TEACHING MATERIAL ON MOBILE LEARNING-BASED DIGITAL LITERACY AS A PREVENTIVE MEASURE FOR SOCIAL MEDIA CONFLICT

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Abstract: This research was conducted with the aim of producing instructional materials on mobile learning-based digital literacy skills as a preventive measure for social media conflicts. The researchers conducted this study using a research and development (R&D) design. We conduct data collection through the techniques of observation, interview, and validation testing. Researchers use the qualitative analysis method to analyze data on instructional needs and validation. Based on the analysis of the collected data, researchers are able to draw conclusions. Media experts and subject matter experts present prominent findings and corrections, from which conclusions are derived, that the instructional materials on digital literacy based on mobile learning are suitable for use as a preventive measure for social media conflicts.

Keywords: teaching material, digital literacy, mobile learning, social media conflict

With the rapid development of the digital era, the use of social media is widespread and inevitable (Perwita, 2021). Irresponsible use of social media can give rise to conflicts and other issues. Social media conflict arises when two or more individuals or groups hold opposing opinions or perspectives on social media. This conflict can arise from various issues, such as religious, political, ethnic, or cultural differences. Social media conflicts often escalate rapidly due to the ease of dissemination and sharing of content on social media platforms (Juditha, 2019). This can trigger heated debates and mutual attacks among social media users (Suryo,

2020). Some instances of social media conflicts can have a detrimental impact on society, such as fostering intergroup distrust and exacerbating existing tensions. Social media conflicts can divide groups and incite discriminatory and violent actions. Hence, social media users need to pay attention to ethics and courtesy when interacting on social media, as well as possess the ability to understand others' perspectives through effective and polite communication (Zulaeha, 2021). As individuals who utilize social media, we strive to discern summaries of information that are acceptable for consumption and avoid berita palsu or information that lacks

credibility (Rismayanti et al., 2022). Therefore, the development of instructional materials on digital literacy skills aimed at preventing social media conflicts is crucial for these students. since they should be literate and prudent in their use of social media as academics.

The education system has undergone dramatic changes with the advent of learning technologies in the late 20th century (Anggraeni & Pentury, 2020). The utilization of mobile learning in the development of teaching materials for digital literacy skills can facilitate access and usage by users. Mobile learning enables learning to take place at any time and anywhere, hence enhancing the effectiveness of the learning process. Furthermore, mobile facilitates learning interaction between instructors and users through an online platform. According to Zulaeha et al (2019), mobile learning (m-learning) in language education can contribute to reducing conflicts on social media by enhancing intercultural understanding and tolerance.

Language is an important aspect that has become an inseparable part of people's social livess (Zulaeha et al., 2023). During language learning, we acquire knowledge about different customs, values, and cultures from our own and learn how to communicate individuals from diverse backgrounds. When learning a language through m-learning, we have the opportunity to learn with tutors or native speakers from many countries and cultures, enabling us to comprehend different perspectives and ways of thinking from diverse backgrounds. This enables us to become more tolerant and avoid potential conflicts arising cultural differences or differing perspectives. Furthermore, language learning through m-learning can also contribute to enhancing digital literacy, which refers to the ability to effectively and responsibly utilize digital technology. Digital literacy can aid us in identifying reliable sources of information and avoiding the dissemination of fake news or inaccurate information on social media, thereby reducing potential conflicts arising from false or inaccurate information (Winarni, 2021). Thus, m-learning in language acquisition can aid in reducing conflicts on social media by enhancing intercultural understanding and tolerance, as well as improving digital literacy to prevent the dissemination of false or inaccurate information.

The instructional material for mobile digital learning-based literacy encompasses various topics, such as social media introduction, privacy management, ethics in social media usage, and the critical ability to evaluate information found on social media (Khaddage, 2016). The diversity of these topics can serve as a strong incentive for students to effectively engage in social media literacy learning.

The research titled "Development of Indonesian language text books multiculturalism and character education to improve traditional poetry writing skills" (Liu, 2018; Winarni et al., 2021) was published in 2021. The purpose of this research is to develop a textbook on the Indonesian language incorporates multiculturalism character education for the learning traditional poetry writing. This study employs the research and development approach, resulting in the production of an appropriate textbook. The research findings indicate that students' skills in writing traditional poetry improved after using textbooks for learning compared to before using textbooks. This suggests that textbooks that are taught should be used by teachers and students to improve their ability to write in classrooms. This module is very comprehensive and effective in increasing student learning outcomes. However, are considerations regarding utilization of instructional materials in the era of society 5.0 that may be easily accessed by students anytime and anywhere (Zulaeha et al., 2023).

The research titled "Modelling exploiting taxonomic knowledge for developing mobile learning systems to enhance children's structural and functional categorization" was conducted by Abbas et al. (Roring, 2022). The objective of this research is to develop a mobile learning system with a proposed dynamic categorization example for pre-school children (aged 3-6 years). This study is a quasi-experimental research that utilizes pre-test and post-test methods to evaluate the effectiveness of the proposed knowledge-based application in terms of categorizing learning abilities. The research findings indicate that children dynamically create knowledge categories that are modeled to achieve higher scores compared to students who follow traditional teaching methods using books and worksheets.

The research conducted by Abbas et al. is relevant for implementation in the period of Society 5.0. However, the mobile application developed by Abbas et al. currently lacks audio or audiovisual features to enhance the clarity of the content within the application.

The novelty of this research is in the application of teaching materials that focus on the issue of conflicts occurring on social media. Social media is an undeniable part of the Society 5.0 era, with its significant impact and benefits in society, particularly among students. Therefore, this research is conducted with the aim of producing instructional materials for digital literacy skills based on mobile learning as a preventive measure for social media conflicts.

METHOD

This study was conducted using a research and development (R&D) design to generate digital literacy teaching materials as a preventive measure for social media conflicts with the assistance of mobile learning. This instructional material was developed in accordance with the research and development procedure, which involves conducting product design tests and validating the product.

The data collection technique for needs analysis is conducted by distributing a structured interview guide on requirements to the respondents. The data collection technique for validating the instructional material prototype is carried out by distributing validation test sheets to expert examiners in the subject matter and media.

Data analysis of instructional material ne eds and validation testing using qualitative an alysis techniques. Qualitative data is obtained from the results of structured interview guides, validation questionnaires directed towards media and material experts. Based on the analysis of the collected data, researchers are able to draw conclusions. The drawing of conclusions is derived from the presentation of data in the form of prominent findings and corrections from experts, thus fulfilling the research objectives.

The development of digital literacy teaching materials is carried out by preparing the required input for digital literacy teaching materials, creating a draft of digital literacy teaching materials, conducting validation processes, and presenting the result in the form of a digital literacy teaching materials prototype. These three steps can be observed in the following image.

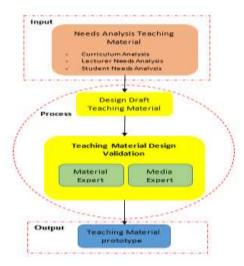


Figure 1. Sequence of Instructional Material Development

RESULTS AND DISCUSSION

Research Results

Preparing the Required Input for the Digital Literacy Teaching Material

The required input for the first mobile learning-based digital literacy teaching material is the curriculum used. Based on the interview with the head of the study program, some study programs are still using Kurikulum Kerangka Kualifikasi Nasional Indonesia (KKNI), while have already implemented independent curriculum. The second input required is the response and needs of students about digital literacy teaching materials. For the second input, data is collected by administering a semi-open questionnaire using Google Form. Questionnaire ini berisi pertanyaan mengenai materi dan format media pembelajaran yang diinginkan. Based on the analysis, the current need of students is the utilization of mobile learning media, which facilitates their digital literacy.

The third input required is the response and needs of the lecturer on teaching materials for digital literacy. For the third input, data is collected bv administering a semi-open questionnaire using Google Form. Questionnaire ini berisi pertanyaan mengenai materi dan format media pembelajaran yang diinginkan. Based on the needs analysis, it is evident that the requirement for lecturers is to have a suitable medium that aligns with the current period, namely the presence of mobile learning to support digital literacy activities among students.

The Process of Creating a Draft for Digital Literacy Teaching Materials and Doing Validation

The process of creating a draft of digital literacy teaching materials in this research utilizes a storyboard that is structured for each scenario. Each stage represents a menu that can be described as follows:

Firstly, the draft of the main page includes the title and program identity that encompasses the functions of opening, animation, text, backdrop, text color, and navigation buttons with instrumental music audio, designed as depicted in the following image.

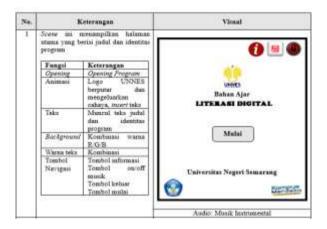


Figure 2. Main Page Storyboard

Secondly, the prayer invitation draft serves as a transitional frame from the main page to the main menu. The function of this frame is to remind students to always recite prayers before engaging in activities. This is an implementation of one of the character values. The draft invitation to pray includes an animated running text function and images of people praying according to the religions present in Indonesia. The draft of the prayer invitation can be seen in the following image.



Figure 3. Invitation to Pray

Thirdly, the main draft includes comprehensive menu of all the content available in the mobile learning instructional materials. The draft of the menu can be seen in the following image.

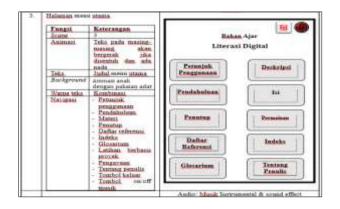


Figure 4. Main Menu Storyboard

Fourthly, the draft menu contains the necessary materials required by students and

professors. The draft menu contents can be seen in the following image.

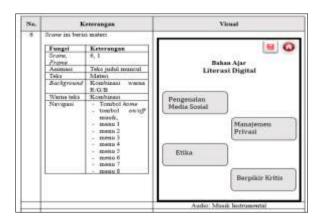


Figure 5. The Content of The Menu

Fourth, draft the quiz menu. The quiz consists of questions designed to assess the students' knowledge after using this instructional

material. The draft of the quiz menu can be seen in the following image.



Figure 6. Storyboard Menu Quiz

After completing the draft, the researcher carried out the validation process of the digital literacy teaching materials draft as a preventive against social media conflicts, measure involving subject matter experts and media experts as validators. The selected subject matter for this study consists of writing skills instructors who were not given a needs questionnaire, whereas the media experts are instructors of instructional media courses or

instructors from instructional technology. The material expert and media expert were chosen due to their extensive expertise in their respective fields. Expert feedback and input from subject matter and media specialists are sought to improve the draft instructional materials. Here are the findings of the data analysis conducted by subject-matter experts and media experts.

Table 1. Data Analysis Results

	Material Expert 1	Material Expert 2	Media Expert 1	Media Expert 1
X	83	76	84	86
xi	90	90	100	100
р	92,2	84,4	84	86

Based on the table of descriptive statistical analysis, the p-values of each expert were compared with the criteria table for instructional material suitability. Based on the matching results, the eligibility criteria for digital literacy teaching materials with mobile assistance, according to expert 1, is deemed suitable with an excellent rating. According to expert 2, it is deemed suitable with a good rating. According to media expert 1, it is deemed suitable with a good rating. And according to media expert 2, it is deemed suitable with an excellent rating. Based on the assessment by experts in content and media, it can be concluded that the digital literacy material supported by mobile learning as a preventive measure for social media conflicts is suitable for prototyping.

Presenting Results in the Format of a **Prototypef for Teaching Digital Literacy**

Developing a prototype of digital literacy teaching materials using mobile learning based on feedback for improvement in each aspect or indicator, as well as criticism from subject matter and media experts. These prototypes can be viewed via the main page, main menu, and quiz.

Discussion

The strategy that begins with 1) preparing the required input for instructional materials, 2) conducting the process of creating a draft of instructional materials and validating it, and 3) presenting the output in the form of a prototype of instructional materials in designing mobile learning-assisted digital literacy materials is indeed important to proactively prevent social media conflicts.

At the first step, it is necessary to consider the curriculum requirements, whether it is the **KKNI** curriculum or the independent curriculum, as well as the feedback and needs of the students and the feedback and needs of the professors. This is due to the implementation of the KKNI (Indonesian National Qualifications Framework) Curriculum and the concept of the Merdeka Curriculum, which serve as the main focus of the learning process, particularly in higher education institutions (Mubarak, 2022). Not only from the curriculum, but the teachinglearning process should also be accommodated by feedback or responses for future preferences (Clononan, 2020), especially the feedback or voice of teachers regarding current educational development (Haung, 2021) and students' feedback for improvement frameworks in the future (De Pietro, 2021).

At the second step, it is necessary to create a draft in the form of a storyboard and validate it with subject matter experts and media professionals. A storyboard is a technique that can assist educators in conveying material or ideas through visual means, thereby engaging students in authentic and active teaching and learning activities (Wahid & Azis, 2022). The utilization of a storyboard enables the visualization of the instructional media to be designed and the resulting application (Yuliarni & Kuntarto, 2019).

In addition to the storyboard, the depiction of the resulting application also requires validation by media and material experts, especially during the development phase, so that the feasibility and quality of the learning media be revised before reaching can experimentation stage (Hamid & Ariwibowo, 2020). Therefore, the presence of a storyboard and validation by subject matter experts and media specialists will greatly support the process of creating and developing drafts of digital literacy teaching materials, as they can provide an overview of the resulting application and evaluate the suitability and quality of the application.

At the third step, it is necessary to create a prototype based on the suggestions and feedback from subject matter and media experts. The creation of this digital literacy teaching material prototype needs to emphasize innovation. The innovation of learning media can have an impact on the effectiveness of learning, as it plays a crucial role in enhancing the success rate of the teaching and learning process. One form of current learning innovation can be designed using the Kodular website platform (Ferdiansyah et al., 2022). One study has demonstrated that utilizing the Kodular website can generate innovative learning media in the form of emodules that effectively enhance students' thinking abilities (Nugraheny & Wahyuningsih, 2022). In another study, the development of learning media using the Kodular website also achieved a score of 81% in the category of excellent based on expert evaluation of the media and materials, therefore being deemed highly suitable (Rismayanti et al., 2022). Therefore, the use of the Kodular website for

developing a prototype of digital literacy teaching materials based on mobile learning is considered very appropriate as a preventive measure against social media conflicts.

The development of mobile learning-based teaching materials for digital literacy skills can serve as a preventive solution for social media conflicts. In the rapidly advancing digital world, the use of social media is widespread and unavoidable. However, the imprudent use of social media can give rise to conflicts and other Therefore. development issues. the instructional materials for digital literacy skills that are focused on preventing social media conflicts becomes crucial. The utilization of mobile learning in the development of teaching materials for digital literacy skills can facilitate access and usage by users. Mobile learning enables learning to take place at any time and anywhere, hence enhancing the effectiveness of learning. Furthermore, mobile learning facilitates interaction between instructors and users through an online platform. Teaching materials for mobile learning-based digital literacy skills can encompass several topics such media introduction. management, ethics in social media usage, and critical abilities to evaluate information found on social media. Furthermore, the utilization of mobile learning enables the incorporation of simulations and case studies to aid users in comprehending the taught concepts demonstrating effective strategies to address social media conflicts. Regular evaluation is necessary to assess the effectiveness developing mobile learning-based teaching materials for digital literacy skills in enhancing users' ability to address social media conflicts and minimize the use of unwise social media.

CONCLUSION

In order to support preventive efforts in social media conflicts, it is necessary to develop a strategy for creating digital literacy teaching materials based on mobile learning. The strategy can be initiated by: 1) preparing input in the form of curriculum analysis and feedback and needs from 162 students, as well as feedback and needs from 7 professors; 2) conducting the

process of creating a draft in the form of a storyboard that is organized into each scene and then undergoing validation by 2 subject matter experts and 2 media experts. After the validation process, the eligibility criteria for digital literacy teaching materials with mobile learning assistance, according to content expert 1, is deemed suitable with an excellent rating. According to content expert 2, it is deemed

suitable with a good rating. According to media expert 1, it is deemed suitable with a good rating. And according to media expert 2, it is deemed suitable with an excellent rating. Additionally, the output is presented in the form of a prototype for digital literacy teaching materials, emphasizing innovation by utilizing the Kodular website.

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