

## Strengthening Pancasila Student Profile Based on Technological Pedagogical and Content Knowledge

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### Abstract

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Learning in elementary schools is currently directed to integrate technology that is aligned with the mission of the material in order to achieve quality results and student character, namely strengthening the profile of Pancasila students. This TPACK construction is expected to form student output as lifelong learners who have global abilities and behavior according to Pancasila values. Field studies need to analyze the integration of technology in learning as an effort to form students who are democratic, capable, and productive Indonesian citizens in the 21st century. The purpose of this study is to fundamentally analyze the model of strengthening the profile of Pancasila students based on TPACK at SDIT Usamah, Tegal City, as well as supporting factors and constraints. This type of research is descriptive qualitative; research location SDIT Usamah, Tegal City; data sources in the form of informants, activities, and documents; Data were collected using non-participant observation techniques, in-depth interviews, documentation studies; data validity testing by extending observations, increasing perseverance in research, discussions, triangulation. Data were analyzed using interactive model techniques flowing through data collection, data reduction, data display and conclusions. The results of the study indicate that strengthening the profile of Pancasila students based on TPACK at SDIT Usamah, Tegal City, especially in grade IV in science learning integrates technology applied through learning media and learning models. The dimensions of the Pancasila student profile are focused on three dimensions that are relevant to the material and objectives of science learning, including: 1) the dimension of global diversity; 2) the dimension of mutual cooperation; 3) the dimension of critical reasoning.

**Keywords:** TPACK; based learning; strengthening the profile of Pancasila students

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## INTRODUCTION

Permendikbud No. 22 of 2020, the Ministry of Education and Culture's Strategic Plan for 2020-2024 contains the Pancasila Student Profile, namely the embodiment of Indonesian students as lifelong learners who have global competence and behave according to the values of Pancasila: 1) believe in, fear God Almighty, and have noble morals; 2) global diversity; 3) work together; 4) be independent; 5) think critically; 6) be creative. The Pancasila student profile is the

figure of the young generation expected in the future, namely a figure who understands, internalizes, applies and practices the character values of Pancasila in everyday life.

Strengthening the six dimensions of the Pancasila student profile in elementary schools must be realized in order to achieve quality results and student character, by integrating TPACK/Technological Pedagogical Content Knowledge-based technology in the industrial era 4.0. This TPACK construction is expected to form student output as lifelong learners who have global capabilities and behavior in accordance with Pancasila values. The development of technology in the field of education produces various conveniences, such as increasing learning abilities, facilitating access to learning, etc. Changes in learning methods and the use of technology in learning need to be pursued. Learning that integrates technology with pedagogical and content mastery, namely TPACK, will create quality learning.

“Learning is essentially not only about students' cognitive abilities, but also affective and psychomotor. Students' affective abilities are instilled through the dimensions of the Pancasila student profile. Efforts to develop these dimensions by integrating TPACK through learning. This is so that students do not get bored and learning is more varied. Teachers must always improve their abilities in terms of ICT in learning” (Antony dkk, 2019).

Based on field studies, 90% of teachers at SDIT Usamah in Tegal city have integrated technology in learning, but not completely. “Integrating TPACK into learning in the digital era is important, as an effort to keep up with developments in the era.” (Hanik et al, 2022). An analysis of the integration of technology in learning is needed as an effort to shape students into democratic, capable and profitable Indonesian citizens in the 21st century. The formulation of the problem of this study: 1) How to strengthen the profile of Pancasila students based on TPACK at SDIT Usamah in Tegal city; 2) describe and analyze supporting factors and constraints.

Strengthening the Pancasila Student Profile based on technology is important for teachers as a foundation for 21st century learning. Similarities between previous research and this research are discussing learning that integrates technology or TPACK. The differences lie in the population, subjects, time and place of the research. The focus of the research is strengthening the Pancasila student profile based on TPACK. The research location is at SDIT Usamah, Tegal City.

The objectives of the study were 1) To analyze the strengthening of Pancasila student profiles based on TPACK at SDIT Usamah; 2) To analyze the supporting and inhibiting factors for strengthening Pancasila student profiles based on TPACK at SDIT Usamah. The study aims to describe and analyze the strengthening of Pancasila student profiles based on TPACK at SDIT Usamah, Tegal City, as well as its supporting and inhibiting factors.

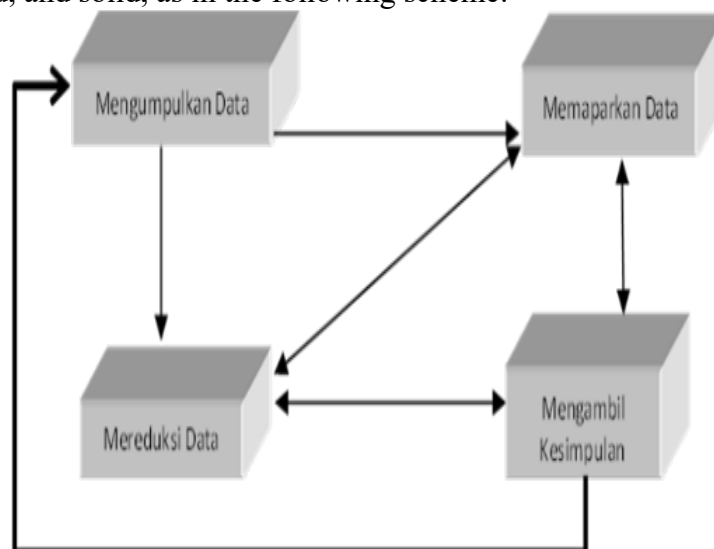
## **METHODS**

Type of qualitative descriptive research. “Qualitative research is research whose data is in the form of words and sentences” (Moleong, 2017). Data is

described descriptively. Subjects of research are principals, teachers, students, at SDIT Usamah, Tegal city. Subjects were selected using purposive sampling technique. Objects of research on social situations in schools include places, actors and activities carried out by principals, teachers, students, parents of students, and places or spaces in the school. Qualitative data analysis techniques with adaptation of the interactive model Miles & Huberman dalam Sugiyono (2015).

This research was conducted in the 2023/2024 academic year. The subjects of this study were the principal, fourth grade teachers, and several fourth grade students of SDIT Usamah, Tegal city, considering the suitability of the informant to the subject to be studied. Determination of the subject using purposive sampling technique, taking data sources according to certain considerations from the researcher; and snowball sampling, taking data sources with a small amount at first, gradually becoming large. Data collection using participant observation methods, in-depth interviews, and documentation. The researcher is the main instrument.

Research data validity techniques, including credibility test (internal validity); transverability (external validity); dependability (reliability); confirmability (objectivity) (Miles & Huberman, 2007). Credibility test using triangulation and member check; dependability test, by conducting an audit of the entire research process; confirmability test tests the criteria of objectivity, if the research results are agreed upon by many people. Confirmability is carried out with several sources: the principal and grade IV teachers, confirmation of research results to obtain agreement. Data are analyzed using the following techniques: 1) Data Reduction: the process of selecting, focusing on simplification, abstraction, and transformation of "rough" data that emerges from various written notes in the field; 2) Data Presentation, a collection of information that is arranged to provide the possibility of drawing conclusions and taking action; 3) Drawing Conclusions, starting from finding the meaning of objects, noting regularities, patterns, explanations, possible configurations, causal flows, and propositions. Conclusions are made in a loose, open, skeptical manner, initially unclear, then increasing in detail, rooted, and solid, as in the following scheme:



**Figure. 1** Components of Miles & Huberman's Interactive Data Analysis Model in Sugiyono (2015)

## **RESULTS & DISCUSSION**

### **Strengthening the Pancasila Student Profile Based on TPACK**

Based on the results of interviews, observations, and documentation, data were obtained on strengthening the Pancasila student profile based on TPACK at SDIT Usamah, Tegal City. This study focused on science learning for grade IV Musa. Strengthening the Pancasila student profile in science learning in grade IV Musa integrates technology applied through learning media and learning models.

“Strengthening the profile of Pancasila students requires strategies that are in accordance with the character of the students” (Kurniawaty dkk, 2022). The dimensions of the Pancasila student profile are focused on three dimensions that are relevant to the material and objectives of science learning, including: 1) the dimension of global diversity; 2) the dimension of mutual cooperation; 3) the dimension of critical reasoning. The following is a description of the research results.

#### 1) The learning media used is technology-based

The following are the activities of the fourth grade science teacher at SDIT UsamahcityTegal carrying out learning using Canva media. All students appear enthusiastic in following the learning by watching the teacher's slide show:



**Figure 1.** Class IV science teacher is carrying out learning using Canva media

The following is a power point slide presented by a fourth grade science teacher at SDIT Usamah, Tegal City. The slide contains learning materials being presented by the teacher. The colorful writing and images make the slide presentation interesting for students, so that learning becomes fun:



**Figure 2.** Science learning for grade IV on Plant Parts and Their Uses with Canva-based video learning media

Based on Figure 1 and Figure 2, it can be explained that the class IV teacher is implementing science education learning.assistedmedialearningCanva-based, namely power point and learning videos. Canva media and learning videos are interesting for students, and foster interest in learning. This was stated by students.1, students.2, students.3 that learning using Canva, which was initially lazy in following learning, became not lazy; learning is not boring, learning becomes fun. The results of the study by Mawarni, et al. (2024) stated that Canva interactive media is feasible, practical, and effective as an innovation in Pancasila learning media in elementary schools by utilizing online design applications.

2) The models applied include the Problem Based Learning/PBL model

The following are student activities during discussions in social studies learning. Students are seen discussing in their respective groups. Students appear enthusiastic in expressing their opinions in groups when solving problems in their groups.

Based on Figure 3, the fourth grade science teacher implemented learning using the PBL/Problem Based Learning model. Students were enthusiastic about carrying out group discussions to solve problems given by the teacher. This was very much felt as evidenced by the solid cooperation according to their respective division of tasks. The Problem Based Learning model improves the science literacy of fifth grade students of Muhammadiyah 2 Elementary School, Kupang City (Aiman and Ahmad, 2020).

Science or Natural and Social Sciences is a combination of elements of natural science and social science in education. The purpose of science learning is to provide students with a broad understanding of various natural and social phenomena around them as a whole and in an integrated manner.



**Figure 3.** The fourth grade teacher carries out science learning using the PBL model, students carry out discussions in groups

Students not only gain knowledge, but also acquire attitudes, skills, and values that are important for everyday life (Muntamah et al, 2023). The implementation of learning does not only prioritize intellectual abilities, but it is hoped that students will also behave and act according to their intellectual abilities. Science learning is very supportive in conveying messages of students' moral values, especially the profile of Pancasila students.

### 3) Strengthening the Pancasila Student Profile Based on TPACK

#### a. Global Diversity Dimensions

The following are student activities in group discussions. Students are seen working together on assignments with their group mates, although students come from different family backgrounds, it is not an obstacle in carrying out the assignment:



**Figure 4.** Grade IV students carry out group assignments in science learning

Based on Figure 4, it appears that the fourth-grade students are actively discussing in their groups. From different family backgrounds, students have the same perception, developing communication skills in the context of differences. Based on the results of interviews with grade IV teachers "...that even though the children come from different socio-economic family backgrounds, they are able to communicate in differences because of mutual respect and appreciation. Furthermore, the science teacher stated that in making assignments given by the teacher, the children were inspired by the culture they brought from their home regions, for example making posters of typical foods from their respective regions...".

b. Dimension of Mutual Cooperation

The following are student activities in discussion groups. Students are seen actively completing group assignments together. With the help of laptops, students are enthusiastic in working together, so that the work is completed quickly.



**Figure 5.** Grade IV students carry out assignments by working together in groups in science learning

Based on Figure 5, it appears that fourth grade students are actively working together using technology in the form of laptops. The statement from student 4 that when carrying out tasks from the teacher in groups, they can work together with friends, so that tasks can be completed quickly and easily because all friends can express their opinions to complement each other. Based on the results of interviews with grade IV teachers (Lt) "...that working together using technology in learning encourages students to take the initiative in learning, complete tasks by working together, and be responsible for the results of their work...".

c. Critical Reasoning Dimensions

The following are student activities in the fourth grade science learning on the use of plants in life. Students seemed enthusiastic in responding to questions raised by the teacher:



**Figure 6.** Grade IV students and teachers are discussing the theme of the uses of plants in life in science learning.

Based on Figure 6, it appears that grade IV students are enthusiastic in learning where the teacher poses problems related to the theme of students analyzing, evaluating and then making decisions. Based on the results of the interview with the teacher (Lt), it was stated that "...through the PBL (Problem Based Learning) learning model that I use, students are trained to analyze information, evaluate various options, and make the right decisions; students can analyze various design elements to create effective work...".

### **Supporting factors and constraints Strengthening the Pancasila Student Profile Based on TPACK**

Based on the results of interviews with class IV science teachers at SDIT Usamah and students, it shows that supporting factors for integrating technology in learning include 1) Availability of devices and internet access, such as computers, tablets, or smartphones and a stable internet connection. Sundari (2024) stated that technology has great potential for improve the quality of teaching and student learning outcomes through easier access to information sources, more interactive and engaging learning, and personalized learning; 2) Basic skills that teachers already have in using Canva or other digital platforms so that it is easy to design interesting and interactive learning materials in learning. Hajar, et al. (2023) in their research stated that the development of Canva media is a solution in developing interactive learning media that trains students' creativity and interest in learning; 3) Support from schools, either in the form of training, provision of devices, or policies that support the use of technology in learning. The role of educational innovation in digital technology-based learning is needed so that the use of technology is optimal and comprehensive. All elements of society, teachers and education actors can support and collaborate to optimize various educational innovations based on digital technology (Ambarwati, et al., 2020); 4) Students' high interest in technology and feeling challenged by the use of Canva, makes learning more effective. The results of Firdausi's research (2022) stated that Canva-based learning

media proved to be more effective in improving student learning outcomes in Indonesian language learning for class V MI Nurul Ihsan Kragilan, Boyolali.

Based on the results of interviews with grade IV science teachers and students, it shows that inhibiting factors or obstacles to integrating technology in learning include 1) Not all students have the same access to devices and the internet, which can create gaps in learning. The results of Arifin and Fauzi's (2024) study require special attention to students' digital knowledge levels, solving economic inequality, and reviewing regulations on the use of technology in Islamic boarding schools; 2) Not all teachers have sufficient skills to utilize technology optimally in learning. The results of Fuaddah et al.'s (2023) study stated that obstacles to the use of information and communication technology include teacher competence to use technology in learning that has not been met, lack of IT resources, multimedia devices are not yet available; 3) Limited budget, so the procurement of devices, training, and digital services can be a significant cost burden for schools.

## **CONCLUSION**

Strengthening the profile of Pancasila students TPACK-based learning focused on SDIT Usamah in Tegal city, integrating technology applied through learning media and learning models; The dimensions of the Pancasila student profile are focused on three dimensions that are relevant to the material and objectives of science learning, including: the dimension of global diversity; the dimension of mutual cooperation; and the dimension of critical reasoning.

Supporting factors for strengthening the profile of Pancasila students based on TPACK at SDIT Usamah, Tegal City, include the availability of devices and internet access, such as computers, tablets, or smartphones and a stable internet connection; basic teacher skills that are already possessed in using Canva or other digital platforms so that it is easy to design interesting and interactive learning materials in learning; support from schools in the form of training, provision of devices, or policies that support the use of technology in learning; high student interest in technology and feeling challenged by the use of Canva, making learning more effective.

Inhibiting factors or obstacles to integrating technology into learning, that not all students have the same access to devices and the internet, so that it can create gaps in learning; Not all teachers have sufficient skills to utilize technology optimally in learning; With a limited budget, the procurement of devices, training, and digital services can be a significant cost burden for schools.

## **REFERENCES**

- Aiman and Ahmad. (2020). Problem-Based Learning (PBL) on Science Literacy of Fifth Grade Elementary School Students. *Flobamorata Elementary Education Journal*.
- Ambarwati, et al. (2020). Literature Study: The Role of Educational Innovation in Digital Technology-Based Learning. *Journal of Educational Technology*

- Innovation Volume 8, No. 2 Online:<http://journal.uny.ac.id/index.php/jitp>.
- Antony, dkk (2019). Teacher's TPACK Profile: The Affect of Teacher Qualification and Teaching Experience. *Journal of Physics: Conference Series*.
- Arifin and Fauzi. (2024). digital divide among students in the era of attention economy; case study at Madrasah Aliyah Al-Ibrohimy Galis. *Jurnal Al-Ibrah* | Vol. 9 No. 1 June 2024.
- Firdausi (2022). The Effectiveness of Canva Media on Indonesian Language Learning Outcomes for Advertising Materials for Class V MI Nurul Ihsan Boyolali in the 2022/2023 Academic Year.
- Fuaddah. (2023). Perspective; Utilization of Information and Communication Technology in 21st Century Learning in Junior High Schools. *Transformative Education Journal (Jupetra)* e-ISSN: 2963-3176. Vol. 02 No. 02 (2023): June 2023.
- Hajar, et al. (2023). The Influence of Canva Application-Based Learning Media on the Learning Interests of Fifth Grade Elementary School Students. *Journal on Education* Volume 06, No. 01, September-December 2023, pp. 6404 – 6413.
- Hanik, E. U., Puspitasari, D., Safitri, E., Firdaus, H. R., Pratiwi, M., & Inayah, R. N. (2022). Integrasi Pendekatan tpack (technological, pedagogical, content knowledge) guru sekolah dasar sikl dalam melaksanakan pembelajaran era digital. *JEID: Journal of Educational Integration and Development*, 2(1), 15-27.
- Kurniawaty, I., Faiz, A., & Purwati. (2022). Strategi Penguatan Profil Pelajar Pancasila di Sekolah Dasar. *Edukatif: Jurnal Ilmu Pendidikan*, 4(4): 5170.
- Mawarni, dkk. (2024). Pengembangan Media Pembelajaran Interaktif Canva pada Materi Implementasi Nilai-Nilai Pancasila Jenjang Sekolah Dasar. *Jurnal: Basicedu*. Volume 8 Nomor 4 Tahun 2024 Halaman 2660 –2671 *Research & Learning in Elementary Education*.
- Miles, M.B., & Huberman, A.M. (2007). *Analisis data kualitatif*. (Terjemahan Tjetjep RohindiRohadi). Jakarta: Universitas Indonesia Press.
- Moleong, J. L. (2017). *Metodologi Penelitian Kualitatif*. Bandung: PT. Remaja Rosdakarya.
- Muntamah, et al. (2023). Potential Application of STEAM (Science, Technology, Engineering, Art, Mathematics) Approach in Natural and Social Sciences (IPAS) Project Learning in Vocational High Schools. *Journal of Learning Innovation in Schools*, 4(1), 77-83.
- Sugiyono. (2015). *Educational Research Methods: Quantitative, Qualitative, and R&D Approaches*. Bandung: Alfabeta.
- Sundari. (2024). Learning Transformation in the Digital Era: Integrating Technology in Modern Education. *Sindoro Cendekia Pendidikan Journal*.<https://doi.org/10.9644/sindoro.v4i5.3325>.