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User Response to the Contribution of STREAM-Based IPAS V Elementary School Teaching Materials as a Support for the Achievement of Pancasila Student Profile

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Abstract: Pancasila Student Profile (P3) is designed to improve the quality of education in Indonesia. This study inserts the R (Religion) element in the STEAM approach into the STREAM approach in the teaching materials of IPAS V SD. Said that this study aims to describe the responses of users (teachers and prospective teachers) to the contribution of STREAM-based IPAS V SD teaching materials as a support for P3 achievements. The research method used is descriptive quantitative, using user responses as data collection. The content and competencies of students in this teaching material are packaged and presented in the form of activities related to aspects of Science, Technology, Religion, Engineering, Art and Mathematics. Which is integrated in learning. With the light of knowledge and wisdom of learning as well as a short comic of gratitude for Allah's blessings and greatness on each topic related to the content of the chapter as a form of strengthening the character education of students. The results of the study concluded that user responses to STREAM-based IPAS V SD teaching materials can contribute as a support for P3 achievement with a score of 82.97%, the predicate is very feasible.

Keywords: Elementary school; Pancasila student profile; STREAM-based IPAS

Introduction

The Pancasila Student Profile is a form of application of the concept of the Independent Curriculum which is designed to improve the quality of education in Indonesia through character development (Purnawanto, 2022). Nadiem Anwar Makarim explained at least three main points in the idea of independent learning, namely technology for acceleration, diversity as an essence, and the Pancasila student profile (Malelak et al., 2021; Raharjo, 2020). Pancasila Students as a representation of Indonesian students or students who are lifelong learners with global competence and act based on Pancasila values, these values are reflected in the six dimensions of the Pancasila student profile which concerns, namely: faith, fear of God Almighty and noble character; global diversity; mutual cooperation; independence; critical reasoning; and creativity (Mulyani et al., 2023).

The independent curriculum has elements that are interconnected with each other and support each other, including subjects. One of the subjects that also supports is the science and science subject. It is hoped that in this merger effort, students will be able to manage the natural and social environment within a unified scope. By collaborating natural sciences with social sciences, it is hoped that the values or elements contained in the Pancasila Student Profile can be implemented by

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students properly (Benu & Mbuik, 2024). In line with this, as an effort to improve the Pancasila Student Profile, it is necessary to apply critical thinking skills using the STEAM approach (Rahma & Isralidin, 2022).

STEAM is a learning approach that gives learners the opportunity to expand their knowledge in the sciences and humanities and at the same time develop the skills needed to thrive in this 21st century such as communication skills, critical thinking skills, leadership, teamwork, creativity, resilience, and other skills (Perignat & Katz-Buonincontro, 2019; Rahma et al., 2023).

Using this STEAM approach can make it easier for students to learn science sciences. Khodijah et al. (2023) said that the advantages and disadvantages of using the STEAM approach are interesting learning for students and students to be more enthusiastic and can think more critically, but STEAM has disadvantages, namely in the element of religion or religion. Achieving the P3 dimension element in learning is the obligation and expectation of every teacher in the learning process. The subject of science and technology in elementary school can be seen as a means that requires the content of the values of the elements and dimensions of P3. So far, the STEAM approach is one of the approaches that is conducive and promising for the achievement of character values contained in the P3 concept.

Through STEAM (Science, Technology, Engineering, Arts, and Mathematics) activities that are integrated in learning, it is possible to achieve the values of the P3 dimensional elements which have 6 dimensions, namely: Faith, fear of God Almighty and have noble character; Global diversity; Mutual cooperation; Independence; Critical reasoning; and Creative (Andhianto et al., 2024). However, in this case, it is seen that there are still weaknesses and shortcomings in the activities of the approach that supports the first P3 dimension, namely fostering faith and piety, or having noble character. Therefore, the novelty in this study is to insert the R (Religion) element in the STEAM approach into the STREAM approach to provide strength and contribution to the achievement of the first dimension of P3 (Azizah et al., 2020), namely the first dimension which reads "Faith, fear God Almighty and have noble character". Thus, efforts to develop STREAM-based teaching materials are expected to be able to complement and contribute to a more meaningful learning approach in the application and achievement of P3 in learning in elementary school.

This is possible because of the study of Religion which is integrated in every discussion of the concept of IPAS in STREAM teaching materials (Suryadi et al., 2023), so that the task of the STREAM project is believed to be able to not only support the achievement of IPAS results but also the quality of the IPAS learning process that contains the values of Religion in the STREAM teaching materials that are developed (Revi, 2024).

The STEAM approach was further developed into STREAM by adding a religion (R) aspect. The development was carried out to adjust science and science learning (Sa'adah, 2022). STREAM is a way of learning by combining many subjects such as science, technology, religion, engineering, art, and mathematics in everyday life (Chapa Albán & Stagg, 2021; Heliawati et al., 2022). The goal is for students to think more broadly and creatively (Melati & Hadi, 2022). Using the STREAM approach, it is hoped that it can support learning outcomes as well as learning objectives in science and science subjects so that they become better and develop. The advantages of the value-oriented LKS and the content of the Qur'an can direct students in developing a spiritual attitude. The researcher recommended that research on the development of other teaching materials should be carried out which is oriented and sourced from the values and content of the Qur'an (Cahyati & Suseno, 2015).

As an effort to support the process of implementing the STREAM approach in science and science learning in elementary schools, relevant, contextual, and detailed teaching materials are needed. Therefore, in this study, a study and development of science and technology teaching materials in elementary schools based on STREAM was carried out.

Based on this background, the formulation of the problem in this study how can the response of users (teachers and prospective teachers) to the STREAM-based 5th grade elementary science science teaching materials contribute as a support for the achievement of the Pancasila student profile (P3)?

Method

The type of research is a descriptive quantitative research, namely describing the results of the questionnaire of respondents' responses to the contribution of STREAM-based IPAS V SD teaching materials as a support for the achievement of the Pancasila Student Profile (P3) that has been developed by the researcher (Sugiyono, 2017).

The subjects of this study are 6 elementary school teachers in class V, 32 PGSD students, and 30 prospective elementary school teachers (PPG PGSD students) of PGRI Adi Buana University Surabaya. The data collection method uses the questionnaire method. The instrument is in the form of a response questionnaire with 4 scales (strongly agree, agree, agree, and disagree).

The data analysis technique uses a description of the percentage of respondents' answers. The description of the responses was carried out in 6 P3 dimensions by categorizing the percentage of eligibility of BA STREAM's contribution into 4 categories of eligibility contributions as represented by Table 1.

Table 1. Categories of Eligibility Contribution

Range of score	Categories
< 65.00	Not eligible
66.00 – 75.00	less feasible
76.00 – 85.00	proper
86.00 – 95.00	Very feasible

Results and Discussion

This IPAS STREAM teaching material contains the light of knowledge so that it can encourage students to have more faith and fear God Almighty. Respondents stated that they strongly agreed with 21.9% and agreed with 78.1% with the feasible category. This IPAS STREAM teaching material contains inserts of learning wisdom, so that it can encourage students to have more noble character. It received a score of 21.9% strongly agree and 75% agree with the decent category. This IPAS STREAM teaching material allows it to contribute to supporting the character of students to have Nationalism/Global Diversity, because it uses several student figures with names and takes advantage of the environment of various regions of the archipelago so as to help students to foster a sense of global diversity received a response of 9.4% and 90.6% agreed with the category Very feasible. The views and opinions among teachers, show the need for more in-depth research to understand the perception of those who are still divided.

The contribution of this IPAS STREAM teaching material in supporting the process of achieving the Gotong Royong Character dimension received a response of 21.9% and 78.1%. This is because it contains project tasks and activities, thus helping students to foster a sense of Cooperation and Mutual Cooperation. IPAS is one of the subjects taught in elementary school.

IPAS also includes science and social learning, which includes nature, technology, environment, geography, history, and culture (Agustina et al., 2020). On the other hand, this IPAS STREAM teaching material contains independent assignments and concept understanding tests so as to help students to foster a sense of independence get a response that strongly agrees 12.5% and agrees 87.5% with the category very feasible. IPAS STREAM teaching materials contain assignments and project activities involving science, technology, engineering, mathematics, and art so as to contribute to various challenges of communication, collaboration, literacy and numeracy, as well as critical thinking of students with a response score of 9.4% and 90.6% agreement with the category of very feasible. Science and technology material basically aims to enable students to understand the material. Properly and able to apply this understanding in the form of projects or works to solve various problems faced in daily life.

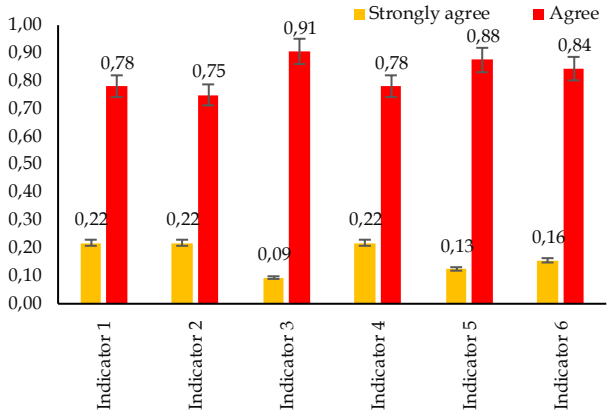

Figure 1. Diagram of the feasibility of contributing teaching materials based on STREAM

Information:
Indicator 1: Religious Character Fearful of God Almighty
Indicator 2: Religious Character with Noble Character
Indicator 3: Nationalism/Global Diversity Character
Indicator 4 : Character of Gotong Royong
Indicator 5: Character of Independence
Indicator 6 : Scientific Character (Critical Reasoning)

This STREAM-based IPAS teaching material, the content and competencies of students in the teaching materials are packaged and presented in the form of activities related to the Science aspect, the Technology aspect, the Religious aspect, the Enginering aspect, and the Art and Mathematics aspect. This approach connects various fields of science, namely science, engineering technology, art and mathematics (Savitri et al., 2023). Thus, users (teachers, students, parents of students, and others) can use it properly and optimally as expected, namely contributing to strengthening the achievements of the process and results of the Superior Education program as an effort to strengthen religious character, and habitually interacting with science, technology, art, and mathematics activities from an early age.

The format and design that contains text and is equipped with supporting images are made in full color using an adequate font size for elementary school students, so as to provide ease, comfort, and pleasure to use. This teaching material is also designed to support the creation of a student-centered learning culture.

STEAM Learning activities are generally in line with the development of learning that focuses on higher-order thinking skills, High-level skill-oriented learning is a complex thinking process, which includes the decomposition of material, conclusion making, representation development, analysis, and the formation of sertra relationships involving the most basic mental activities (Mubarok et al., 2020). By inserting elements of Religion in the discussion of each concept of IPAS content, it is hoped that it will not only provide the strengthening of superior education (Literacy, numeracy and science and technology) but also more emphasis on strengthening the character of students.

In the presentation of the concept of each chapter, cases related to the content and context of life in the student's environment are always given as well as project assignments to build students' literacy, collaboration, and communication competencies. This is confirmed by the results of the research, that the Applied Biology learning program using the STREAM (Science, Technology, Religion, Engineering, Arts, and Mahtematics) Approach is able to equip students with the habit of thinking, especially systematics Thingking Skills (Aryani et al., 2024; Azizah, 2019; Ramdan, 2022). This learning combines the 3Es learning cycle model (exploration phase, concept introduction, and concept application), Jigsaw cooperative learning method, and a combination of other learning methods. Students are encouraged to develop scientific process and design skills (engineering).

The STREAM approach requires teachers to play a role in designing and designing learning, developing teaching strategies, interacting with students, recognizing the uniqueness of each student, and conducting assessments in a transparent manner (Firdaus, 2022). Students, as learning subjects, have the responsibility to learn new concepts, think critically, pour out ideas, ask questions, conduct simple research, apply learning results through real actions, and interact socially (Dilla, 2023). They are also expected to integrate religious aspects as part of strengthening character education. Although the roles of teachers and students are different, they need to work together to complete the project that has been planned as best as possible.

This teaching material provides material information and conceptual competencies with a variety of forms and physical activities. This teaching material is also designed to support the creation of a student-centered learning atmosphere and the growth of the achievement of the Pancasila Student Profile target. With the insertion of R (Religion) elements that provide the strength to achieve superior education (character strengthening, literacy, numeracy and science and technology), this teaching material makes it possible to contribute to teachers and students in the implementation of innovative and adaptive learning that integrates the concept of STREAM (Science, Technology, Religion, Engineering, Art, Mathematic) in the content and various student activities (Azizah et al., 2021; Rahmawati & Haryanto, 2022; Revinda & Sofiyanita, 2024).

Each chapter cover is equipped with a short comic of conversations related to the content of the chapter inserted with conversations of gratitude for the blessings and greatness of Allah, and used by teachers as a trigger question in learning the understanding of the concept of chapter topics. By inserting the light of knowledge and wisdom of learning on each topic as a form of strengthening students' character education.

Conclusion

In accordance with the description of the results and discussion, it can be concluded that the responses of users (teachers and prospective teachers) to the STREAM-based 5th grade science sciences teaching materials can be concluded as follows: the insertion of the light of knowledge and the wisdom of learning can encourage students to have more faith, fear God Almighty, agree 78.1%; can encourage students to have more noble character. received an approval score of 75%; fostering a sense of global diversity received an approval response of 90.6%; supporting the process of achieving the dimension of mutual cooperation with a response of 78.1%; fostering a sense of independence received an 87.5% response in agreement; and various challenges of communication, collaboration, literacy and numeracy, as well as critical thinking of students with a response score of 90.6%. The response of users (teachers and prospective teachers) to the teaching materials of grade 5 elementary science sciences based on STREAM, it can contribute as a support for the achievement of the Pancasila student profile (P3) with an average score of 82.97% with a very decent predicate.

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Conflicts of Interest
The authors declare no conflict of interest.

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