Designing a Procedural Texts e-Book Using Local Wisdom of Tangerang City Foods

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Abstract

This study aimed to identify suitable learning media for teaching English using procedural text concepts. The research employed an R & D using ADDIE development model. From the review, the researcher designed an e-book learning media incorporating local wisdom, specifically focusing on Tangerang's culinary heritage. This media was developed using the Contextual Teaching and Learning (CTL) approach to enhance the effectiveness of the learning process. The ADDIE model was applied as a systematic and procedural framework to guide the development of the learning media. The findings suggest that integrating local cultural elements into digital learning tools can improve student engagement and comprehension. The study concludes that e-books based on local wisdom, designed through a structured development model, offer a promising solution for modern English learning. Overall, this research highlights the potential of culturally relevant, technology-based media to support more meaningful and accessible education.

Keywords: e-Book Design, Procedure Text, ADDIE Model

INTRODUCTION

Creating English learning media, especially for procedural texts, is important to meet students' needs in today's global world, where English is a key skill. In Indonesia, English is a required subject in high school but is mostly taught only in the classroom and not used daily. Tomilson explains that English is mainly used in formal education and is not part of everyday community life (Tomlinson, 2013). This shows the need for new learning materials that connect lessons to local contexts. These materials would help make English learning more meaningful and useful for students (Gilmore, 2007).

Learning English involves listening, reading, speaking, and writing, but writing is often the hardest for EFL students. Many students lose interest because teaching methods are boring and repetitive. Improving writing skills helps students learn more words, use grammar better, and gain more knowledge (Graham, & Perin, 2007). Studies show that using new ways like technology, games, and teaching based on writing types can make students more interested and better at writing (Hyland, 2018). It is important to solve teaching problems and use different strategies to help students become good writers and stay motivated (Rahmawati, 2020).

A major problem in learning English is that the teaching materials often do not relate to students' daily lives (Muthusamy & Shanmugam, 2019). When lessons are too general and not connected to real experiences, students lose interest and find it hard to use English in

everyday situations. Research shows that adding local culture to lessons makes learning more relevant and motivates students better. For example, using cooking-related activities helps students improve their English and understand culture in a real way (Lee & Huang, 2018). This approach makes learning more meaningful and useful for students.

The creation of a culinary guidebook for Tangerang Old Market provides young adults with important information about local food heritage. This guidebook includes interesting pictures and is based on data from observations, interviews, and research. Studies show that the guidebook gives a special learning experience and helps people understand and appreciate Tangerang's culinary traditions better (Huang et al., 2012). Similar research on e-book learning media using the ADDIE model in subjects like science has shown that such materials can be very valid and effective for education (Branch & Varank, 2009). However, there is still little research about English learning materials related to Tangerang's local culinary practices, so it is important to create learning media that is both accurate and connected to students' local environment (Hsieh & Lee, 2020).

This study focuses on creating an e-book about procedural texts using the ADDIE model. It uses Tangerang City's local culinary wisdom as the main content. The city has a rich food culture but few learning materials use it. The aim is to improve students' English skills while keeping local traditions alive (Zhang & Sun, 2017). This method offers a practical and interesting way to learn English based on real cultural context (Lee & Shih, 2020).

METHOD

This study used an R & D using ADDIE development modelto develop educational media (Branch & Varank, 2009). It involves English teachers and eighth-grade students at a junior high school in Tangerang City, Indonesia. The goal is to create an e-book with procedural texts that include local culinary wisdom from Tangerang. Participants were carefully selected to understand their needs and how ready they are to use digital learning tools. Data was collected through interviews, observations, and reviewing curriculum documents to make sure the media fits the learning context and supports hybrid learning (Creswell, & Poth, 2016).

This study followed the five steps of the ADDIE model: needs analysis, design, development, implementation, and evaluation. Data was analyzed to find learning needs, create content about Tangerang's culinary traditions, and check how well the media worked. The findings helped make an interesting and easy-to-use e-book and improved it during the final evaluation (Dick et al., 1985). The ADDIE model's clear, step-by-step process ensures careful planning and good results. Each stage in the ADDIE model is based on knowledge and past learning experiences to develop effective educational media:
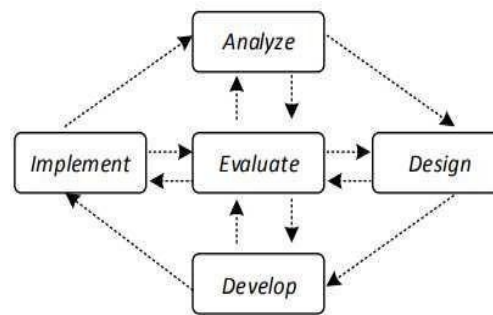
Figure 1. Stages of the ADDIE Model

The ADDIE model research steps (Dick et al., 1985):

1. Analysis (Key Stage)

   The analysis phase is very important in the ADDIE model. It starts by looking at the students' backgrounds to understand their needs. Teachers need to create learning media that fits what students require. This phase involves a detailed check to make sure the learning media meets all necessary standards. After identifying needs, the researcher must see if the media is practical and suitable. This evaluation is called a feasibility study. It helps decide if the learning media can be used successfully in the classroom (Reiser & Dempsey, 2017).

2. Design

   The design stage is also called the planning phase. Researchers explain that this phase focuses on creating the structure of learning media. The researcher identifies goals for the learning media during this stage. The researcher selects suitable learning materials and classroom activities. Researchers outline strategies for evaluating the learning process. Studies show that clear planning supports better design outcomes. Researchers find that the design phase acts as a main guide. It directs the development stage that follows. The design blueprint helps ensure the media meets educational goals. Overall, this phase is essential for effective learning media creation.

3. Development

   The ADDIE model includes a development phase as the third step. Researchers explain that this phase turns the design into a real product. The researcher completes a detailed plan for the learning media at this stage. The plan guides the development work throughout the process. Researchers produce learning materials based on the design guidelines. The development phase creates practical learning resources from the original idea. Studies show that this phase is crucial for functionality and usability. Researchers construct media that meets educational objectives. The development phase bridges planning and implementation. Overall, it transforms concepts into effective learning tools.

4. Implementation

The implementation phase involves applying the finished design in a real classroom. Researchers explain that this phase shifts the project from development to use. Educators use the learning media with students during implementation. The implementation tests how well the media supports learning. Researchers find that this phase helps assess the media's practical functionality. Studies show that implementation evaluates the media's impact on students. The phase is important for gathering feedback from actual use. Researchers use the feedback to identify improvements. Educators make necessary changes based on the evaluation results. Overall, implementation helps ensure the learning media works effectively in real settings.

5. Evaluation

The ADDIE model includes an evaluation phase with two types of assessments. Researchers explain that formative evaluation happens during the learning process. Formative evaluation involves direct interaction with students. The summative evaluation takes place after all learning activities finish. Researchers find that summative evaluation measures students' overall achievement. The evaluations provide important feedback about the learning media's effectiveness. The researcher uses this feedback to identify areas that need improvement. Educators apply the results to enhance the learning media. The information helps guide the next steps for users of the media. Overall, evaluation ensures the learning media meets its educational goals.

RESULTS AND DISCUSSION

Media plays a very important role in the learning system. It is a central part of the teaching and learning process (Clark, & Mayer, 2023). The media chosen should match the learning goals and the activities involved. The main reason for picking certain media is to help students interact better with the materials. Learning media is one of many new tools teachers can use. It helps increase students' interest and motivation in learning. This, in turn, can improve their academic results (Rasam & Sari, 2018).

E-modules can be used offline on various gadgets. They include English learning materials that follow the Independent Curriculum (Meng & Chen, 2023). The modules focus on strengthening students' Pancasila profiles with examples and extra exercises. The Pancasila Student Profile has six main parts that guide this development. The first part is practiced by doing daily activities like praying before class. Critical thinking skills are built by analyzing traditional foods from Tangerang City. To develop independence, students study the materials on their own using the E-Module. For the global, independent, and creative skills, students do both individual and group tasks. In groups, they work together, help each

other, and make shared decisions (Johnson & Johnson, 2009). They also create new ideas and solutions during discussions and individual work.

Educators must consider many factors before creating learning media. They need to focus on students' learning styles. Students' learning styles often depend on their character and environment (Fleming, 2001). Learning styles explain how people focus during learning. They also show how people master new information (Pashler et al., 2008). Each person acquires knowledge in different ways. They process information uniquely. They remember information differently in the learning process. Over time, these differences form a person's learning style.

Children use digital devices like smartphones and laptops daily. They access information and learn using these devices without realizing it (Owston et al., 2013). Educators must include digital technology in teaching to meet students' needs. Teachers apply blended learning to combine classroom and online teaching. Blended learning uses electronic devices for online education. It helps students learn both face-to-face and remotely. Researchers show that blended learning improves education quality. Innovative teachers adopt blended learning in universities today (Means et al., 2010). Secondary schools also use network-based media for teaching now. These changes happen as technology becomes more important in education (Halverson et al., 2014).

Educators need to create and use learning media effectively to be professional. This ability forms part of their broader skill set (Darling-Hammond, 2006). Education experts assess professionalism in teachers through four main areas (Evans, 2011). Pedagogical competence focuses on teaching methods and strategies. Teachers also need personality competence to manage themselves well. Social competence helps them interact with others effectively. Professional competence ensures they meet job standards. Researchers describe these as key competencies for educators. Each competence contributes to being an effective teacher (Hagger et al., 2008). These ideas guide teacher development today:

1. Pedagogical competence involves educators managing learning activities well, including planning, teaching, and assessing. They also manage subjects and choose suitable learning media.
2. Personality competence means educators act as good role models for their students daily.
3. Social competence requires educators to keep a positive attitude and communicate effectively in school and community life.
4. Professional competence focuses on educators developing their skills, understanding academic content, and mastering research knowledge.

Educators face challenges overcoming learning loss after two years of limited student

interaction. They use pedagogical competence to improve creativity in teaching. This competence helps increase student interest during lessons (Darling-Hammond, 2017). Student interest affects their engagement in learning. It also helps students participate actively in understanding materials. Teachers create supportive environments for students to ask questions and share ideas. They encourage students to explore new experiences confidently. Educators work to provide high-quality education continuously. They aim to develop students who are knowledgeable and ethical. Teachers also prepare students to compete globally by using innovative learning media (Koehler & Mishra, 2009).

Traditional printed books lose popularity among students because digital technology rises rapidly. Students prefer e-books because they access them easily on devices like smartphones (Smith, 2007). e-books include multimedia elements such as text, images, videos, and audio to match the syllabus. The researchers note that e-books use internet links, Google Drive, and QR codes for accessibility (Pandya et al., 2024). This method makes e-books very convenient for students. Studies find that e-books save costs compared to printed books. Researchers explain that e-books also increase learning efficiency. Students feel more engaged with multimedia content in e-books. The availability of digital devices supports students' use of e-books. Overall, e-books replace printed books in modern education due to technology advancements (Wang et al., 2024).

Students often struggle to keep up with material because learning time is limited in classrooms (Mariani et al., 2024). Teachers use presentation media and learning videos to help students. However, e-books can bring new enthusiasm to students. The study shows that e-books improve students' English skills. E-books allow students to review lessons anytime and anywhere (Brown & Davis, 2013). The researcher chooses Book Creator as the platform to develop e-books. Book Creator is free and easy to use. The platform lets the researcher add text, images, audio, and video to e-books. These features make learning more engaging and interactive (Chen & Tsai, 2025). Using e-books can improve learning quality and motivate students (Wolf & Putnam, 2023).

The researcher selects appropriate content as an essential step in designing e-book teaching materials. The researcher chooses procedural text based on Tangerang's local wisdom about a traditional snack. The researcher applies the Contextual Teaching and Learning (CTL) approach in this project. CTL connects teaching materials to students' surroundings. The approach encourages students to relate knowledge to daily life (Smith, 2023). Researchers state that CTL helps integrate real-world context into lessons. Students interact closely with gadgets and networks in learning. e-books become easily accessible both inside and outside school (Wang et al., 2020). Researchers find that unstable internet

connectivity can cause problems (Poston et al., 2020). Educators need to provide solutions to overcome connectivity challenges.

Learning design aims to develop, implement, assess, and manage learning environments (Smith, 2007). The field focuses on improving learning quality through methods, media, and procedures. Learning design enhances education by using various strategies. The researcher uses the ADDIE model for this study. The ADDIE model stands for Analysis, Design, Development, Implementation, and Evaluation. Instructional designers often use the ADDIE model because it provides clear stages. The model helps create structured and organized learning processes. Researchers find that ADDIE increases the effectiveness of instructional design. The model also helps in managing resources efficiently during development. Overall, ADDIE supports a systematic approach to improving learning outcomes (Crompton et al., 2024).

Tangerang City has a rich culinary heritage known for its traditional snacks. The local snacks define the identity of Tangerang's market. Researchers state that local cuisine reflects cultural wisdom unique to the city. Scholars emphasize that local wisdom shows a nation's cultural traits (Sola et al., 2021). Local wisdom helps communities absorb and adapt foreign cultures. Researchers find that adapting foreign influences prevents losing local traditions (Martinez, 2010). Local wisdom preserves positive indigenous values within the society. Studies show that local wisdom acts as cultural glue in communities. It helps maintain the traditional identity of the people. Overall, local wisdom strengthens social and cultural bonds in Tangerang City (Tsuei et al., 2020).

Local wisdom plays an important role in education by emphasizing regional strengths that schools should preserve. Researchers find that using local wisdom in learning media helps students focus on language learning with familiar content (Smith et al., 2020). This method aligns with Contextual Teaching and Learning (CTL), which connects lessons to real-life experiences. Studies show that procedural texts are common but can be boring without good learning media. The researcher decides to develop teaching materials as an e-book to make learning more engaging. e-books offer many benefits because of digital technology advances. However, the researcher limits this study to designing an e-book with procedural texts about Tangerang City's local culinary wisdom. Researchers believe this will create interesting and relevant learning media. The design steps must follow systematic procedures. Incorporating local wisdom into e-books enhances meaningful and effective learning (Sing & Shukla, 2025):

1. Choosing culinary materials in the form of food typical of Tangerang City
2. Collecting recipes, taking pictures and videos of making foods

3. Write down the learning objectives

4. Lists the steps to make snacks (*procedure text)*

5. Determine the Student Worksheet

6. Determine the *book cover*

The researcher completes the design of an e-book about procedural text on Tangerang City's local culinary wisdom. The researcher will conduct validation to check the e-book's quality and suitability. Experts in design, content, and media will perform the validation (Wang et al., 2021). The validation helps find and fix any weaknesses in the e-book. This step ensures the e-book meets development standards. Experts provide important feedback during the validation process. The researcher follows a structured development phase for the e-book. Validation helps improve the e-book before it is widely used. The process makes sure the e-book becomes effective learning media (Garcia et al., 2019). Overall, validation is important to produce high-quality educational materials (Kumar et al., 2025).

CONCLUSION

Based on the study's findings, learning media is important in the digital era for improving education. The research shows that e-books are effective because they are attractive and easy to access anytime. The study explains that students can learn flexibly at school, home, or community according to the independent curriculum. The researchers state that using local wisdom in e-book content helps students value their culture. However, the study finds that unstable internet connections cause problems for users. The researchers suggest uploading e-books on platforms like Google Classroom to solve this problem. The study recommends using the ADDIE model to design e-books systematically. It shows that this model helps create media that fits educational goals. The research proves that combining culture and technology in e-books improves learning results. Therefore, the study concludes that developing and using e-books is necessary for modern education.

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