (S10)	Female		IK (S25)	Male
	RS (S11)	Male		LR (S26)	Female
	MR (S12)	Male		HG (S27)	Male
	SN (S13)	Female		UT (S28)	Female
	NK (S14)	Male		JR (S29)	Male
	MK (S15)	Female		HJ (S30)	Male
	JK (S16)	Male		GU (S31)	Female
				HI (S32)	Male

Data collection and analysis

The data were collected through questionnaires, interviews, document analysis, and Focus Group Discussions (FGDs). The questionnaire results were analyzed using descriptive statistical techniques, such as frequencies, percentages, and mean scores, to assess the feasibility, usability, and overall quality of the developed media. However, the interview and FGD data were transcribed and examined using Braun and Clarke's (2006) thematic analysis procedures involved familiarizing with the data, generating initial codes, grouping similar codes into categories, identifying potential themes, reviewing and refining the themes, and producing the final report. During the coding process, significant statements and recurring patterns were identified and labelled through open coding before being organized into broader thematic themes. Furthermore, the document analysis data were interpreted qualitatively to evaluate the relevance, suitability, and appropriateness of the learning materials. To ensure the credibility of the findings, the researchers conducted member checking by presenting the results to the participants for validation and feedback. This approach enabled participants to verify that the interpretations were accurate and offer further insights or corrections.

FINDINGS AND DISCUSSION

Findings

Initial analysis stage

In the first stage, the researchers analyzed students' needs for their English learning media and evaluated the existing and current learning media used by students. Students' needs are explored using a questionnaire and interview. The first question related to the students' interest in learning English. The result showed 48.1% of students had low interest in learning English. Some reasons are explored in an interview; one of the reasons mentioned by student 6 was, *"The teacher frequently taught English using an English textbook, which was rather boring."* Hence, it is asserted that teachers should explore and use various teaching aids, methods, and strategies to enhance students' interest in learning.

The second question related to the English learning constraints that students experience while learning English. The finding indicates that the limited availability of learning media has become one of the major obstacles affecting students' English learning process. This is reflected in the result, as 62.1% of the students perceived that current English learning media were insufficient. The result suggests that students require more supportive, engaging, and accessible learning resources to facilitate their language learning experiences. Without adequate media, students may experience difficulties in maintaining motivation, comprehending the materials, and actively participating in classroom activities. Therefore, the finding highlights the importance of developing effective and interactive learning media to support students' English learning outcomes. The third question related to learning resources that can facilitate students' learning English process. As 55.2% of students need more learning resources besides teachers' explanations and textbooks. It is in line with the fourth question about media needed by the students; 64.3% of students need multimedia teaching-learning aids to assist them in comprehending English lessons. As student 1 said, *"I hope my teacher will use a type of multimedia that consists of many interesting features like visual, audio, and video."*

The fifth question relates to the combination of media that can assist students in learning English. 44.4% of students revealed they need a combination of visual, audio, and linguistic. As student 4 testified, *"The combination of using media while learning English sounds interesting, because hopefully it can help me to catch the complicated topic in English quickly."* Based on the findings, most of the students were expecting the presence of multimedia, which can assist students' comprehension; this is in line with the study of Mathew and Alidmat (2013), who asserted that audio-visual

material or audio-visual aids (AVAs) are various instruments that appeal to the senses of learning for presentation and can make the learning process more interesting (Abdillah, 2022). Additionally, the sixth question relates to English skills. 44.4% of students need English vocabulary, and 40.7% need writing skills. As mentioned by student 2, “All English skills are important, but vocabulary is the most I need,” and student 3, “I love writing, and I want to learn it more.” The seventh question is about short dialogues; 44.4% of students need to learn about asking for information, and 40.7% need greetings. One of the reasons is explored in the interview: “We need short dialogues that relate to asking for information because we use it in our daily lives” (Student 1).

The eighth question related to the students’ need for learning and teaching activities. The score of 51.9% shows that students need many practices in learning English to help them understand the material properly. As mentioned by Student 2, “I think many practices are needed in our learning activity. The practice can help us to illustrate the material and get a better understanding, especially in speaking English.” In regard to current English learning media, 44.8% of students urged that the existing English learning media were inadequate and thus cannot assist them in understanding the material. As mentioned by student 4. “Currently, the learning media is still inadequate, so it cannot help us understand the material”. Lastly, in the tenth question, 63.2% of students were very motivated to have a supplemental teaching learning media that uses a multimodal approach. It is mentioned by student 5, “The combination of learning media in teaching English is needed because it will help us to understand the lesson and makes us enthusiastic in learning.”

Based on the questionnaire and interview results above, students demonstrated a lack of interest in learning English, which is caused by the lack of learning media that arouse students' enthusiasm for learning and engagement during learning, coupled with monotonous learning methods, learning resources, and learning activities. To confirm what has been said by students, researchers analyzed the existing learning media used by the teacher. The analysis of existing English learning media constituted an essential preliminary stage in the development process, providing empirical insights and guiding the design of the proposed digital English learning media. The results of the analysis are presented as follows.

Table 2. Current English Learning Media Used by the Teacher

English learning media	Reference	Total
Textbook	Kemdikbud. (2017). <i>Bahasa Inggris: When English rings a bell</i> (Revised Edition). Kementerian Pendidikan dan Kebudayaan. https://buku.kemdikbud.go.id	1
School area environment	Outing class	1
Electronic media	Computer, projector	2

Based on the data presented in Table 2 above, it was found that textbooks, the school environment, and electronic media served as the learning resources utilized in the school. Among these resources, the textbook entitled *Bahasa Inggris: When English Rings a Bell* was predominantly used in English learning activities. This textbook integrates visual and linguistic elements. Each chapter of the book provides various topics and is supported by exercises and conversations. However, students often found it difficult and tiresome during learning and practice from the book. This is due to a lack of supplemental learning media, like audio and video, which can support students’ understanding. Besides English Textbooks, teachers utilize the school environment, such as learning outside of the class; this activity can foster and improve students’ awareness of the surrounding environment. However, there were some obstacles experienced by teachers when implementing it; one of those is a lack of students' focus. Computers and projectors were also used to assist and achieve interesting learning activities. However, these electronic media are rarely used because most of the teachers are elderly and are less able to operate electronic media properly.

With this limited ability, teachers ultimately did not use learning media optimally. Regarding the several interview results above, it is asserted that the current English learning media used by the teacher did not grab students' interest in learning English. This might cause students to be lazy and unmotivated. To convince and strengthen the results of the interview above, the following table is the result of an expert's validation of the current English learning textbook, which is evaluated based on the learning media principle proposed by Clark & Mayer (2008).

Table 3. Expert's Judgment of the Current Learning Media

No	Aspect Clark and Mayer (2008)	Experts' judgment	Mean
1	Multimedia	74.83	77.08
2	Spatial Contiguity	79.25	
3	Modality	76.00	
4	Redundancy	77.00	
5	Coherence	77.00	
6	Personalization	76.50	
7	Segmenting	77.83	
8	Pre-training	78.25	

Table 3 above shows that the existing or current English learning textbook got 77.08%. It shows several aspects of composing the teaching textbook have not been achieved or fulfilled. Although the media were considered relatively adequate, several important aspects had not been fully achieved. Among all components, the multimedia aspect received the lowest score (74.83%), followed by modality (76%), indicating weaknesses in the integration of various media formats and learning modes within the instructional materials. This finding is consistent with the results of the questionnaire and interview, which revealed that the learning materials lacked supplemental media such as audio and video resources to support students' comprehension. The lower scores in multimedia and modality aspects further confirm that the current learning media still provide limited multimodal learning experiences for students. Therefore, these findings highlight the need to develop more interactive and multimodal English learning media that integrate various forms of digital content to enhance students' understanding and engagement in learning English. As stated by Mayer (2017), the modality principle tends to be more effective when learners have limited prior knowledge and when verbal segments are short rather than lengthy. In addition, the existing learning media incorporate only two semiotic modes, namely linguistic (written text) and visual (images) elements. Hence, the limited integration of multimodal resources may reduce students' engagement and interest in the learning process. In conclusion, the evaluation of current English language learning media shows the need for improvement in several aspects, especially in the use of multimedia and modality, which has the lowest score among the aspects assessed.

Development Stage

In the second stage, the researchers designed the multimodal learning media in the form of an animated video using Animaker, which incorporated the DDD-E (Decide, Design, Develop, and Evaluation) model and the GBA (Genre-Based Approach) stages for the sequence of book content. The DDD-E model was considered suitable because it provides systematic and structured procedures for instructional media development, beginning from deciding the instructional goals to designing, developing, and evaluating the final product. Its iterative and organized framework enabled the researchers to ensure that the developed media aligned with students' learning needs and the objectives of the study. Furthermore, the evaluation stage allowed continuous revision and improvement of the media based on expert validation and users' feedback, which contributed to the quality and effectiveness of the final product.

In the DDD-E model, the *Decide* stage was the time for researchers to decide goals, topics, concepts, skills, or materials that will be included in the media based on prior need analysis. However, in the *Design and Develop* stages the researcher began to create the content of the animated video using Genre-Based Approach, in this stage the researcher tried to design the prototype by inserting the topic, the images, and the audio into media then arranged those elements using GBA approach, including (1) Building Knowledge of the Field, (2) Modelling of the Text, (3) Joint Construction, (4) Independent Construction, 5) Linking related text. Those stages provided gradual scaffolding that helps students develop their comprehension and production of English texts systematically. The following figures are several parts of the animated video that were developed.

Figure 2. Introduction Building Knowledge



Figure 3. Invitation Building Knowledge



Figures 2 and 3 above are examples of the content of the animated video that was developed. This animated video consists of 4 topics. Nevertheless, only two topics, namely Introduction and Invitation, are presented as representative examples to demonstrate the building knowledge stage of GBA. In this stage, the students were shown several expressions that should be used while having an introduction and the definition of an invitation. The function of this stage is to brainstorm and stimulate students' knowledge before discussing the topic. In this stage, each material was given a simple explanation to build students' brief knowledge of the topics. This stage also aims to equip students with critical thinking and knowledge of the learning topic that can help them understand it easily in the second stage, namely modeling.

Figure 4. Self-Introduction Modeling



Figure 5. Invitation Modeling



Figures 4 and 5 were examples of the second stage of GBA, which is modeling. In the modeling stage, researchers provided a model of the material or topic in the form of multimodal media consisting of visuals and audio in order to give additional explanation and provide a real and authentic description of the material discussed in the prior stage (building knowledge). This activity aims to build students' understanding of the text and give additional comprehension through giving multiple communication modes. Besides modeling, the next sequence was the exercise named joint construction and independent construction, which can be shown in the following figures 6 and 7.

Figure 6. Example of Joint Construction

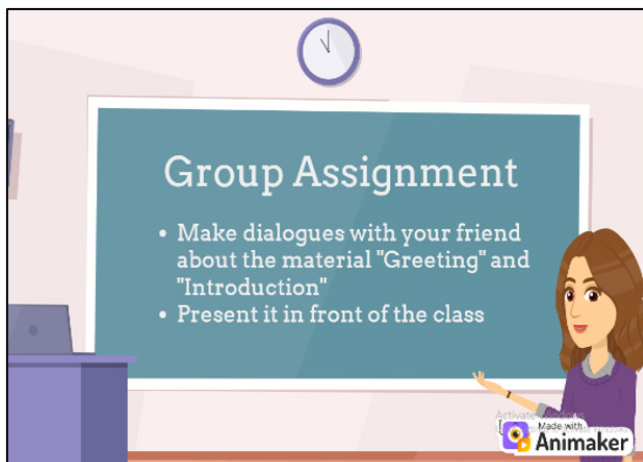


Figure 7. Example of Independent Construction



The figures 6 and 7 above illustrate the third and the fourth stages of GBA, those are *joint construction* and *independent construction*. In figure 6 (*joint construction*) the students do the assignment with a group and still under teacher's guidance, however in figure 7 (*individual construction*) the assessment is done individually. In this stage, students need to practice individually to evaluate their own personal understanding of the materials. The last stage of GBA is the *linking to the related text*. The goal of this stage is to strengthen and reconfirm students' comprehension by self-reflection and reflection on others, thereby improving their overall understanding of the material. Thus, the design and development stage were done.

The last stage of design and development was evaluation through expert's validation. It was carried out to obtain evaluations and ideas for a draft or design prototype. The validation form transmitted to experts includes a table with sections for evaluation and suggestions. The aspects that experts should be evaluated based on multimedia principles by Clark & Mayer (2008) are listed in the following table.

Table 4. Expert's Judgment Result

No	Aspect (Clark & Mayer, 2008)	1 st Expert's Judgment	Mean
1	Multimedia	82.99	80.80%
2	Contiguity	82.53	
3	Modality	80.92	
4	Redundancy	83.45	
5	Coherence	75.52	
6	Personalization	79.66	
7	Segmenting	82.41	
8	Pre-training	78.97	

The result of the expert's judgment toward the animated video developed is shown in Table 4 above. It shows a significant improvement of 80.80 %. Even though there are still many suggestions and revisions regarding coherence and pre -training. This score reflects a solid evaluation of various aspects, including multimedia, contiguity, modality, redundancy, personalization, and segmenting. This improvement represents the adaptation and continuous improvement made based on feedback from the previous judgment. However, to convince and make the better English learning media, the try-out and the reflection of the prototype on the students are needed.

Try-out and Reflection

At the third stage of DBR was the try-out. The try-out was carried out with students using the multimodal animated videos. The purpose of the try-out was to assess the practicality of the prototype. After each session, a focus group discussion was done to evaluate the usage of the product as learning media and to collect feedback for the reflection and improvement. The following Table 5 is the result of Try-out 1.

Table 5. The Result of FGD Try-out 1

No	Evaluation in FGD Try-out 1
1	Students said the use of animated video helps them to understand the topic. They also stated that learning by audio-visual can train their listening and reading skills.
2	Students found it difficult to see the text in the video because it appeared blurry.
3	Students argue that they prefer to do learning activities using audio-visual video rather than traditional methods.
4	The materials discussed are easy to understand.

As shown in Table 5 above, students were interested in using a multimodal animated video for learning since it encourages them in the learning process. The use of a multimodal approach in the prototype also engages students to participate and makes them comprehend the materials easily. However, there are still shortcomings regarding the blurry text; this suggestion has already been addressed in the second trial. After knowing students' perception in regard with the use of English learning media based Multimodal through FGD, students are also required to give their view in regard with multimedia principles on the following table 6.

Table 6. Students' Response to Try-out 1

No	Aspect (Clark & Mayer, 2008)	Students' Response	Mean
1	Multimedia	84.83	82.50%
2	Contiguity	85.52	
3	Modality	81.38	
4	Redundancy	85.52	
5	Coherence	76.21	
6	Personalization	82.41	
7	Segmenting	84.14	
8	Pre-training	80.00	

Table 6 shows that the first trial gained 82.50%, which is categorized as quite good. This result is adjusted to the results of FGD 1; there are still several media principles that need to be improved, including the principles of coherence, pre-training, and modality, in addition to the quality of the text attached to the video, which looks blurry. Those suggestions and evaluation were directly revised, and after being revised and improved, the researchers held a second try-out.

Table 7. The Result of FGD Try-out 2

No	Evaluation in FGD Try-out 2
1	Students can read the text in the video clearly, and the quality of sound and picture in the video is better than before.
2	The varied backgrounds encourage students to be more focused on the material in the video.
3	Students said that the use of pre-training is easier than before because it provides simple, clear, and to-the-point instruction.
4	There are still images and backgrounds that are not relevant to the material and text that are displayed on the screen.

Table 7 above illustrates there were slight improvements in FGD results from point 1 to 3 compared to the prior one. However, students still found certain backgrounds and images to be irrelevant to the content and language that are shown and described in point 4. This was also proven from the result of students' multimedia response, which can be seen from the following Table 8.

Table 8. Students' Response to Try-out 2

No	Aspect (Clark & Mayer, 2008)	Students' Response	Mean
1	Multimedia	86.44%	83.82%
2	Contiguity	87.36%	
3	Modality	85.98 %	
4	Redundancy	85.98%	
5	Coherence	76.90%	
6	Personalization	84.48%	
7	Segmenting	85.52%	
8	Pre-training	81.38%	

Table 8 shows an improvement in the mean score of 83.82%. The improvement in several multimedia aspects indicates that the revisions made after the previous trial and FGD successfully enhanced the quality and effectiveness of the developed media. The increase in the multimedia and contiguity principles shows that the integration between text, images, audio, and animations became clearer and more organized, enabling students to understand the learning materials more easily. In addition, the improvement in the modality aspect shows that the combination of visual and auditory information was better optimized, reducing students' cognitive load during learning. These improvements were likely influenced by the revisions conducted based on students' feedback, particularly regarding the clarity of video text, multimedia presentation, and the organization of learning content. However, the data above also shows that there was still revision in regard to coherence. In this section, the evaluations were not only made in the parts that were highlighted by students, but other principles were also evaluated and checked by the researcher; hence, in the second try-out, almost all multimedia principles got a high score. However, students seem not yet satisfied with the revisions of coherence and pre-training, which have not changed significantly. Consequently, the 3rd try-out needs to be conducted. Considering that there are still many multimedia principles and students' views in try-out 1 and 2 that need to be revised, the researcher rechecked all multimedia principles in the prototype of multimodal-based English learning media. So that the learning media can be used properly and get positive responses from students and experts. The results of try-out 3 can be seen in Table 9 below.

Table 9. Final Expert's Judgment and Students' Responses

No	Aspect (Clark & Mayer, 2008)	Expert's Judgment	Mean	Students' Response	Mean
1	Multimedia	90.57%		93.56%	
2	Contiguity	89.89%		90.80%	
3	Modality	82.53%		86.51%	
4	Redundancy	87.36%		89.20%	
5	Coherence	84.14%	87.16%	86.21%	89.07%
6	Personalization	87.24%		87.93%	
7	Segmenting	86.90%		90.00%	
8	Pre-training	88.62%		88.62%	

Table 9 above is the last try-out and reflection stage; the researchers obtained two results: the first is the final result of the expert's judgment as 87.16%, and the second is the final result of students' responses as 89.07%. Both results are higher than the prior judgment and try-out. Based on the try-outs and FGD above, the development of multimodal-based English learning media designed using Animaker demonstrated systematic and significant improvements. The students' responses also consistently indicated that integrating multimodal elements such as visuals, audio, linguistics, and clear textual presentation enhanced their comprehension and interest in the learning process. This shows that the product has significant positive insights. Furthermore, students agreed that the integration of multimodal elements facilitates greater engagement during learning activities and hopefully can be suitable and feasible for wider application in English language teaching and learning contexts.

Discussion

The findings of this study show that the use of multimodal media guided by Mayer's (2017) multimedia principles can improve the quality and organization of digital learning media. The application of these principles helps combine text, images, audio, and animation in a clear and systematic way. In addition, the use of the DDD-E Model and Genre-Based Approach (GBA) makes the learning content more structured and easier for students to follow and understand the material. This finding is supported by Mufida and Nabhan (2023), who stated that multimodality helps students understand learning materials more easily, reduces boredom and sleepiness, and creates more engaging and interactive learning activities. The findings also show positive results in students' engagement. Students gave positive responses to the learning media, and their mean scores increased steadily across the three tryouts. This indicates that the use of multimodal learning media can improve students' interest and participation in learning English. The attractive combination of visual, audio, and interactive features makes learning more enjoyable and meaningful. This finding is in line with Bachrudin et al. (2023), who mentioned that interactive multimodal e-modules can provide engaging and contextualized learning experiences and support independent learning. Similarly, previous studies by Fajrianti and Meilana (2022), Maula (2021), and Waruwu and Pakiding (2023) found that the use of Animaker can increase students' motivation, learning interest, and learning outcomes. Lastly, the study emphasizes the importance of technology integration in learning. The use of Animaker as a digital learning tool helps create modern, dynamic, efficient, and effective learning experiences. Gan et al. (2015, p. 216) and Mishra and Sharma (2005, p. 72) stated that technology-based learning provides many benefits in education. In addition, Ahmada and Rizkiyah (2024) explained that technology integration can enrich learning materials, improve access to learning, provide direct feedback, and increase productivity. Teo and Zhou (2016) also mentioned that technology makes learning

more interesting and increases students' learning interest. Therefore, the findings suggest that integrating multimodal approaches and technology is highly recommended to improve English learning in rural areas.

CONCLUSIONS AND SUGGESTIONS

The findings indicate that multimodal-based learning media are effective and worthy to use in English learning, particularly in remote areas, as shown by students' positive responses and experts' validation results. The integration of linguistic, visual, audio, spatial, and gestural elements helps students understand the material more easily through various modes of communication. Furthermore, designing English learning media through animated video using GBA made the process of designing become more systematic, scaffolded, and aligned with principles and theories. Hence, this study implies that multimodal learning media have strong potential to support curriculum innovation and the integration of technology in English education. Teachers are encouraged to develop creative and interactive learning media to increase students' motivation and comprehension. Therefore, workshops and teacher training programs are recommended to improve educators' competence in designing and implementing multimodal learning media effectively in the classroom. In addition, future researchers are encouraged to conduct longitudinal studies investigating teachers' ability to integrate multimodal approaches in English learning and their long-term effects on students' academic achievement and language proficiency.

REFERENCES

- Abdillah, T. R. (2022). Pengembangan Media Pembelajaran Interaktif Menggunakan Metode Ivers & Barron. *Jurnal TIKA*, 7(2), 179–188. <https://doi.org/10.51179/tika.v7i2.1321>
- Afiyattena, N., & Pravitasari, H. (2022). Development of Grammar in Written Discourse E-Book with Multimodal Approach Using Book-Creator Application. *Wiralodra English Journal*, 6(2), 64–81. <https://doi.org/10.31943/wej.v6i2.183>
- Ahmada, A., & Rizkiyah, F. (2024). Technology Integration in English Language Learning Based on the TPACK-SAMR Framework at Three Indonesian Universities. *Indonesian Journal of English Education*, 11(2), 357–368. <https://doi.org/10.15408/ijee.v11i2.37996>
- Bachrudin, S., Drajadi, N. A., & Santosa, E. B. (2023). Pengembangan E-Modul berbasis Multimodal untuk Mendukung Penguasaan Berbicara Bahasa Inggris Pemuda Desa Piyak. *Journal of Education Research*, 4(4), 1723–1730.
- Bansong, K., Poopatwiboon, S., & Sukying, A. (2023). The Effects of Multimodal Teaching on English Vocabulary Knowledge of Thai Primary School Students. *Journal of Education and Learning*, 12(6), 46. <https://doi.org/10.5539/jel.v12n6p46>
- Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Clark, R. C., & Mayer, R. E. (2008). *E-Learning and the Science of Instruction* (R. Taff (ed.); 2nd ed.). Pfeiffer.
- Dewdney, A., & Ride, P. (2014). *The Digital Media Handbook* (2nd ed.). Routledge.
- Duha, M. S. U., Tang, X., Matsuo, A., Zhu, B., & Maeda, Y. (2026). The Effect of Social Media Use on Language Learning: A Meta-Analysis. *System*, 137, 103931. <https://doi.org/10.1016/j.system.2025.103931>
- Fajrianti, R., & Meilana, S. F. (2022). Pengaruh Penggunaan Media Animaker Terhadap Hasil Belajar Peserta Didik pada Mata Pelajaran IPS Sekolah Dasar. *Jurnal Basicedu*, 6(4), 6630–6637. <https://doi.org/10.31004/basicedu.v6i4.3325>
- Gan, B., Menkhoff, T., & Smith, R. R. (2015). Enhancing Students' Learning Process through Interactive Digital Media: New Opportunities for Collaborative Learning. *Computers in Human Behavior*, 51, 652–663. <https://dx.doi.org/10.1016/j.chb.2014.12.048>
- Haerani, N. D., Afiyattena, N., & Sumedi, S. H. (2025). The University Students' Experiences in Designing a Digital Multimodal Learning Media for Teaching English. *Indonesian Journal of Education and Learning*, 08(02), 91–102. <https://doi.org/10.31002/ijel.v8i2.2599>
- Hyland, K. (2024). Genre-Based Instruction and Corpora. *TESOL Quarterly*, 58(3), 1227–1234.
- Ivers, K. S., & Barron, A. E. (2002). *Multimedia Projects in Education: Designing, Producing, and Assessing* (2nd ed.). Libraries Unlimited Teacher Ideas Press.

- Kiviahio, A., & Einolander, J. (2023). Digital Transformation, Well-Being and Shrinking Communities: Narrowing the Divides between Urban and Rural. *Heliyon*, 9(8), e18801. <https://doi.org/10.1016/j.heliyon.2023.e18801>
- Kress, G., & Leeuwen, T. van. (2001). Multimodal Discourse: The Modes and Media of Contemporary Communication. In *Arnold Publisher*.
- Kummin, S., Surat, S., Kuty, F. M., Othman, Z., & Muslim, N. (2020). *The Use of Multimodal Texts in Teaching English Language Oral Skills*. 8(12), 7015–7021. <https://doi.org/10.13189/ujer.2020.081269>
- Martin, F., & Betrus, A. K. (2019). Digital Media for Learning: Theories, Processes, and Solutions. In *Springer*. <https://doi.org/10.1007/978-3-030-33120-7>
- Mathew, N. G., & Alidmat, A. O. H. (2013). A Study on the Usefulness of Audio-Visual Aids in EFL Classroom: Implications for Effective Instruction. *International Journal of Higher Education*, 2(2), 86–92. <https://doi.org/10.5430/ijhe.v2n2p86>
- Maula, I. (2021). Designing Animaker as Instructional Media in Learning Reading Descriptive Text and Recount Text for Tenth Grade Students at MA Darul Falah. *LangEdu Journal*, 10(6). <https://jim.unisma.ac.id/index.php/LANG/article/view/11711>
- Mayer, R. E. (2017). Using Multimedia for E-Learning. *Journal of Computer Assisted Learning*, 33(5), 403–423. <https://doi.org/10.1111/jcal.12197>
- Mishra, S., & Sharma, R. C. (2005). Interactive Multimedia in Education and Training. In *Idea Group Publishing*.
- Mufida, N., & Nabhan, S. (2023). Fostering Multimodal Literacy Using Powtoon Application in Teaching English Reading : High School Students' Perceptions. *Journal of English Language Teaching and Literature*, 4(2), 176–189.
- Mustafa, F., Nguyen, H. T. M., & Gao, X. (Andy). (2024). The Challenges and Solutions of Technology Integration In Rural Schools : A Systematic Literature Review. *International Journal of Educational Research*, 126(February), 102380. <https://doi.org/10.1016/j.ijer.2024.102380>
- Paino, N. P., & Hutagalung, T. (2022). Developing Biographical Texts by Audio-visual Teaching Materials: Animaker-Web for High School Students. *Utamax : Journal of Ultimate Research and Trends in Education*, 4(3), 228–245. <https://doi.org/10.31849/utamax.v4i3.11125>
- Pattemore, A., & Muñoz, C. (2020). Learning L2 Constructions from Captioned Audio-Visual Exposure: The Effect of Learner-Related Factors. *System*, 93, 102303. <https://doi.org/10.1016/j.system.2020.102303>
- Perales, W., & Bedoya Ulla, M. (2025). Technology in EFL Contextual Teaching and Learning: Teachers' Practices and Perspectives in a Thai University. *Heliyon*, 11(17), 1–10. <https://doi.org/10.1016/j.heliyon.2025.e44169>
- Reeves, T. C. (2006). Design Research from a Technology Perspective. In J. van Den Akker, K. Gravemeijer, S. McKenney, & N. Nieveen (Eds.), *Educational Design Research* (pp. 52–66). Routledge.
- Safira, U., I. G. A. L. P., & Suwastini, N. K. A. (2024). The Immense of Digital Divide : A Literature Review of Rural and Urban Schools' Classroom Technologies in English Language Learning. *Jurnal Indonesia Sosial Teknologi*, 5(8), 3667–3677.
- Salemink, K., Townsend, L., & Chapman, P. (2025). The Remapping of Rural Digitalisation: A Just-Rural Narrative Review. *Journal of Rural Studies*, 113, 103499. <https://doi.org/10.1016/j.jrurstud.2024.103499>
- Sartini, R., K., & Fauziati, E. (2024). Innovative Pedagogies: Enhancing ELT/TESOL through Technology and Collaboration. *JLE: Journal of Literate of English Education Study Program*, 5(2), 136–146.
- Sumedi, S. H., Afiyattena, N., & Hastuti, A. I. (2025). Students' Perceptions of Reading Digital Texts at a Private University in Indonesia. *Globish (an English-Indonesian Journal for English, Education, and Culture)*, 14(1), 110–120. <https://doi.org/10.31000/globish.v14i1.12913>
- Supriadi, B., Patak, A. A., & Korompot, C. A. (2023). Teaching EFL in a Rural School : Challenges and Strategies. *Pinisi: Journal of Art, Humanity, and Social Studies*, 3(3), 208–215.
- Tamba, R., & Simanjuntak, V. N. T. (2023). Development of Animated Video-Based Learning Media Using the Animaker Application on Theme 7 Sub-theme 1 Class V SDN 101765 Bandar Setia. *Asian Journal of Applied Education (AJAE)*, 2(3), 303–314. <https://doi.org/10.55927/ajae.v2i3.4975>
- Tang, Y., Li, Q., & Wu, Y. (2024). The Impact of the Digital Divide on Rural Older People's Mental Quality of Life: A Conditional Process Analysis. *Heliyon*, 10(17), 1–11. <https://doi.org/10.1016/j.heliyon.2024.e37109>
- Teo, T., & Zhou, M. (2016). The Influence of Teachers' Conceptions of Teaching and Learning on Their Technology Acceptance. *Interactive Learning Environments*, 25(4), 513–527. <https://doi.org/10.1080/10494820.2016.1143844>
- Waruwu, A. T. M., & Pakiding, H. (2023). Penggunaan Aplikasi Animasi Interaktif (ANIMAKER) dalam Proses Pembelajaran. *Vox Dei: Jurnal Teologi Dan Pastoral*, 4(2), 197–209. <https://jurnal.sttekumene.ac.id>