

Digital Literacy Assisted by Mobile Learning Based on Articulate Storyline in Learning to Understand Poetry

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Abstract: The independent curriculum goes hand in hand with the rapid development of technology. Students must go alongside with various technologies. Digital literacy is not just about students being able to operate technology. This learning is applied to the material of understanding poetry in class X SMK. This research uses a descriptive qualitative approach with interview and observation models as data sources. The results show that android-based learning is in accordance with the needs of students. This research aims to provide an overview of how effective the application made by the author to be applied for education in school. The results show that mobile learning is a digital learning media which is in accordance with students' needs.

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Introduction

Education is an important part of life, with the aim of teaching everyone to be better than before. Therefore, education must be provided as best as possible to improve its quality. Learners, educators, the environment, facilities, and learning media used can be influenced in carrying out the process in accordance with learning objectives. According to Kristiawan (2018), education is an effort to make students' human potential become real and can be used throughout

life. Learning provided by teachers, especially in Indonesian language subjects, is certainly, very important through an integrated process. Julianto, et al (2023) stated that education is developing rapidly, especially in the digital world. Teachers should maximize the use of digital technology or digitalization to provide students with easy access to various types of knowledge through communication and information technology systems.

Technological advances in learning have greatly benefited both teachers and students. The use of technology such as computers, the internet and mobile devices has enabled extensive and effective access to information in this situation. In addition, technology has encouraged the development of a variety of more interactive and engaging educational approaches and strategies, such as simulations, media-based learning, and educational games. In addition, the use of technology enables remote or online education, which is very important in the current context of global progress. It allows students to keep learning and connecting with their educators without having to meet in person in the classroom. Moreover, technology allows flexibility in terms of time and place of learning, allowing students to learn at the rhythm and environment that is most comfortable for them (Escueta et al., 2017). To integrate digital devices into the teaching and learning process and use them as a bridge between them and students, teachers must have digital capabilities (Sugiyarta et al., 2020). This will enable primary school students to follow the learning process in the curriculum independently.

With the continuous development of technology, the utilization of technology in learning should continue to be optimized to improve students' learning experience and the quality of education. Educational technology has greatly assisted students and teachers. Technology such as computers, the internet, and mobile phones have enabled extensive and effective access to data. In addition, because of technology, a variety of interactive and engaging learning approaches have been developed. These include simulations, educational games, and multimedia-based learning (Bhat, 2023). According to Kominfo data (2021), the number of smartphone users in Indonesia reached 167 million, or 89% of the population, in 2021. Smartphones seem to have turned into a loyal friend that cannot be separated. Smartphones are growing in popularity and becoming more and more intertwined with our daily lives. Each new release brings new features that make it easier to use, as well as many new apps that make our lives easier. Our shift from conventional classrooms to more engaging and interactive classrooms is one significant example of the huge improvement in the use of mobile devices in education.

Teachers face challenges in their role as facilitators in the classroom. They must find ways to make the material understandable and acceptable by students. Choosing the right media is one of the components that affect the teacher's success in delivering the material. To do this, teachers must have sufficient knowledge and skills about learning media. Education 4.0 adds to the phenomenon of digital integration in everyday life, where humans and machines collaborate to discover new theories of innovation and solve problems. The future of education 4.0 has the possibility to change the way people use information, which is digital-based and not limited to space and time. According to Halili (2019), educational institutions must continue to develop creative approaches to improve the teaching and learning process to meet the demands of the industrial revolution 4.0.

Along with the rapid development of technology and preparing students in the 5.0 era, of course, being aware of technology is mandatory. One of the efforts that can be used as habituation is digital literacy applied to students. Digital literacy includes the ability to use hardware and

software as well as the ability to understand, to share, and to produce information critically in the modern world (Wardana et al., 2022). The way we interact and obtain information changed significantly during the digital age. As a growing up generations in the technological era, strong digital literacy is essential for high school students (Suhardiana, 2019). Digital literacy includes not only the ability to use software and hardware, but also the skills to understand, to disseminate, and to produce useful information (Silaban et al., 2023). Digital literacy in Indonesia is in the medium category with an index of 3.49 on a scale of 5, according to a 2020 Kominfo survey in 34 provinces (Katadata Insight Center, 2021). The results of the initial analysis at SMP Negeri 7 Jember also show that digital literacy is moderate. Students in class VIII E obtained an average score of 3.87 for digital literacy in the information and data literacy category, and a score of 3.09 for the use of digital tools. According to Rahayu and Mayasari (2018), the lack of application of digital literacy in learning can lead to a reduction in these abilities. Mentioning technology-based teaching materials is one of the efforts to integrate digital literacy into learning that can be done by teachers (Sa'adah, et al., 2020).

The learning media used has also changed, from printed books to audio-visual media displayed through internet networks available online. Web-based learning or e-learning, a more recent and popular learning system, can be created using many facilities available on the internet (Muntoha, et al, 2010). Subsequently, it turned into M-learning. The development of communication technology, namely smartphones, encourages the development of mobile learning. Android is a well-known smartphone operating system nowadays. Android, an operating system (OS) for mobile devices based on Linux, is an open source platform that makes it easy for developers to create applications and is available for various types of mobile devices. M-Learning is a digital learning media used to help students learn with computers or android and designed to achieve learning objectives (Yaumi, 2018). Digital media is a learning resource consisting of material, methods, and evaluation limits that are systematically designed and attractive to achieve learning objectives (Laili in Sidiq, 2020). Digital modules can also be adapted to mobile devices to meet needs (Ardiansyah and Nana in Afrian, et al., 2021).

Mobile learning is a learning model that uses information and communication technology. According to the idea, mobile learning has the advantage of availability of teaching materials that can be accessed anytime and attractive visualization of materials. The use of mobile phone-based learning materials is one example of technology used in the learning process. According to Hafis & Supianto (2018), mobile learning refers to learning materials and learning activities delivered through mobile media that accommodate limitations in delivering multimedia, especially sound, images, animation (video), and text. A different opinion states that mobile learning provides more opportunities for students to work together and interact informally (Handayani, 2016:81).

Mobile learning refers to the use of handheld devices such as cell phones, laptops, and information technology widely used in education, with particular emphasis on smartphones. Mobile learning also known as mobile learning, will inevitably result in Android and iOS-based mobile phone applications. These applications can be used as a complement to conventional learning (Nasution, A. & Siddik, M., 2020). Therefore, it can be concluded that mobile learning is a learning method that consists of applications installed on smartphones.

Research titled the Effectiveness of Online Learning in Students' Views (Choiroh, 2020) outlines that the use of online learning media can encourage students to improve the quality of their learning. There are four major advantages of using online learning media, including: 1) the

teaching and learning process will definitely be more interesting, 2) the learning materials will be clearer, so that students can understand the lessons clearly, and 3) in the midst of rapid technological development, research that has been done shows that online learning is very important for education.

In line with this, another study was conducted by Fakhri (2020) with the title Effectiveness of Using Android-Based Mobile Learning Media in Learning Poetry. The research explained that by using mobile devices to learn online, there will be many advantages. Some of them are learning will become more interesting, finding learning materials will become easier, and learning will certainly be more varied. Thus, mobile devices can help create effective and well-organized learning. Another study with the title Development of Android-Based Mobile Learning Module to Improve Digital Literacy of Junior High School Students conducted by Wahyuni, Sri, et al (2022) also explained that mobile learning has a positive impact on the student learning process.

Learning in SMK is different from that in SMA.

Bahasa Indonesia is one of the appropriate subjects to assess how effective mobile learning is. Despite Bahasa Indonesia being one of the subjects in the SMK curriculum, learning still has not achieved the expected results. This is proven by the fact that many students are still unable to communicate correctly in Bahasa and use it in daily life. One of the problems is the conventional approach to education, where teachers focus on existing textbooks. Teachers sometimes do not teach materials of Bahasa Indonesia according to the relevant curriculum syllabus. This is not without reason, but sometimes the lack of student motivation is also very influential.

One of the materials in learning Bahasa Indonesia in SMK class X is understanding poetry. Poetry material is considered a scourge or a difficult lesson for students due to several things, such as the absence of appropriate methods, less attractive media, and a monotonous learning process. Poetry has a different language from other texts studied in Bahasa Indonesia subjects. Innovation is needed so that this material is conveyed optimally. Mobile learning in Bahasa Indonesia learning on the material of understanding poetry is considered appropriate for grade X students.

Research Method

This research uses a descriptive qualitative approach. Descriptive qualitative research describes a specific situation (Saddhono et al., 2019). In its implementation, researchers conducted product assessment and design in the form of mobile learning for poetry material. Furthermore, the trial was carried out. For data collection, active observation, interviews, documentation, and questionnaires were used.

The descriptive qualitative method (Sugiyono, 2014) is used to collect data then the data is compiled, combined, and analyzed to provide a clear insight of the problem to be discussed. The author collects data through the following methods: 1. Observation, which is collecting data by reviewing the object studied or taking existing field data. 2. Interview, in which the author interviews teachers, principals, and students. 3. Documents, where the author collects documents and information about events in the field. 4. Questionnaires: This questionnaire was circulated to educators and students at the school.

The data obtained is then processed, described in the form of a detailed description and then concluded.

Result and Discussion

Students' Needs for Digitization of Learning

In designing the media, the first step taken by researchers is to distribute questionnaires of student needs for the learning process. Researchers conducted a survey to 92 respondents, consisting of vocational students. The questionnaire was distributed easily through WhatsApp groups and social media. According to the results of the questionnaire, 94.6% of students agreed that the process of Indonesian language learning activities was interesting and fun. Furthermore, related to the interesting learning process, 82.6% of students agreed that the Indonesian language learning process should always use interesting media. Related to interesting media as many as 97.8% of students agree and feel happy if when learning uses interesting media. Interesting media here will be used in learning to understand poetry.

The next question distributed through the questionnaire is related to the type of media that suits the needs and desires of students. Based on the distribution results, 97.8% of students are happy if learning does not only use books but utilizes cellphones as a supporting tool. This cannot be denied because almost all students have smartphones that should function as learning support. This is in line with the opinions of students as many as 89.1% of students prefer to open or read material via cellphones (smartphones) rather than books. This obviously must be facilitated so that the level of digital literacy of students increases with the use of mobile learning in learning to understand poetry.

Mobile Learning Media Overview

The results of the needs analysis show that students are more interested in interesting and smartphone-based learning media. One of the learning media models that can be used by teachers is mobile learning, which relies on technology and mobile devices. This model must have several features, such as the ability to connect to other devices, especially computers, the ability to deliver learning materials, and the ability to enable communication between teachers and students. The following are the results of the media design prototype.



Figure 1: Initial Media Display

In the initial display, a picture of students who are eager to learn poetry material is presented. This section presents the initial page of the M-learning application as a medium in the learning process of understanding poetry. In this section, the learning objectives of improving students' skills in understanding poetry are also displayed.



Figure 2. Application Login Page

This section contains initial instructions for using the application. In this section students can choose the material to be learned starting from the lowest level and will advance if they have passed the previous level.



Figure 3. Poetry M-learning Menu

The next display after students click login is the menu section that students will learn. This menu display is adjusted to the learning objectives and also the learning process is made interesting so that students are excited about the learning process according to the questionnaire results. In the evaluation section to measure the level of student understanding, it is made according to the wishes of students, not only task-based but also self-assessment and reflection.



Figure 4. In-App Materials

In listening skills, students will be given different poetry texts that are covered by the researcher so that they are more interested in understanding the poetry material more deeply. In addition, theories related to the elements of poetry are presented according to students' needs, and this section stimulates students' creativity so that they can generate their own creative ideas to understand and analyze the content of poetry.

In addition to presenting material related to poetry in this media, challenges are also presented that students must pass. This challenge is to determine students' abilities both in writing and reciting poetry. This section is designed in order to let students have guidance in developing their talents.



Figure 5: Steps for writing a poem

At this stage, students are guided to express their thoughts and creative ideas, and then convey it by orally and written. During the learning process, writing skills should be demonstrated (Hasan & Lubis, 2023). This media enhances students' writing skills by offering a "let's learn" perspective that explains how to write creatively, gather ideas from everyday experiences, and express those ideas. Once learners can write poetry with the help of the stimuli in the media, they can complete the expected project. The project consists of writing a poem in text form independently, which can then be turned into a creative video.

This media has a creative project menu where the researcher has provided LKPD during the project. In addition, there is a motivational menu designed by researchers to meet the needs and daily experiences of learners during observations and interviews. This is obviously with the aim that during implementation, students can improve their digital literacy skills and poetry comprehension skills.



Figure 6. Student Reflection Chart

The final section of the M-learning presents a rubric that students must fill in about what they have learned and what their impressions during the learning process. This section is used for educators to know how far the understanding and needs of students. This can be used as a guideline in applying the media to the next material.

Conclusion

Overall, the results of the research conducted can be concluded that mobile learning in learning to understand poetry can be utilized as a learning medium and also as a positive impact on digital literacy in students. Mobile learning can be used to facilitate students' independent learning. This shows space for further development. This can include improving content display, encouraging the use of mobile learning, and providing stimulus to encourage students to become better at digital literacy.

References

- Afrian, Z., Ellianawati, dan S. Susilo. (2021). Pengembangan mobile module fisika berbasis problem based learning pada materi suhu dan pemuaiannya di SMK. *Unnes Physics Education Journal* 9 (3), 256-263. DOI: <https://doi.org/10.15294/upej.v9i3.45866>
- Bano. M., Zowghia. D., Kearney. M., Schuck. S., & Aubusson. P. (2018). Mobile learning for science and mathematics school education: A systematic review of empirical evidence. *Computers & Education*.
- Bhat, S., Uthappa, UT, Sadhasivam, T., Altalhi, T., Han, SS, & Kurkuri, MD (2023). Ketumbar yang melimpah menghasilkan karbon aktif (AC) dengan luas permukaan tinggi untuk kinerja adsorpsi unggul pewarna kationik/anionik dan aplikasi superkapasitor. *Jurnal Teknik Kimia*, 459, 141577.
- Choirah, N. (2020). Efektivitas pembelajaran berbasis daring/e-learning dalam pandangan siswa. Skripsi tidak diterbitkan. Surakarta (ID). IAIN Surakarta.
- Escueta, M., Quan, V., Nickow, AJ, & Oreopoulos, P. (2017). *Teknologi pendidikan: Tinjauan berbasis bukti*.
- Faqih, M. (2020). Efektivitas penggunaan media pembelajaran mobile learning berbasis android dalam pembelajaran puisi. *Jurnal Konfiks*, 7(2), 27-34.
- Hafis, M., & Supianto, A. A. 2018. Mobile game design for learning chemical bonds with endless run approach. *International Journal of Interactive Mobile Technologies*, 12(8), 104–112. <https://doi.org/10.3991/ijim.v12i8.9260>
- Halili, S. H. (2019). Technological advancements in education 4.0. *The Online Journal of Distance Education and e-Learning*, 7(1), 63-69.
- Handayani, R. D. 2016. Pengembangan Bahan Ajar Elektronik Berbasis Mobile-Learning Pada Mata Kuliah Optik Di Fkip Universitas Jember. *Ta'dib*, 17(1), 81. <https://doi.org/10.31958/jt.v17i1.262>
- Hanum, Z. (2021). Kemenkominfo: 89% Penduduk Indonesia Gunakan Smartphone Sumber: <https://mediaindonesia.com/humaniora/389057/kemenkominfo-89-penduduk-indonesia-gunakan-smartphone>. Media Indonesia. (diakses tanggal 20 April 2024).
- Hasan, J. S., & Lubis, F. (2023). Aplikasi Spotify: Solusi Baru dalam Pembelajaran Menulis Cerpen di SMA. *GHANCARAN: Jurnal Pendidikan Bahasa Dan Sastra Indonesia*, 5(1), 194–211.
- Julianto, IT, Kurniadi, D., Septiana, Y., & Sutedi, A. (2023). Pra-pemrosesan teks alternatif menggunakan chat GPT open AI. *Jurnal Nasional Pendidikan Teknik Informatika: JANAPATI*, 12(1), 67-77.
- Katadata Insight Center. (2021). *Status Literasi digital Indonesia*.

- <https://kic.katadata.co.id/insights/35/status-literasi-digital-indonesia>
- Kristiawan, M., Suryanti, I. Muntazir, M., & Ribuwati, A. (2018). *Inovasi Pendidikan*. Jawa Timur: Wade Group National Publishing.
- Muntoha, dkk. (2010). *Pengembangan Sistem Evaluasi Pembelajaran Berbasis Web (Web Based Learning Assessment System)*.
- Nasution, A., & Siddik, M. (2020). Impact of Using Mobile Learning Applications in the Learning Process. In *International Conference on Social, Sciences and Information Technology (Vol. 1, No. 1, pp. 37-42)*.
- Purosad, Apip, dkk. (2020). Implementasi Model Pembelajaran Mobile Learning Berbasis Android Dalam Meningkatkan Prestasi Belajar Siswa pada Pembelajaran Bahasa Inggris: Degrees Of Comparison. *Jurnal Teknologi Pendidikan dan Pembelajaran Volume 5 Nomor 1*.
- Rahayu, T., & Mayasari, T. (2018). Profil kemampuan awal literasi digital dalam pembelajaran fisika siswa SMK Kota Madiun. In *Seminar Nasional Quantum (Vol. 25, No. 1, pp. 2477-1511)*.
- Sa'adah, S., Maryanti, S., Maspupah, M., dan Mas'ud A. (2020). Literasi Digital Mahasiswa Calon Guru Biologi dalam Menyusun Bahan Ajar Berbasis Audio Visual. <http://digilib.uinsgd.ac.id/id/eprint/30681>
- Saddhono, K., Sudarsana, I. K., & Iskandar, A. (2019). Implementation of Indonesian Language the learning Based on Information and Communication Technology in Improving Senior High School Students' Achievement in Surakarta. *Journal of Physics: Conference Series, 1254(1)*. <https://doi.org/10.1088/1742-6596/1254/1/012059> Hasan dan lubis 2023
- Sidiq, R. (2020). Pengembangan e-modul interaktif berbasis android pada mata kuliah strategi belajar mengajar. *Jurnal Pendidikan Sejarah, 9(1), 1-14*.
- Silaban, R., Prianti, D., Simamora, M. T., Sebayang, G. A. B., & Ginting, S. J. B. (2023). PENYULUHAN MANFAAT DAN TANTANGAN PEMBELAJARAN BERBASIS LITERASI DIGITAL TERHADAP KEMAMPUAN BERBAHASA INGGRIS ERA 4.0 DI SEKOLAH SDS NASRANI 4 TA 2022/2023. *ABDIMAS MANDIRI-Jurnal Pengabdian kepada Masyarakat, 3(1), 41-47*.
- Sugiyarta, S., Prabowo, A., Ahmad, T. A., Siroj, M. B., & Purwinarko, A. (2020). Identifikasi kemampuan guru sebagai guru penggerak di karesidenan Semarang. *Jurnal Profesi Keguruan, 6(2), 215-221*.
- Sugiyono. (2014). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.
- Suhardiana, I. P. A. (2019). Peran teknologi dalam mendukung pembelajaran bahasa Inggris di sekolah dasar. *Adi Widya: Jurnal Pendidikan Dasar, 4(1), 92-102*.
- Wahyuni, S., Wulandari, E. U., Fadilah, R. E., & Yusmar, F. (2022). Pengembangan mobile learning module berbasis android untuk meningkatkan literasi digital siswa SMP. *LENZA (Lentera Sains): Jurnal Pendidikan IPA, 12(2), 125-134*.
- Wardana, M. A. W., Rizqina, A. A., Salsabilah, A. N., Handayani, D. A. P., Dewi, S. M., & Ulya, C. (2022). Pengembangan Media Pembelajaran Berbasis Aplikasi Canva dengan Model Microblogging sebagai Pembelajaran Teks Prosedur Tingkat SMP. *Lingua Franca, 1(1), 53-66*.
- Yaumi, M. (2018). *Media dan teknologi pembelajaran*. Prenada Media.