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31

# Improving Teachers' Digital Literacy in the Implementation of the Pancasila Student Profile Strengthening Project Activities through AndiLearn (Android Interactive Learning) Media

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# **ABSTRACT**

Increasing digital literacy among teachers is crucial in facing the challenges of 21st century education. Digital literacy not only plays a role in improving technological competence, but also as a foundation in developing innovative learning methods, including in the implementation of the Pancasila Student Profile Strengthening Project (P5) activities in elementary schools. This Community Service (PkM) aims to improve teachers' digital literacy in using Android-based learning media, as well as increase teachers' understanding of the implementation of the Pancasila Student Profile Strengthening Project (P5) through the use of technology. The method in this PkM activity begins with an initial survey, digital literacy training, introduction to AndiLearn, implementation and mentoring, as well as evaluation and follow-up. The results that have been achieved in this activity are the improvement of teachers' digital literacy through the use of AndiLearn so that it has a positive impact on the quality of P5 implementation.

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## INTRODUCTION

In today's digital era, digital literacy is one of the important competencies that must be possessed by educators (Jayanti Putri Purwaningrum and Latifah Nur Ahyani, 2021). Digital literacy includes not only basic skills in using technology, but also critical skills in accessing, analyzing, and evaluating information obtained from various digital platforms (Kemdikbud, 2017). In the context of education, digital literacy is very important to support the implementation of various programs and projects, one of which is the Pancasila Student Profile Strengthening Project (P5). This project aims to shape students' character in accordance with Pancasila values through contextual and continuous learning.

Digital literacy is as important as reading, writing, arithmetic, and other disciplines. A digitally literate teacher means someone who can process various information, understand messages and communicate effectively with others in various forms, such as creating, collaborating, communicating, and working

according to ethical rules, and understanding when and how technology must be used to be effective in achieving goals. In this case, it also includes awareness and critical thinking of various positive and negative impacts that may occur due to the use of technology in daily life. If teachers lack mastery of digital competencies, it is very risky for teachers to be left out in the competition for jobs, democratic participation, and social interaction.

Currently, SD Negeri Sindurjan implements two curriculums in its school, namely the 2013 curriculum for grades II, III, V and VI and the independent curriculum in grades I and IV. The main emphasis in the independent curriculum is on the formation of student character in accordance with the Pancasila Student Profile formulated from the goals of Indonesia's national education (Inayah, 2021; Ulandari & Dwi, 2023). Pancasila Student Profile has 6 dimensions of character, namely faith, fear of God Almighty and noble character, mutual cooperation, global diversity, critical reasoning, creativity and independence (Satria et al., 2022). The Pancasila Student Profile is realized through learning at school including face-to-face (intracurricular), extracurricular and project-based co-curricular learning (Faturrahman et al., 2022). Intracurricular learning covers 70-80% of class hours and co-curricular learning covers 20-30% of class hours(Pendidikan et al., 2022). The fundamental difference in the independent curriculum is the existence of project-based co-curricular learning to strengthen the character of the Pancasila Student Profile and softskill. The learning is called the Pancasila Student Profile Strengthening Project (P5).

Currently, the implementation of the Pancasila Student Profile Strengthening Project (P5) at SD Negeri Sindurjan, Purworejo Regency is still limited to focusing on the implementation of activities for students in carrying out a series of project activities. Teachers facilitated by referring to conventional modules, namely modules in the form of ebooks that have been provided by the ministry and then printed to make them easier to use, so that there are no modules that are creatively designed based on Android to be more practical as well as able to improve digital literacy for teachers who are facilitators in the Pancasila Student Profile Strengthening Project (P5) activities at SD Negeri Sindurjan.

In training and survey activities related to the use of technology in learning, there are still many teachers who experience difficulties in utilizing digital technology effectively. In intracurricular learning activities, teachers are also still very limited in the use of technology in learning, then in the Pancasila Student Profile Strengthening Project (P5) activities, teachers have never used technology such as Android to help in the implementation of P5 activities. Therefore, this community service program is focused on improving teachers' digital literacy through training on the use of AndiLearn (Android Interactive Learning), an Android-based interactive learning media designed to support P5 activities.

The use of Android devices in learning greatly helps increase engagement, accessibility, and interactivity for teachers (Nuryadi et al., 2023). Android can be leveraged in learning because teachers can access various resources such as e-books, videos, or scientific journals instantly. Apps like Google Classroom, Khan Academy, and YouTube Education allow access to learning materials anytime and anywhere. Android devices allow the use of apps that support interactive learning, such as online quizzes, simulations, or augmented reality (AR) (Astuti et al., 2021). Nowadays, Android also provides easy access to various educational resources, therefore teachers can easily utilize and make Android devices a very valuable tool in improving the quality of learning and work efficiency of teachers, as well as encouraging the adoption of technology in education.

Therefore, the purpose of this community service activity is to 1) improve teachers' digital literacy in using Android-based learning media, 2) Increase teachers' understanding of the implementation of the Pancasila Student Profile Strengthening Project (P5) through the use of technology, 3) Support the development of students' character in accordance with Pancasila values through interactive and contextual learning.

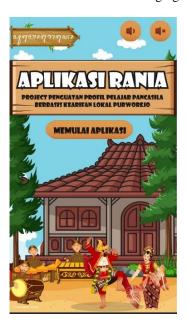
#### **METHOD**

This Community Service Activity (PkM) was carried out by a team that collaborated between the University of Muhammadiyah Purworejo and Muria Kudus University. The implementation of PkM activities was carried out for 2 months starting from August to September 2024. PkM activities were carried out at SD Negeri Sindurjan, Purworejo district with 10 teachers involved. PkM activities are carried out through several stages, namely:

- 1. Initial survey: A survey was conducted at SD Negeri Sindurjan on teachers to identify the level of digital literacy and training needs needed, especially the implementation of P5 that has been running in schools.
- 2. Digital literacy training: This activity is carried out in order to provide training to teachers on digital literacy, including the use of digital applications and devices, as well as ethics in the digital world.
- 3. Introduction to AndiLearn: Andilearn is a Rania application in the form of an Android application specifically designed to assist teachers in managing the activities of the Pancasila Student Profile Strengthening Project (P5). This training covers how to install, use the features of the application, and how to integrate this application in P5 activities.
- 4. Simulation and mentoring: Teachers are given the opportunity to conduct simulations using AndiLearn in the management of P5 activities. During this period, the service team will provide assistance and evaluation of the use of the Rania application that has been developed.
- 5. Evaluation and follow-up: In this final stage, the team and teachers evaluate the simulation results and provide recommendations for improvement for further development.

#### RESULTS

Community Service Activities (PkM) began by conducting a survey related to needs analysis. The results show that most of the teachers at SD Negeri Sindurjan are educators and education staff at SD Negeri Sindurjan are at a relatively young age and are quite competent in learning using digital technology. However, based on interviews with 5 teachers at SD Negeri Sindurjan in learning activities, including in P5 activities, teachers have never used ICT-based learning media, especially Android. This is because they think that making modern learning media is difficult and requires special competencies. Only 19% of teachers utilize modern technology in classroom learning. Based on the results of the survey, the team then developed an Android-based Rania application to assist teachers in managing P5. The following is a display of the application.





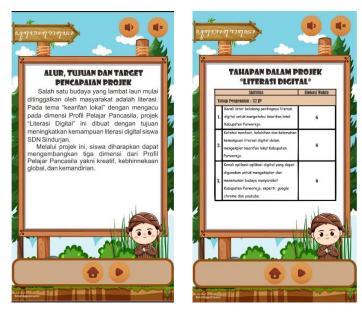


Figure 1. Initial View on the Rania App

Then at the next stage is to carry out the initial activity, namely training on making P5 modules, this activity is carried out in order to provide training to teachers regarding understanding the basic concepts of P5. The theme taken in the preparation of the P4 module is Local Wisdom. The following are the training activities for making P5 modules.



Figure 2. Training Activities for Making P5 Modules

After teachers can create a P5 teaching module, training is then carried out in the context of strengthening digital literacy, namely the introduction of AndiLearn. This activity began with the installation, use of application features, and how to integrate this application in P5 activities. The following is a documentation of the training activities.



Figure 3. Introduction of AndiLearn with the Rania Application

After the teacher participated in the introduction of AndiLearn with the Rania Application, a simulation was carried out using AndiLearn in the management of P5 activities at school. This activity took place very enthusiastically because teachers could directly provide evaluations related to the implementation of P5 as well as related to the Rania Application which will later be used as an Android-based electronic module to guide P5 activities in schools.

At the end of this PkM activity, a final evaluation was carried out in order to ensure the shortcomings that could later be corrected as well as to reflect and follow up on this PkM activity. The results of the responses obtained from the results of this activity show that most teachers feel interested in this PkM activity and hope that the activity can continue to be carried out gradually. Then related to the teachers' response in improving digital literacy, the results of the questionnaire showed that 90% of teachers were happy with the application developed and at the same time could help in carrying out P5 activities in schools so that it was more meaningful and in accordance with the guidelines that had been made. This is in accordance with the results of research which states that the use of IT-based learning media can provide a positive response to teachers and students (Khoirunisa et al., 2023; Nuryadi et al., 2023; Wibowo et al., 2023; Yudi Purwoko et al., 2020). The developed application makes the achievement of learning goals more focused and teachers get a more interesting, interactive, and contextual training experience, which can ultimately help teachers in improving digital narrative.

### CONCLUSION

Improving teachers' digital literacy is a strategic step in supporting the implementation of the Pancasila Student Profile Strengthening Project through technology. Through the use of AndiLearn learning media with the Rania Application, teachers' digital literacy can increase because teachers are interested and easy to use so that P5 activities can run smoothly according to the planned activities. This service activity not only provides direct benefits to teachers but also contributes to improving the quality of education in the digital era.

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# REFERENCES

- [1] Astuti, E. P., Purwoko, R. Y., & Gunawan, A. A. (2021). Development of Learning Media Assisted by Android Studio to Explore Mathematical Ability of Junior High School Students. Jurnal Mercumatika: Jurnal Penelitian Matematika Dan Pendidikan Matematika, 6(1). https://doi.org/10.26486/JM.V6I1.1984
- [2] Faturrahman, F., Setiawan, F., Astuti, W. D., & Khasanah, K. (2022). Analisis Kebijakan Program Penguatan Pendidikan Karakter. Tsaqofah, 2(4), 466–474. https://doi.org/10.58578/tsaqofah.v2i4.469
- [3] Inayah, N. N. (2021). Integrasi Dimensi Profil Pelajar Pancasila dalam Mata Pelajaran Pendidikan Agama Islam Menghadapi Era 4.0 di SMK Negeri Tambakboyo. Journal of Education and Learning Sciences, 1(1), 1–13. https://doi.org/10.56404/jels.v1i1.7
- [4] Jayanti Putri Purwaningrum dan Latifah Nur Ahyani. (2021). Pengembangan Digital Interactive Module Bernuansa Javanese Culture Untuk Meningkatkan Kemampuan Literasi Numerasi Siswa Diskalkulia.
- [5] kementerian pendidikan dan kebudayaan. (2017). Materi Pendukung Literasi Digital. Kementerian Pendidikan Dan Kebudayaan, 43.
- [6] Khoirunisa, I., Purwoko, R. Y., & Anjarini, T. (2023). Multimedia Interaktif Berbasis Contekstual Teaching Learning Pada Materi Pecahan Sederhana di Sekolah Dasar. Edukasiana: Jurnal Inovasi Pendidikan, 2(3), 186–196. https://doi.org/10.56916/ejip.v2i3.389
- [7] Nuryadi, N., Fitriadhy, A., Marhaeni, N. H., Purwoko, R. Y., & Rumasoreng, M. I. (2023). The Effects of Puppet Ethnomathematics Applications as Mathematics Teaching Materials for Character Education-Based. Pegem Journal of Education and Instruction, 13(2), 153–160. https://doi.org/10.47750/PEGEGOG.13.02.19
- [8] Pendidikan, K., Teknologi, D., Standar, B., & Pendidikan, dan A. (2022). Keputusan Kepala Badan Standar, Kurikulum, dan Asesmen Pendidikan Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Nomor 009/H/Kr/2022 tentang Dimensi, Elemen, dan Subelemen Profil Pelajar Pancasila pada Kurikulum Merdeka (Issue 021).
- [9] Satria, R., Adiprima, P., Wulan, K. S., & Harjatanaya, T. Y. (2022). Panduan Pengembangan Projek Penguatan Profil Pelajar Pancasila. Badan Standar, Kurikulum, Dan Asesmen Pendidikan, 137.
- [10] Ulandari, S., & Dwi, D. (2023). Implementasi Proyek Penguatan Profil Pelajar Pancasila sebagai Upaya Menguatkan Karakter Peserta Didik. 8(2), 12–28.
- [11] Wibowo, T., Triyono, A., Saleh, R. R. M., Habsyi, R., & Purwoko, R. Y. (2023). E-Modul Berbasis Android "Kitkat Versi 4.4" Untuk Memfasilitasi Asynchronous Learning Mahasiswa Pendidikan Matematika Di Ternate. Kwangsan: Jurnal Teknologi Pendidikan, 11(1), 147. https://doi.org/10.31800/jtp.kw.v11n1.p147--164

[12] Yudi Purwoko, R., Nugraheni, P., Nadhilah, S., Keguruan, F., Pendidikan, I., Muhammadiyah, U., Purworejo, P., Purworejo, K., Purworejo, K., Tengah, J., & Penulis, K. (2020). Analisis Kebutuhan Pengembangan E-Modul Berbasis Etnomatematika Produk Budaya Jawa Tengah. Jurnal Mercumatika: Jurnal Penelitian Matematika Dan Pendidikan Matematika, 5(1), 1–8. https://doi.org/10.26486/JM.V4I2.1165