

Designing Instagram-based Learning Materials to Enhance Novice EFL Learners' Vocabulary Learning

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Abstract

This study aims to present the process of designing Instagram-based learning materials aimed at enhancing English vocabulary learning among novice EFL learners in Masewe village, Poso, Central Sulawesi. Using the ADDIE framework, culturally rich and authentic materials were designed to align with students' needs, interests, and local contexts. This study was part of a community outreach program for students of the English Language Education Study Program, involving 1 university student as the project initiator, 1 EFL teacher, 2 community leaders, and 10 students aged 12–15 years as participants. The object of this study was Instagram-based learning materials developed by integrating the cultural and natural context of Masewe village into the theme of nature. The instruments used were questionnaires, a test, and a rubric. The data were processed quantitatively and analyzed descriptively. The results revealed that integrating cultural and authentic elements into English learning materials can improve students' motivation and engagement. Over a four-week implementation period, the participants demonstrated improvement in their English vocabulary and expressed increased motivation to learn English, particularly when authentic content was incorporated. This study is limited by its small sample size, short implementation duration, and focus solely on vocabulary outcomes. Future research should explore long-term impacts, expand to other language skills in a larger cohort, and investigate how Instagram-based learning affects students' overall language proficiency and cultural identity development across diverse educational settings.

Keywords: Instagram, Authentic materials, ADDIE, Vocabulary, Novice EFL learners, Instructional design

1. Introduction

In the rapidly growing digital era, the use of social media has become an integral part of daily life, especially among the younger generation. It has also created a new opportunity in education, especially in the context of learning English as a foreign language (EFL). Social media, especially Instagram, is a powerful platform for increasing young learners' motivation in learning English. Instagram can increase student engagement and interest in the learning process through its visual and interactive features. The Instagram platform's ability to provide fast feedback and facilitate student interactions makes it an effective tool for creating a collaborative learning environment. This interactive aspect will not only encourage student participation but also allow active learning where students can think and learn from one another.

Although several studies have explored the potential of Instagram in EFL instruction, most have focused primarily on general language skills or urban classroom contexts with access to modern technology. This study offers different perspective by focusing on the development of culturally contextualized Instagram-based learning materials for young EFL learners in a rural Indonesian setting, where such innovations remain underexplored. Furthermore, few studies have examined how to design these materials using a structured instructional design framework such as ADDIE.

This study aims to fill that gap by addressing the following research objective: “To develop Instagram-based English learning materials that incorporate local cultural content using the ADDIE instructional design model, and their impact on students’ vocabulary acquisition and motivation”. By focusing on the integration of local cultural heritage into English learning content and by targeting young learners in a village context, this research contributes a novel perspective to the existing literature on social media-based education. It also provides practical insights into how Instagram can be adapted not only as a digital tool but also as a culturally responsive learning medium in underrepresented educational settings.

2. Literature Review

Several studies have highlighted the effectiveness of Instagram as a tool in learning English. Instagram’s strength is in its flexibility to supporting different types of content such as images, videos, and stories allows teachers to create interesting and creative learning materials that can capture students' interest (Fauziah et al., 2023; Nasution, 2023). By presenting information in a visually appealing and accessible manner, Instagram is able to transform traditional educational methods into more dynamic and fun activities (Sanusi et al., 2021). Since students are already familiar with this platform, the attraction and intimacy of Instagram make learning more relevant and not too frightening for them, thus encouraging them to actively participate in the learning process, hence improving their motivation (Mahmud et al., 2022; Pujiati et al., 2019). In addition to that, Instagram also encourages collaboration and discussion among students, further increasing their motivation and engagement. Features such as comments, direct messages, and collaborative posts allow students to interact with teachers, fostering a sense of community and support (Fauziah et al., 2023; Mahmud et al., 2022; Nasution, 2023; Pujiati et al., 2019; Sanusi et al., 2021; Syafruddin et al., 2024).

Learning English is often a challenge for young learners. The lack of context and relevance of learning materials to everyday life can cause this problem. As a result, many students experience difficulties in understanding and applying the language concepts they learn, which in turn can reduce their motivation and interest in learning. Therefore, educators need a new strategy that can help students learn English in a more fun and engaging way. Integrating cultural content into English learning materials can become a new strategy to make learning process more relevant and interesting (Tungka, 2012). Educators can use Instagram to promote students’ cultural awareness by maximizing its multimodal features to share images, videos, and stories in a way that can make English learning more understandable and engaging for students (Greenhow & Lewin, 2016), thus

creating a meaningful learning experience and culturally relevant for them (Alptekin, 1993; Barfield & Uzarski, 2008; Chun et al., 2016; Peranginangin et al., 2019; Saniei, 2012; Sudiran, 2023; Tungka, 2012). Furthermore, educators can create or use content that makes learning English fun and applicable to everyday life, such as through storytelling, thematic photo essays, or interactive posts that require students' active engagement in English. Those kinds of activities not only can expose them to the use of English but also enhance their cultural awareness, providing real-world contexts that make the learning of English more relevant and engaging.

This strategy of integrating cultural content into English learning materials is supported by earlier studies (Alptekin, 1993; Barfield & Uzarski, 2008; Chun et al., 2016; Peranginangin et al., 2019; Saniei, 2012; Sudiran, 2023; Tungka, 2012), which highlight the pedagogical benefits of cultural authenticity in materials to build deeper learner engagement, identity, and pride. These references are essential to the present study as they offer both theoretical and practical rationales for embedding culture in EFL instruction—particularly in a rural context like Masewe Village, where cultural identity can serve as a powerful anchor for language learning.

This study aims to fill the gap in previous findings by providing information on how to integrate cultural content into English learning content that is created on Instagram. The framework used in this research is the ADDIE framework, which is one of the models that formulates a generic, systematic, dynamic, and flexible learning design process that is widely used in effective learning design (Greaney & Ellis, 2005; Molenda, 2015). The main tasks in analyzing this include clarifying learning problems, setting learning objectives, analyzing subordinate goals and skills, as well as analyzing the learning environment and students (Branch, 2010).

Masewe Village is located in the East Pamona District of Poso Regency in Central Sulawesi. Masewe Village is rich in its Pamonanese cultural heritage and boasts beautiful natural surroundings, including a waterfall. Based on the initial interview results from the researchers, it was found that despite the village's rich cultural and natural heritage, EFL teachers rarely incorporate the village's potential into their educational materials. Consequently, young learners feel that learning English is unconnected to their everyday existence and cultural identity. Brown (2007) argues that students' involvement and motivation significantly decrease when they fail to see the relevance of educational content from their own experiences. Therefore, to overcome this gap, an innovative approach is needed that not only teaches language skills but also fosters pride and cultural awareness among students.

The researchers chose the ADDIE model as an approach to creating learning materials for EFL young learners in Masewe village that not only teach English language skills but also foster cultural pride among students. This model comprises 5 phases: analysis, design, development, implementation, and evaluation. It guarantees the planning, development, and careful enhancement of learning materials to serve students' needs (Branch, 2010; Greaney & Ellis, 2005). Educational experts widely recognize this model as a comprehensive and flexible approach to learning designs, particularly due to its ability to adapt to various educational contexts (Gustafson & Branch, 2002; Molenda, 2015). The use of the ADDIE model is particularly important in this study for several reasons. First, it ensures that learning materials are developed in a structured and research-informed

way, beginning with an in-depth understanding of learners' needs, the cultural context, and the learning environment (Branch, 2010; Gustafson & Branch, 2002). Second, the model supports flexibility and revision at each stage, which is crucial in adapting materials for the specific sociocultural and technological context of Masewe Village.

This study explores the development and application process that focuses on Instagram-based cultural learning material using the ADDIE model to provide reference on how Instagram can be used as a learning tool due to its potential to craft more engaging and contextually relevant learning experiences for students in village areas.

3. Method

This study adopted a research and development approach, focusing on the process of developing the prototype of Instagram-based learning materials for EFL novice learners at SMPN SATAP Masewe, Poso regency, Central Sulawesi. The framework utilized was the ADDIE model, which comprises five stages: Analysis, Design, Development, Implementation, and Evaluation. This study was a part of a community outreach program for students of the English Language Education Study Program, which was located in Masewe village in 2024. This two-month project involved 1 university student as the project initiator, 1 EFL teacher, 2 community leaders, and 10 students of SMPN SATAP Masewe aged 12-15 years old. The object in this study is Instagram-based learning materials developed by integrating the cultural and natural context in Masewe village on the nature topic. The instruments used in this study were questionnaires, a test, and a rubric. The test instrument was validated by two EFL experts to ensure its relevance and alignment with the learning objectives. The rubric was used to evaluate students' performance and was also reviewed by expert validators for consistency and appropriateness. The data were processed quantitatively by tabulating responses, calculating means, and interpreting trends to assess learner engagement and material effectiveness, and analyzed descriptively.

4. Results and Discussion

Results

Analysis phase

A needs analysis was conducted in this phase. The researchers collected the data by distributing surveys and interviews with 1 EFL teacher who teaches at a junior high school in the village and 2 community leaders. The results show three significant points to be used in developing a syllabus and learning materials.

1. *The students, who are also Masewe villagers, are EFL novice learners.* The interview results showed that students at SMPN SATAP Masewe had never studied English in a formal education institution before, as English was not taught as a compulsory subject in their elementary schools. As a result, students viewed English as one of the most challenging subjects they encountered in school.
2. *The students are fond of the village's rich cultural and natural context.* Results of the interviews with the community leaders revealed that the children and teenagers of the village actively

participated in cultural and community events, such as Padungku, a Thanksgiving-like event, and Pamonanese traditional wedding ceremonies. They also spent a significant amount of their after-school time in nature. Surrounded by forests and hills and a waterfall, the Masewe village provides an ideal setting for children and teenagers to engage in adventurous play.

3. *The students are familiar with social media, including Instagram.* The vast spread of the internet has reached the lives of villagers, including the Masewe teenagers. They were active users of social media, including Instagram.

Design and Development phases

The two phases were done simultaneously. The team developed the prototype of Instagram-based learning materials using the needs analysis results. The main objective emphasized in the learning materials was to increase students' vocabulary. The design process included carefully selecting the authentic images and videos and compiling them into a thematic unit that reflects natural attractions, especially in the Masewe village. The team also developed an evaluation rubric to be used by the raters in the evaluation phase, and the instruments used by the students for their responses.

Implementation phase

In this phase, the team introduced this prototype to the 10 students who volunteered in the pilot project.



Figure 1. Introducing the Prototype

For four weeks, the materials were taught in students' regular classroom activities, yet the assignments were done online. Figure 2 shows the interaction of students

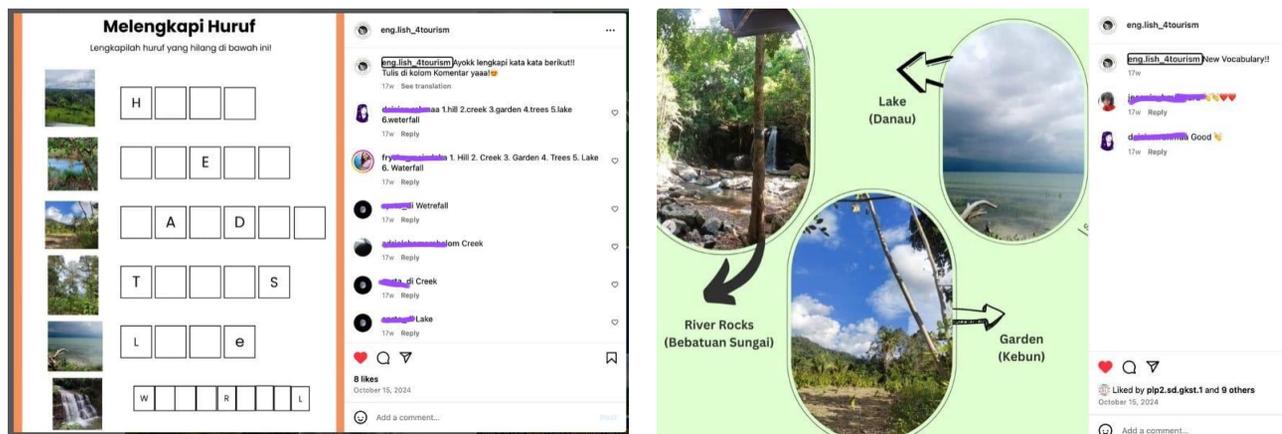


Figure 2. Students' Interaction with the Material

As seen in Figure 2, students interacted with the account by liking and commenting in English. During interview, they claimed that they also shared the post with their other friends. At the end of the fourth week, the team asked for students' feedback through a questionnaire (see Table 3).

Evaluation phase

This phase consisted of the team's efforts to gather feedback to finalize the prototype. Due to the limited time, only two types of evaluation were conducted in this phase: formative and summative evaluation. Formative evaluation was conducted right after the first prototype was developed. The purpose was to check whether the learning needs and objectives were accommodated in the prototype, and the cultural and natural aspects were integrated into the materials. The prototype created was evaluated by the lecturer as rater 1 and the EFL teacher at SMPN SATAP Masewe as rater 2. The rubric used in this phase was modified from Tungka's rubric of Expert Questionnaire for Prototype (Tungka, 2017).

Table 1. Blueprint of Rubric

No	Indicators
<i>Integration of Cultural and Natural References into the Learning Materials</i>	
1	The learning objectives stated in the Instagram account posts align with the learning objectives and needs of students.
2	Objectives of each post correspond to students' need for vocabulary improvement.
3	The product allows students to engage with the learning materials without the presence of teachers.
4	Instructions to engage with the posts (giving comments, doing call to action, etc.) reflect various learning methods and accommodate students' different learning styles.
5	The content flow in the product is relevant to the curriculum standards and the competences decided to be taught to the students.
6	Learning objectives and competences expected are stated in the post or caption.
7	The contents integrate cultural and natural elements, such as traditional events and natural attractions.
8	Cultural and nature references are presented proportionally in a way that is respectful and inclusive, encouraging students to engage with diverse perspectives and contexts.
9	Cultural and nature references are presented in a respectful way.
<i>Design and Multimodal Aspect</i>	
10	The layout and design of the Instagram page are attractive.
11	The physical appearance of the product (the use of images, posts, videos, etc.) is attractive.
12	The video content clearly represents the materials and learning objectives taught to students.
13	The composition of modes in each post (integration of texts, visuals, audio, and videos) is clear and attractive, colorful, and in proper font size, which is readable online.

Source: (Tungka, 2017)

The raters' feedback was used to evaluate the prototype's visual and interactive aspects, as well as its educational aspect. After receiving the raters' feedback, the prototype was revised accordingly and sent back to the raters for their second feedback. The raters' quantitative feedback was processed statistically to find out the agreement between their scores, and the results for this prototype development were shown in Table 2.

Table 2. Raters' Feedback of the Prototype

No	Interrater's Scores	Cohen's Kappa coefficient	Interpretation
1	Scores on 1 st feedback, first prototype	0,24	Fair agreement
2	Scores on 2 nd feedback, revised prototype	0,69	Substantial agreement

Source: (Vierra & Garrett, 2005)

Table 2 shows that there were differences in the raters' evaluation of the first prototype, and after it was revised based on their feedback, the raters' feedback finally reached a substantial agreement, implying that the prototype had been improved.

Summative evaluation was conducted while the students tried out the prototype in four-week learning activities. The aspects evaluated in this type of evaluation were the prototype's effectiveness in achieving the learning objectives and in improving students' engagement. The team used two tools in collecting the data: a questionnaire and vocabulary test. Both tools were given twice: at the beginning and at the end of the four-week activities. The vocabulary tests results show a significant increase in the students' mean scores before and after the Instagram-based learning materials were given to them, which was from 55.5 in the pre-test to 70 in the posttest, showing an improvement rate of 26.13%. This improvement rate indicates a significant improvement in students' vocabulary test scores after using Instagram-based learning materials.

The average mean score of students' responses shows 3.6, showing an increase in students' motivation to learn English, especially outside the classroom.

Table 3. Students' Responses

No.	Statement	Mean Score	
		Before	After
1	English is very enjoyable for me.	3.0	3.8
2	Writing sentences in English is very enjoyable for me.	3.4	3.4
3	I am able to remember the meanings of English words that are taught to me.	3.3	3.5
4	I enjoy learning English outside of class.	3.6	3.6
5	I am motivated when learning about English and culture at the same time.	3.3	3.7
Total of average		3.32	3.60

The questionnaire results, presented in Table 3, show the increased mean score in students' positive attitude towards learning English (statement #1) and are particularly motivated when cultural aspects are integrated in their learning materials (statement #5). These statements got the highest mean score of all statements. In contrast, the lowest average score of all their responses was writing activities (statement #2), indicating less enthusiasm or motivation for this aspect of learning. However, in general, the data shows students' positive response towards learning English, with the highest mean score reflecting their enjoyment for the overall experience of learning English through the prototype.

Discussion

The findings of this study align closely with the previous studies that underscore Instagram's potential as an effective tool for English language learning. The findings resonate with those of Pujiati, Zahra, and Tamela as well as of Sanusi, Safitri, and Sabar (Pujiati et al., 2019; Sanusi et al., 2021) which emphasize Instagram's resourcefulness in presenting visually appealing and dynamic

educational materials. In the current study, Instagram's multimedia features—such as images, videos, and texts—were strategically employed to create a culturally relevant and engaging learning experience for students. By leveraging these tools, the researchers successfully transformed traditional language instruction into an interactive and enjoyable process that captivated the learners' attention.

In addition to its engaging format, the study highlighted Instagram's ability to foster a sense of intimacy and relevance in the learning process. As Sudiran (Sudiran, 2023) claims, Instagram's familiarity among students removes the intimidation often associated with learning a challenging subject like English. This was evident in the study, where the students actively participated by liking, commenting on, and sharing posts in English, suggesting that the platform created a low-pressure environment for practicing the language. This finding also echoes the findings from previous studies (Mahmud et al., 2022; Pujiati et al., 2019; Sanusi et al., 2021), claiming that Instagram's interactive features encourage collaboration and discussion, further boosting motivation and engagement. Through comments and direct interaction with peers and educators, the students developed a sense of community and support, which made the learning experience more collaborative and rewarding.

The integration of authentic images and videos as cultural content into the Instagram-based materials further elevated the learning experience. Drawing on previous studies (Alptekin, 1993; Barfield & Uzarski, 2008; Peranginangin et al., 2019; Saniei, 2012; Tungka, 2012) who advocate for the inclusion of cultural elements in language education, the researchers tailored the materials to reflect the students' cultural and natural environment. By embedding photos of natural attractions into the photos or illustration in the learning materials, the researchers made the learning process more relevant to the students' everyday lives. This approach not only increased the learners' interest in the subject but also fostered cultural pride and awareness, as suggested by Greenhow and Lewin (Greenhow & Lewin, 2016). The students' positive responses to these materials, particularly their motivation when cultural aspects were incorporated, affirm the value of this strategy in making English education meaningful and contextually grounded.

Compared to other tools that can be used to create learning materials, such as TikTok, or even gamified learning platforms such as Kahoot, Instagram offers a more socially interactive and context-rich environment (Fauziah et al., 2023). While those tools have been shown to support vocabulary retention through repetition and gamification, they often lack the cultural and communicative dimensions that Instagram can provide. This study suggests that Instagram not only aids vocabulary acquisition through multimodal input but also contextualizes it within real-life cultural references, which enhances meaning-making and long-term retention. Furthermore, the informal, socially embedded learning on Instagram fosters spontaneous language use, which is often limited in more structured or app-based environments.

In addition to vocabulary learning, the use of Instagram to create learning materials can positively influence the development of other language skills. For instance, students' engagement in reading captions and watching videos supports reading and listening comprehension. Likewise, participating in the comment sections and creating posts or stories in English provides a platform for practicing both writing and speaking in authentic, purpose-driven contexts. Although the study noted

some reluctance in writing tasks, integrating more structured opportunities for spoken responses (via voice notes or short video posts) and written reflection (such as personal journaling in captions) could further enhance productive language skills.

Despite these promising outcomes, there are some challenges to overcome, such as students' reluctance for writing activities, which indicates an area for improvement. Addressing this aspect by incorporating creative writing prompts tied to cultural themes or more interactive writing tasks could further enhance student engagement. The improvement in students' vocabulary scores (26.13%) and the rise in their average motivation scores (from 3.32 to 3.60) underscore Instagram's potential as an effective platform for vocabulary acquisition and student motivation.

This study proved that using Instagram as a bridge between traditional educational objectives and modern technological approaches in creating a culturally relevant and multimodal learning experience can be effective. The use of the ADDIE framework was instrumental in designing a systematic and flexible process, ensuring that learning materials were both engaging and educationally effective. By addressing a gap in previous research, this study contributes valuable insights into how social media platforms like Instagram can be harnessed to create culturally contextualized and meaningful English learning experiences.

5. Conclusion

This study shows the implementation of ADDIE framework in designing Instagram-based English learning materials for novice EFL learners, more particularly those who are in rural regions. The findings showed that using authentic images and videos can overcome learners' difficulties in learning new vocabulary, thus improving their motivation to learn more. The platform's multimodal features offer a potential to be utilized as a cutting-edge teaching tool for novice EFL learners. Future studies should examine how other social media platforms can be used as teaching tools to improve learners' English communication skills, and evaluate the long-term effects of Instagram-based learning resources on EFL learners' vocabulary mastery.

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