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ELT in Local and Global Lives: from Policy to Classroom Practices

Developing Local Content-Based Motion Graphics as Learning Media for Vocabulary Learning

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ABSTRACT

This research aims to explore the potential of motion graphics as an effective vocabulary learning tool for senior high school students. The developed motion graphics leverages local content to engage students and make them feel a part of their culture as they expand their English vocabulary. The research employs a design-based research approach to develop and evaluate the media, this method consists of four phases, there are; Analysis of Practical Problems, Development of Solutions, Iterative Cycles of Testing and Refinement, and Reflection to Produce "Design Principles" and Enhance Solution Implementation. The research consists of semi-structured interviews, close-ended questionnaires, material expert judgments, and media expert judgments. Furthermore, data analysis technique that used in this research are data condensation, data display, drawing and verifying conclusion. The research concludes with the development of local content-based motion graphics as a promising learning media for vocabulary learning, taking into account the cultural context and the students' preferences. The findings contribute to the understanding of effective learning strategies and the potential of motion graphics in education, particularly in the context of senior high school vocabulary learning.

Keywords: design-based research; motion graphics; local content; vocabulary learning

INTRODUCTION

This research aims to address the challenges faced by high school students in Rangkasbitung, Indonesia, in acquiring English vocabulary. The idea of improving vocabulary learning is fundamentally essential for English as a foreign language learner, especially in Indonesia. Learners who learn English as a foreign language also have some difficulties in their learning process. Read (2000) stated that vocabulary learning is a challenging task for language learners. Based on the observation, the students struggle with vocabulary and the language system.

Developing innovative motion graphics and include local content, the study seeks to develop engaging and effective learning media. These motion graphics develop to enhance vocabulary acquisition but also learn a deeper understanding of local content. Through a design-based research methodology, the researcher iteratively develops, test, and refine these media, ensuring their alignment with the specific needs and learning styles of the students. In addition, this research aims to put the students with the vocabulary skills necessary to improve in their academic and personal encourage while suddenly promoting cultural appreciation and understanding.

METHOD

This research used design-based research approach. According to Thomas C. Reeves (2006), Design-based Research (DBR) is a method aimed at creating and refining learning components, strategies, materials, and systems. Reeves emphasizes that DBR should be viewed as a research approach rather than a strict methodology. Design-based research develop both learning components and learning system to create a product of the research. Design-based research consist of qualitative and quantitative data. Because of their emphasis on people's lived experiences, qualitative data are intrinsically well adapted for identifying and linking the meanings individuals place on the events, processes, and structures of their lives. The design-based research is divided into some phases. According to Reeves (2006), design-based research consists of 4 phases, there are; Analysis of Practical Problems by Researchers and Practitioners Collaboration, Development of Solutions by Existing Design Principles and Technological Innovations, Iterative Cycles of Testing and Refinement of Solutions in Practice, and Reflection to Produce "Design Principles" and Enhance Solution Implementation.

Design-based research



Refinement of problems, solutions, methods, and design principles

Figure 1. Design-based research scheme

Data collection techniques used in this research are closed-ended questionnaires and semi structured interview. Moreover, in this research, the researcher utilized some instruments, which are, interview guidance, documentation, material expert judgement form, media expert judgement form, and students' assessment form. The research conducted in senior high school in Rangkasbitung, the subject included 57 eleventh grade students of the school. To analyse the data, the researcher used Miles and Huberman's (2014) three data analysis: Data Condensation, Data Display, and Drawing Conclusion.

RESULT AND DISCUSSION

Analysis of Practical Problems by Researchers and Practitioners: The first phase of the research involved identifying practical problems in vocabulary learning through semi-structured interviews with teachers and close-ended questionnaires from students. The interviews revealed that existing vocabulary learning methods were not engaging enough, and there was a need for innovative media to improve

student motivation and vocabulary acquisition. Teachers indicated that using local content-based motion graphics could significantly enhance the learning experience, particularly by making it more relatable. On the other hand, the student questionnaires highlighted the challenges they faced in learning English vocabulary, such as the difficulty of remembering new words. A majority of students agreed that using media could improve their learning experience, with strong interest in integrating local cultural content. This phase established the foundation for creating a media solution that would address both the students' and teachers' needs. The table below shows students response to the close-ended questionnaire:

An example of a column	Strongly	Agree	Neutral	Disagree	Strongly
heading	Agree				Disagree
The importance of learning	42%	54%	4%	0%	0%
English					
The importance of using	51%	49%	0%	0%	0%
media in learning English					
Learning English is	19%	65%	16%	0%	0%
challenging					
The importance of understand	58%	42%	0%	0%	0%
English vocabulary in					
learning English					
The importance of using	67%	33%	0%	0%	0%
media in learning English					
vocabulary					
Learning English vocabulary	18%	72%	10%	0%	0%
is challenging					
The importance of learn	25%	63%	12%	0%	0%
English about local content					
and culture (Indonesia)					
Watch English animations,	70%	30%	0%	0%	0%
movies, or short videos can					
increase English vocabulary					
understanding					
Media has a big influence in	69%	31%	0%	0%	0%
assist vocabulary learning					
The importance of developing	49%	51%	0%	0%	0%
new media for learning					
English vocabulary					

Table 1. Students' response to close-ended questionnaire

Development of Solutions by Design Principles and Technological Innovations: In the second phase, solutions were developed based on the analysis from the previous step. The media creation process began with planning, which involved setting learning objectives, gathering materials, and

scripting a storyboard centred on the local culture of the Baduy tribe in Banten. This theme was chosen because it aligned with the curriculum and could make vocabulary learning more culturally relevant for students. The media included motion graphics that combined visual elements, animations, and sound to create an engaging learning experience. The design process involved voice-over recordings, creation of graphic assets, and careful selection of background music. The result was a motion graphic as learning media that aimed to teach vocabulary in a way that was interactive, visually appealing, and contextually grounded in the students' local culture. Figure 2 is the animating process of developing motion graphics learning media for vocabulary learning:



Figure.2 Motion Graphics Animating Process

Iterative Cycles of Testing and Refinement: Once the media had been developed, it went through several cycles of testing and refinement. Expert validation forms were used to gather feedback from both media and material experts. These experts evaluated the appropriateness of the content, media quality, and alignment with the learning objectives. The material expert validation yielded a validity score of 98%, indicating that the content was highly suitable for vocabulary learning. The media expert validation resulted in a 96% validity score, confirming the technical quality and appropriateness of the motion graphics. Their suggestions were incorporated into the subsequent versions of the media. Additionally, student assessments were conducted to gather feedback on their experience with the motion graphics. This feedback was crucial for identifying areas that required further refinement, such as adjusting the clarity of certain animations or improving the pacing of the lessons. Through these iterative cycles, the media became more polished and better suited to the needs of both students and teachers. In the classroom, researcher shows the student motion graphics learning media for vocabulary learning and the students are really interested in. The table 2 shows students vocabulary acquisition:

Students' vocabulary acquisition	Percentage		
Learn 1-3 new vocabularies	21%		
Learn 4-6 new vocabularies	35%		
Learn 7-9 new vocabularies	32%		
Learn 10-12 new vocabularies	12%		

Table 2. Vocabulary Acquisition

Reflection and Enhancement of Solution Implementation: In the final phase, the research focused on reflecting upon the entire development process to produce design principles that could guide future implementations. The reflection involved analysing feedback from students and experts to assess

the effectiveness of the motion graphics in assisting vocabulary learning. The findings showed that the integration of local cultural content in motion graphics not only made learning more engaging but also helped students relate the vocabulary to their daily lives. This approach provided a practical framework for future educational tools, emphasizing the importance of cultural relevance in learning materials. The successful implementation of the media reinforced the value of design-based research, where continuous testing and refinement lead to more effective educational solutions.

DISCUSSION

This study describes the development of local content-based motion graphics as learning media for vocabulary learning in senior high school. The media is kind of animation which is a motion graphics that had been assessed for its validity, effectiveness, and practicality. The result of expert appraisal suggested that the media can be watched by the learners with little revision. The teacher also suggests and realize that it is necessary to using media to teach English vocabulary. In this case the teacher has implemented several learning media in the classroom, but is still very open to new media that has never been used in the classroom. According to Tatipang, Manuas, Wuntu, Rorintulus & Lengkoan, (2022), teachers can at least use inexpensive and efficient tools which simple and unpretentious, that being a must in an effort to achieve the expected teaching goals.

With the use of this learning media, teachers can promote more active learning. In order to explore more vocabularies in English teaching and learning process, this media has varieties of vocabulary and include local content. In learning, students' participations are very necessary because without their involvement, learning might not be meaningful (Syawaluddin, 2020). The students are interested in learning vocabulary using local content-based motion graphics because of the appearance and the material of the media. This shows that multimedia presentations make the input more comprehensible and memorable.

CONCLUSION

This research follows a design-based research (DBR) methodology, aimed to create a strong correlation between educational research and problem solution. The study consists of four phases: Analysis of Practical Problems, Development of Solutions, Iterative Cycles of Testing and Refinement, and Reflection to Produce "Design Principles" and Enhance Solution Implementation. Each phase has a different purpose, such as identifying object requirements, creating a concept, testing solution effectiveness, and evaluating the entire process. The data collection techniques include close-ended questionnaires, semi-structured interviews, and expert assessment forms. In addition, the research was conducted in SMA Negeri 1 Rangkasbitung, the subject were 57 elevent-grade students.

The research has successfully developed local content-based motion graphics as a learning media for vocabulary learning, following the design-based research methodology. The research has

addressed the identified problems of students' difficulties in learning English vocabulary, lack of motivation, and different educational backgrounds. The use of motion graphics with local content has the potential to enhance the teaching and learning quality, specifically in the context of vocabulary learning for eleventh-grade students in Banten. The media used in this research assisted students to learn some new vocabularies based on local content and daily vocabularies. The data showed the media was valid and had excellent category.

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