

Realizing the Pancasila Student Profile through SDG 4: Zero Waste, Science, and Literacy Projects in Elementary Schools

Husnul Fatihah^{1*}, Dadang Sundawa², Asep Mahfudz², Vina Amilia¹, Rahmawati², Diva Amanda³

¹Universitas Sriwijaya, Palembang, Indonesia

²Universitas Pendidikan Indonesia, Bandung, Indonesia

³Universitas Negeri Yogyakarta, Yogyakarta, Indonesia



DOI : <https://doi.org/10.63230/jocsis.2.3.183>

Sections Info

Article history:

Submitted: March 3, 2026

Final Revised: May 29, 2026

Accepted: July 3, 2026

First Available Online: July 21, 2026

Publication Date: September 27, 2026

Keywords:

Character Education;

Elementary School;

Pancasila Student Profile;

School Programs.

ABSTRACT

Objective: The study aimed to explore, analyze, and describe the strategies implemented by elementary schools to develop the Pancasila Student Profile. Specifically, the study examined school programs, stakeholder involvement, and institutional practices that support the internalization of Pancasila values and character development among students at Palembang Nature School. **Method:** The study employed a descriptive qualitative approach and was conducted at Palembang Nature School, also known as SAPA Palembang Elementary School. The research participants consisted of the principal, teachers, students, and parents or guardians. Data were collected through observations, interviews, and document analysis. The data analysis process involved data collection, data reduction, data presentation, and conclusion drawing. Data credibility was established through source and technique triangulation. **Results:** The findings identified five major programs implemented to develop the Pancasila Student Profile: (1) Zero Waste, (2) Science Project, (3) Language Literacy Week, (4) Cultural Week, and (5) Survival. These programs facilitated the development of students' character, faith in God Almighty, knowledge, creativity, independence, responsibility, and democratic attitudes. The successful implementation of the Pancasila Student Profile was supported by three main factors. **Novelty:** The study provides an integrated description of how nature-based elementary school programs can be used to develop the Pancasila Student Profile through experiential, environmental, scientific, cultural, literacy, and survival-oriented activities. The findings demonstrate that the Pancasila Student Profile can be effectively developed through a whole-school approach involving school leaders, teachers, students, and parents.

INTRODUCTION

Education is one of the processes that humans must go through in their lives. Both formal, informal and non-formal education are all in order to form the desired culture in the future. As written in the National Education System Law of 2003 that Education in the context of developing and shaping a dignified national civilization (Presiden Republik Indonesia, 2003). Furthermore, in chapter 3, it is further detailed that a dignified national civilization can be realized if the people of the Indonesian nation have the ability and disposition to believe and fear God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent and become democratic and responsible citizens.

In line with the details of chapter 3, Wijayanti et al. wrote that education is part of community activities in instilling values and norms from generation to generation in society (Brown, 1992). Meanwhile, Ki Hajar Dewantara defines education as an effort to advance children's ethics, mind and body (Mudana, 2019).

Ki Hadjar Dewantara said that the education environment consists of three scopes called the Tri centers of Education. The scope of the family, the scope of the school and the scope of the community. The family sphere is a small society that at least consists of parents and children, the relationship in this family is bound by descendants. The scope of the community consists of several combinations of family circles that have at least the head of the neighborhood unit. Then the scope of the school consists of teachers, students and a

systematic curriculum. These three spheres have an equally great influence on growth and development both physically and mentally (Aningsih et al., 2022).

The Government and the Ministry of Education and Culture, Research and Technology as the institutions responsible for the implementation of education in schools in Indonesia view the importance of character education or character formation. Character education in Indonesia is sourced from religious, Pancasila and cultural values (Kurniawan, 2018). There is a government program that is basically in order to realize character education that is sourced from Pancasila values, the program is called the Pancasila student profile.

The Pancasila Student Profile is a program in the 2020-2024 strategic plan of the Ministry of Education and Culture, Research and Technology. The Pancasila student profile is an elaboration of the goals of national education, the goals of education nationally include realizing character values in students who are Indonesian people.

The Pancasila student profile is a form of Indonesian students as human beings who learn throughout their lives who have global competence and behavior in accordance with Pancasila values. The main characteristics of the student profile are faith, fear of God Almighty, noble character, global diversity, cooperation, independence, critical reasoning and creativity (Benawa & Sihombing, 2023).

There are many ways to create a Pancasila student profile, according to Susilawati iThe implementation of Pancasila student profile values in learning is carried out through school culture, intracurricular, co-curricular and extracurricular learning (6). In intracurricular learning, there are many dimensions that need to be considered to realize the Pancasila student profile. Among the dimensions that need to be considered are textbooks, semester implementation plans or syllabus, lesson plans (meeting learning plans), learning media, learning methods. In the research Fitri Andriani explained how to realize the Pancasila student profile based on religious values, the research said that if it strengthens religious values, it can realize the Pancasila student profile (Indriani et al., 2024).

To realize the Pancasila student profile referred to earlier, of course, every activity in learning must use the Pancasila student profile values approach, as well as intracurricular, co-curricular and extracurricular school activities, the three school activities must be developed in order to realize the Pancasila student profile. So that the profile of Pancasila students can be realized according to the government's independent learning platform.

The readiness of teachers and schools in developing and strengthening the value of the Pancasila student profile has been widely discussed. Elementary school is an effective school level in realizing the Pancasila student profile. Students at elementary school age are between the ages of 6-12 years. At the age of 6-12 years, the development of children is very rapid in various aspects (Gong et al., 2025). The development of language, emotional, social, and intellectual aspects of children at elementary school age is very rapid, meaning that teachers and schools at the elementary school level play a very important role in shaping the Pancasila student profile.

At the elementary school level at the Palembang nature school (SAPA) there are various programs in realizing the Pancasila student profile for its students. SD SAPA routinely carries out various activities every year including zero waste, cultural week, project science week, Literacy Week, City Tour. All activities are reported by the school both in the form of work reports and in the form of news on social media, as mentioned by Hendrawan that SAPA has conducted a routine cultural week every year (Hendrawan, 2022).

Based on a preliminary study conducted by researchers at the Palembang Nature School Elementary School located in Jakabaring, it has integrated the value of the Pancasila student profile in its school culture, namely in intracurricular, co-curricular and extracurricular activities. In co-curricular activities, there are several programs that basically aim to grow and develop the value of the Pancasila student profile. Among the co-curricular activities are

zero waste, literacy week, cultural week and market day. In zero waste activities, there are several stages of activities that according to the researcher's initial observations, are very thick with the cultivation of Pancasila student profile values. Therefore, this study will describe how SAPA Elementary School realizes the Pancasila student profile.

RESEARCH METHOD

Research design

This study employed a descriptive qualitative research design. The qualitative approach was selected because the study aimed to explore, analyze, and describe the strategies implemented by elementary schools in realizing the Pancasila Student Profile based on the actual conditions experienced by the research subjects. According to Creswell and Creswell (2018), qualitative research is appropriate for investigating phenomena in natural settings by interpreting participants' perspectives and experiences. In this study, the researchers focused on understanding how school programs, institutional practices, and interactions among school stakeholders contributed to the development of students' character values based on the Pancasila Student Profile.

This research was conducted at Palembang Nature School Elementary School (Sekolah Alam Palembang/SAPA) located in Jakabaring, Palembang City, South Sumatra Province. The research was carried out from October 2022 to February 2023. The study examined various school programs designed to develop the dimensions of the Pancasila Student Profile, including students who have noble character and faith in God Almighty, independence, creativity, critical thinking, cooperation, and global awareness.

The qualitative descriptive design was considered appropriate because this study did not aim to measure the effect of a specific treatment but to provide an in-depth description of the processes, strategies, and supporting factors involved in implementing the Pancasila Student Profile in an elementary school context.

Research participants

The participants of this study consisted of the principal, teachers, and students of Palembang Nature School Elementary School. The participants were selected using purposive sampling because they were directly involved in the implementation and development of programs related to the Pancasila Student Profile.

The principal was selected as a key informant because of his/her role in developing school policies and institutional programs. Teachers were involved as informants because they implemented learning activities and character-building programs, while students were included to provide perspectives regarding their experiences in participating in school programs. In addition, supporting information was obtained from school documentation related to the implementation of the programs.

The involvement of various participants allowed the researchers to obtain comprehensive information regarding the planning, implementation, and evaluation of programs supporting the realization of the Pancasila Student Profile.

Research instruments

The instruments used in this study consisted of observation guidelines, interview guidelines, and documentation guidelines. These instruments were developed to collect data regarding the implementation strategies of the Pancasila Student Profile at Palembang Nature School Elementary School.

The observation guidelines were used to identify school activities, student behaviors, and interactions among school members during the implementation of character-building programs. The interview guidelines were used to conduct in-depth interviews with the

principal, teachers, and students to explore their experiences, perceptions, and roles in realizing the Pancasila Student Profile. Meanwhile, documentation guidelines were used to collect supporting data, such as school program documents, activity reports, and other relevant records.

The research instruments focused on several aspects, including school programs, institutional support, teacher involvement, student participation, and collaboration between schools and parents. The collected information was used to describe the strategies and factors supporting the realization of the Pancasila Student Profile.

Data analysis techniques

Data collection in this study was conducted through observation, in-depth interviews, and documentation. The researchers were guided by data collection instruments in the form of observation grids, interview guidelines, and documentation guidelines. The collected data were analyzed using the qualitative data analysis model proposed by Miles, Huberman, and Saldaña (2014), which consists of three main stages: data condensation, data display, and conclusion drawing/verification.

In the data condensation stage, the researchers selected, simplified, and organized the collected information from observations, interviews, and documents. The data were categorized based on themes related to the implementation of the Pancasila Student Profile, including school programs, stakeholder involvement, institutionalization strategies, and supporting factors.

In the data display stage, the categorized information was presented systematically in the form of descriptions and thematic explanations to identify patterns and relationships among the findings. The final stage involved drawing conclusions and verifying the findings by interpreting the data obtained from different sources.

To ensure the credibility and validity of the data, this study applied triangulation techniques and reference studies. Source triangulation was conducted by comparing information obtained from principals, teachers, and students, while technique triangulation was conducted by comparing data from observations, interviews, and documentation. Through this process, the researchers ensured that the findings accurately represented the strategies implemented by Palembang Nature School Elementary School in realizing the Pancasila Student Profile.

RESULTS AND DISCUSSION

Results

The results of the study can be described based on observations, interviews and documentation (Najmi et al., 2024). The results of the observation are known that the chairman of the Foundation always emphasizes that the zero waste week program, science project, literacy week, cultural week, city tour must be held every year, then morning dhikr is held every day before the lesson starts. The results of the interview and documentation also stated that zero waste week, science project, literacy week, cultural week, city tour are always held once a year.

Although caring for the environment has become a special approach for SAPA elementary schools, zero waste is a place to strengthen and remind people of their concern for nature and the environment. The zero waste program is held once a year, the goal of zero waste is to produce a generation that is the successor of the nation that is beneficial to nature, humans and others (Sasongko, 2023). This is in line with the institution's vision, which is to become an educational institution based on back to nature.

Zero waste week is filled with various activities, including, a zerowaste market, a shopping bag painting competition, fashion show used goods, used goods installation, and

so on. In the zerowaste market, they are taught to sell foodstuffs that do not use plastic, sell student works and sell used clothes for the school community (Triansyah, 2023). It is the responsibility of all of us to care about waste and try to save plastic, considering that waste has been piling up. According to Sakti, the waste on the earth is increasing as the human population increases, even the garbage on the earth is already as large as the territory of Indonesia (Sakti et al., 2021). Therefore, the zero waste program is one of the strategies in strengthening the profile of Pancasila students, especially in elements of noble character. From the results of observations, interviews and documentation, data was obtained that in the zero waste program there is a strengthening of faith, fear of God Almighty, noble character, global diversity, cooperation, independence, critical reasoning and creativity.

Based on the results of the study, it is known that the principal gives directions to each teacher to always insert about realizing the Pancasila student profile in the zerowaste program. The element of fearing God Almighty The value is manifested when understanding to students that humans are leaders on earth, mentioned by the holy book as "ustaziatulalam", therefore protecting the earth from garbage is an obligation and getting great rewards on the side of Allah SWT (Susanti et al., 2023). In the element of noble character, teachers have become role models in protecting schools from waste by bringing their own drinking fountains and not using plastic excessively, teachers also teach as well as be examples in managing waste (Onde et al., 2025). In the element of global diversity, teachers teach children to maintain cleanliness even though they are outside their area (Pratiwi et al., 2024). In the element of working together, the teacher gets used to students making works together with used plastic materials. The teacher's independent element asks students to bring a rice box and a drinking place when buying food at the school canteen, while in the critical and creative reasoning element, the teacher asks students to determine works made of used plastic materials to display during the zerowaste celebration. For more details, please see Table 1.

Table 1. Creating a Pancasila Student Profile throught zero waste

No	Information	Findings	Interpretation
1	Based on the results of interviews and observations with teachers and principals	Zero waste week teaches students to apply noble moral elements, namely students must dispose of garbage in the place that has been provided, teachers ask students to dispose of garbage according to the type of waste, organic waste is disposed of in organic waste cans and inorganic waste is disposed of in inorganic waste bins.	The interpretation shows the existence of realizing noble moral elements
2		Teachers get students used to not Relying on plastic packaging to reduce the use of plastic in life. Asking students to bring their own drink tumbler and bring their own tumbler or drinking utensils when going to the school canteen, this is included in the independent value in the Pancasila student profile	The interpretation shows that there is an effort to realize the independent element.
3		The teacher also teaches students to be creative and think critically in processing plastic waste into usable materials, for example making bags from used plastic, making soap from used cooking oil	Interpretation shows that there is an effort to realize the elements of critical and creative reasoning

No	Information	Findings	Interpretation
4		Teachers make it a habit for students to work together in designing and practicing what will be displayed at the peak of zero waste week	The interpretation shows that there are efforts to realize the element of mutual cooperation
5		The school organizes a cheap market (<i>thrift clothes</i>) for the surrounding community	The interpretation shows that there are efforts to realize the element of global diversity
6		Teachers understand to students that humans are assigned by God Almighty as leaders on earth, therefore protecting the earth is an obligation	The interpretation shows that there is an effort to realize the element of piety to God Almighty

The second program is project science, project science is held once a year, this activity aims to hone the logic of science, get used to scientific thinking from finding problems, find solutions to problems and prove the truth of the solution and then present the project that has been prepared (Saiz & Rivas, 2023). This activity is attended by all SAPA elementary school students, from grade 1 to grade 6, problems are adjusted to the stages of student development. The teacher is in charge of directing what the students want to know, then the students are directed to cooperate with the two parents to answer the problems they want to know through a small experiment at home, then the students are assisted by the two parents to make an observation report.

This activity also provides a fun academic challenge. There are several steps in the science project carried out by students. These steps are in accordance with the steps of scientific thinking in the project-based learning approach: 1) asking about problems in daily life, 2) relating problems in the basis of the scriptures, 3) preparing a project implementation schedule, 4) conducting experiments, 5) monitoring experiments or projects, 5) compiling reports. Simple steps part of the project-based learning approach (Nurhidayah et al., 2021).

When students follow these steps of scientific thinking, students are directly formed into students who show the profile of Pancasila students, the most dominant element formed is the element of critical and creative reasoning, there are elements of fear of God Almighty, noble character, global diversity, cooperation, independence, critical reasoning and creativity (Parwati & Suastra, 2024). Further information can be seen in Table 2.

Table 2. Analysis of creating Pancasila Student Profiles through project science

No	Information	Findings	Interpretation
1	Based on the results of interviews and observations with teachers and principals	Teachers get students used to thinking critically about what happens in the environment by getting used to asking questions.	Interpretation shows the embodiment of elements of critical and creative reasoning
2		The teacher asks students to guess the answer to the question in the scriptures	The interpretation shows the embodiment of the element of fearing God Almighty.

No	Information	Findings	Interpretation
3		Teachers get students used to answering questions by conducting trials	Interpretation shows the embodiment of an independent element
4		Teachers get used to students writing questions and steps to answer questions in a report book and into a chart with parents to be presented	The interpretation shows that there are efforts to realize the elements of mutual cooperation
5		Teachers familiarize students with polite language for presentations	Interpretation shows the effort to realize the noble moral element
6		Teachers make it a habit for students to listen when other friends explain the science of their project, even though it is not interesting according to students	The interpretation shows that there are efforts to realize the element of global diversity

The next program is language literacy week, language literacy aims to familiarize students not only with reading but also being able to understand and retell the content of books, as well as making simple books. This is important considering the Kompas report that Indonesian children's reading comprehension ability is still low (Napitupulu, 2023).

This language literacy activity is usually carried out in October, the stages of the activity are carried out by reading books, donating books, summarizing the contents of the book and making books. The theme of the book is read and made based on the student's interest, for example, students are interested in learning about celestial bodies, then the book they read is adjusted to the theme of celestial bodies, and books are made about celestial bodies (Şensoy & Kocakuşak, 2025). The form of the book made can be in the form of a simple novel, short story or simple comic. This activity ended with a costplay competition (costume) from the main character which was read at the top of the event and was open to the public

Table 3. Analysis of realizing Pancasila Student Profile through language literacy

No	Information	Findings	Interpretation
1	Based on the results of interviews and observations with teachers and principals	The teacher directs students to write down the interests they want to know	The interpretation shows that there is an effort to realize the element of global diversity (respecting student diversity)
2		Teachers direct students to choose, search for books, literature they want to know	The interpretation shows that there is an effort to realize an independent element
3		The teacher asks students to write a report from the interest they want to know	Interpretation shows that there is an effort to realize the elements of critical and creative reasoning
4		The teacher asks students to make a short story or a simple comic related to the student's interests	Interpretation shows that there is an effort to realize the elements of critical and creative reasoning
5		The teacher asked students to prepare themselves to explain in front of the class with standard, polite and polite language	The interpretation shows that there is an effort to realize the element of noble character

No	Information	Findings	Interpretation
6		The teacher directs students to associate each interest with the verses in each student's holy book	The interpretation shows that there is an effort to realize the element of piety to God Almighty

Cultural week is held once a year, this cultural week aims to familiarize students with living in diversity so as to foster a sense of tolerance. From this activity, students get to know other people's cultures, both archipelago culture and international culture, when they already know other cultures, students do not feel that their own culture is the highest and best (Redjeki, 2025).

During the national cultural week, teachers and students study geographical location maps, typical Indonesian cuisine, dances, songs, folklore, traditional games, traditional clothing, nature reserves and traditional ceremonies (Yoniatini et al., 2025). The form is a carnival of traditional clothes for students, teachers and parents, culinary exhibitions, fashion shows and dance performances, songs, traditional ceremonies, folk games and inviting guest teachers from their respective cultures (Huang & Noknoi, 2025). The cultural week is scheduled to be held every June and is open to the public, it is expected to be a spectacle and entertainment that educates the community around SAPA elementary school and the city of Palembang.

International Culture Week is no different from national culture, international culture is scheduled every three years alternately with national culture, for example, the previous year national culture then two years later the international culture schedule. International cultural festivals are the same as archipelago cultural festivals that raise local wisdom, international culture is taught in detail and in a very fun method (Yatim et al., 2025). Students, teachers and parents are given the freedom to be creative in making it happen together. Students and teachers learn more about dahullu in the form of geographical location maps, archipelago cuisine, dances, songs, folklore, traditional games, traditional clothing, nature reserves and traditional ceremonies. Then prepare everything to be displayed, prepare traditional clothes for students, teachers and parents for the carnival, prepare culinary exhibitions, fashion shows and dance performances, songs, traditional ceremonies, folk games and invite guest teachers from their respective cultures.

Table 4. Analysis of creating Pancasila Student Profiles through cultural week

No	Information	Findings	Interpretation
1	Based on the results of interviews and observations with teachers and principals	Teachers make it a habit for students to start each activity by reading prayers	The interpretation shows that there is an effort to realize the element of piety to God Almighty
2		Teachers guide students to carry out responsibly the results of deliberations related to the cultural division of each class	The interpretation shows that there is an effort to realize the element of noble character
3		Teachers guide students to look for culturally related literature to be understood and displayed	The interpretation shows that there is an effort to realize an independent element
4		Teachers get used to students deliberating on the division of tasks in cultural festivals	The interpretation shows that there are efforts to realize the element of mutual cooperation

No	Information	Findings	Interpretation
5		The teacher guides students to determine the concept of the creation to be displayed at the cultural festival	Interpretation shows that there is an effort to realize the elements of critical and creative reasoning
6		Each class gets a different cultural division (both national and international culture)	The interpretation shows that there are efforts to realize the element of global diversity

The next program is called City tour (survival), this program is held according to the class level. City tours aim to make students able to adapt and survive in any conditions, rural environments, urban environments, travel and accommodation. In addition, the city tour also aims to make students accustomed to solving the problems they face, not running away from problems and not giving up. Given the problem-solving ability (Pangalila & Fatimah, 2023). And the ability to survive and never give up is needed in daily life and in the world of work (Dunbar, 2008).

The destination location of the city tour is determined based on the grade level, for grades 1-3 the destination is around the city of Palembang. For grades 4-6 around the region in South Sumatra province. This means that the higher the class, the more difficult and the wider the challenge. Students are taught to study the activities of the local people, and to feel and help the activities of the residents.

Table 5. Analysis of creating Pancasila Student Profiles through city tour (survival)

No	Information	Findings	Interpretation
1	Based on the results of interviews and observations with teachers and principals	The teacher guides students to start the city tour journey by reading a prayer	The interpretation shows that there is an effort to realize the element of fearing God Almighty
2		The teacher gives instructions to students regarding what needs to be prepared before participating in the city tour	The interpretation shows that there is an effort to realize an independent element
3		Teachers get students used to helping each other on the journey	The interpretation shows that there are efforts to realize the element of mutual cooperation
4		Teachers familiarize students with being able to solve the problems they face	Interpretation shows that there is an effort to realize the elements of critical and creative reasoning
5		Students learn about community life at the location that has been chosen for the city tour	The interpretation shows that there are efforts to realize the element of global diversity
6		Teachers make it a habit for students not to easily complain about the bad conditions they face	The interpretation shows that there is an effort to realize the element of noble character

The programs that have been implemented by SAPA Elementary School are effective and efficient programs in realizing the Pancasila student profile. It is effective because it is right

on target, right in order to realize the six elements of the Pancasila student profile, efficiently implemented because it does not require large funds in the implementation of the five programs.

The realization of the successful Pancasila student profile is the result of cooperation between parents/guardians of students, teachers, teaching staff and the community. Among the reasons for the success of realizing the Pancasila student profile at SAPA Palembang Elementary School are, there is a combination of teachers, intensive interaction, which is 1) good institutionalization related to the program 2) intensive interaction between teachers and principals, teachers and students, between students, between students and parents, between teachers and students and even between parents of students; 3) exemplary from teachers and principals. On the concept of character education and moral education (Fatimah & Waluyati, 2020), good character which is taught to children at home and at school needs reinforcement in society. That is why an effective character school is not to work alone (exclusively) but is willing to cooperate optimally with the parents of students and parents are also willing to cooperate with the school (Wagner, 2019).

Discussion

The findings of this study indicate that the realization of the Pancasila Student Profile at Palembang Nature School Elementary School (SAPA) is implemented through a whole-school approach involving structured programs, institutional support, and collaboration among school stakeholders. The results obtained from observations, interviews, and documentation show that five main programs, namely Zero Waste, Science Project, Language Literacy Week, Cultural Week, and City Tour (Survival), consistently contribute to strengthening the dimensions of the Pancasila Student Profile (Najmi et al., 2024). These findings suggest that character development is not only achieved through classroom learning but also through meaningful experiences embedded in students' daily activities.

The implementation of the Zero Waste program demonstrates how environmental awareness can become an effective medium for strengthening students' character values. Although environmental care has become one of the main characteristics of SAPA Elementary School, the Zero Waste program functions as a structured strategy to reinforce students' responsibility toward nature and society. This finding is consistent with Sasongko (2023), who stated that environmental-based education can contribute to developing responsible generations who are aware of the relationship between humans and nature. The program also reflects the school's vision of implementing education based on the concept of back to nature.

Through various activities such as zero waste markets, reusable shopping bag competitions, recycled product exhibitions, and used-item fashion shows, students are provided with direct experiences in managing waste creatively. The zero waste market, for example, teaches students to reduce plastic consumption, sell environmentally friendly products, promote student creativity, and reuse unused materials (Triansyah, 2023). These activities are important because waste problems continue to increase along with population growth, making environmental responsibility an essential value that needs to be developed from an early age (Sakti et al., 2021).

The Zero Waste program contributes to several dimensions of the Pancasila Student Profile. The dimension of faith in God Almighty is strengthened through teachers' explanations that humans have a responsibility as stewards of the earth, making environmental preservation a moral and religious obligation (Susanti et al., 2023). The dimension of noble character is developed through teachers' exemplary behaviors, such as reducing plastic use and consistently practicing proper waste management (Onde et al., 2025). Furthermore, students develop independence by bringing reusable drinking

containers and food containers, cooperation through collaborative recycled-product projects, creativity through waste-processing activities, and global diversity through social responsibility toward the wider community (Pratiwi et al., 2024). These findings indicate that environmental programs can serve as authentic contexts for character formation.

The Science Project program also plays an important role in developing students' critical and creative reasoning. The findings show that students are encouraged to identify problems, formulate questions, conduct simple experiments, analyze results, and communicate their findings. This process reflects the principles of scientific inquiry and project-based learning, where students actively construct knowledge through investigation and problem solving (Saiz & Rivas, 2023). The stages implemented in the Science Project program, including identifying problems, connecting problems with religious values, designing projects, conducting experiments, preparing reports, and presenting results, are consistent with the characteristics of project-based learning approaches (Nurhidayah et al., 2021).

Through this process, students are not only developing scientific skills but also strengthening multiple dimensions of the Pancasila Student Profile. Critical and creative reasoning becomes the dominant dimension because students are trained to analyze problems and generate solutions. Meanwhile, other dimensions such as independence, cooperation, noble character, and faith in God Almighty are developed through individual responsibility, collaboration with parents, ethical communication, and reflection on scientific phenomena from a religious perspective. This finding supports previous research emphasizing that inquiry-based and project-based learning approaches effectively promote higher-order thinking and character development simultaneously (Parwati & Suastra, 2024).

The Language Literacy Week program further strengthens students' ability to develop literacy skills and independent learning habits. The program does not only focus on reading activities but also encourages students to understand, summarize, and produce their own written works. This approach is important because reading comprehension remains a challenge among Indonesian students (Napitupulu, 2023). By allowing students to select topics based on their interests, the program provides opportunities for personalized learning and respects students' diversity.

The process of searching for references, writing reports, creating stories or comics, and presenting their works encourages students to develop critical thinking, creativity, independence, and communication skills. Furthermore, integrating students' interests with religious values strengthens the dimension of faith in God Almighty. The findings demonstrate that literacy activities can become a powerful strategy to develop the Pancasila Student Profile when they are designed as meaningful and productive learning experiences rather than merely reading exercises.

The Cultural Week program provides another important contribution by developing students' awareness of diversity. Through national and international cultural activities, students learn about different traditions, languages, foods, clothing, arts, and social practices. This finding supports the idea that multicultural education can foster tolerance and prevent students from assuming that their own culture is superior to others (Redjeki, 2025).

The cultural festival activities involving students, teachers, and parents create opportunities for collaboration and appreciation of cultural differences. Students learn to divide responsibilities, conduct discussions, search for cultural information, and creatively present cultural performances. These processes strengthen cooperation, independence, creativity, critical reasoning, noble character, and global diversity. Thus, cultural-based programs can function as experiential learning environments that support the development of socially responsible and culturally aware students.

The City Tour (Survival) program strengthens students' independence, adaptability, and problem-solving abilities. Unlike conventional field trips that mainly focus on recreation,

SAPA's City Tour program is designed as an experiential learning activity where students encounter real-life situations and learn how to respond to challenges. Students are trained to prepare independently, cooperate with others, solve problems, and adapt to different environments. These skills are essential because problem-solving ability and resilience are required both in daily life and future professional contexts (Dunbar, 2008; Pangalila & Fatimah, 2023).

Overall, the five programs implemented at SAPA Elementary School demonstrate that the realization of the Pancasila Student Profile requires continuous integration between school programs, teacher practices, leadership, and family involvement. The effectiveness of these programs is not primarily determined by financial resources but by strong institutional commitment and consistent implementation. The findings reveal three important factors contributing to the success of the Pancasila Student Profile implementation: effective institutionalization of programs, intensive interaction among school stakeholders, and exemplary behavior demonstrated by principals and teachers.

These findings are consistent with character education perspectives stating that successful character development requires collaboration between schools, families, and communities rather than relying solely on classroom instruction (Fatimah & Waluyati, 2020). Schools that actively involve parents and community members create stronger environments for reinforcing character values because students experience consistency between school, home, and society (Wagner, 2019).

Therefore, this study highlights that the Pancasila Student Profile can be effectively developed through a holistic school-based approach. The novelty of this research lies in demonstrating how integrated environmental, scientific, literacy, cultural, and experiential programs can collectively support the formation of Pancasila values in elementary school students. Rather than implementing character education as a separate subject, SAPA Elementary School integrates character formation into meaningful student experiences, creating a sustainable model for strengthening the Pancasila Student Profile.

CONCLUSION

Fundamental Finding: This study demonstrates that the implementation of school-based programs at SAPA Palembang Elementary School effectively supports the realization of the Pancasila Student Profile. The findings reveal that five main programs, namely Zero Waste, Science Project, Language Literacy Week, Cultural Week, and City Tour (Survival), contribute to the development of the six dimensions of the Pancasila Student Profile: faith in God Almighty and noble character, independence, critical and creative reasoning, cooperation, and global diversity. Each program provides meaningful learning experiences that allow students to develop character values through environmental activities, scientific inquiry, literacy practices, cultural appreciation, and real-life problem-solving experiences. The findings indicate that the successful implementation of the Pancasila Student Profile is supported by effective program institutionalization, continuous involvement of teachers and principals, and strong collaboration between schools and parents. Although several challenges were identified, particularly related to parents' availability in supporting student activities, these obstacles were managed through flexible involvement strategies by involving other family members, such as siblings, grandparents, or relatives. **Implication:** The findings provide evidence that the realization of the Pancasila Student Profile can be effectively achieved through an integrated and experiential school-based approach. Schools can develop students' character not only through classroom instruction but also through structured programs that connect learning with real-life contexts. The results suggest that educational institutions should strengthen collaboration among school leaders, teachers, students, parents, and communities to create a supportive environment for character

development. The programs implemented at SAPA Palembang Elementary School can serve as practical references for other elementary schools, both in urban and rural areas, in designing effective and efficient strategies to strengthen the Pancasila Student Profile. **Limitation:** This study was conducted in only one elementary school, namely SAPA Palembang Elementary School, which may limit the generalizability of the findings to other educational contexts. Furthermore, this study focused primarily on describing program implementation and stakeholder experiences without quantitatively measuring changes in students' character development over time. The study also relied on qualitative data obtained from observations, interviews, and documentation, which may be influenced by participants' perceptions and interpretations. **Future Research:** Future studies are recommended to involve a wider range of schools with different geographical, cultural, and institutional backgrounds to obtain a broader understanding of strategies for implementing the Pancasila Student Profile. Further research may also examine the long-term impact of school-based programs on students' character development using mixed-method or longitudinal approaches. In addition, future studies could explore the role of digital technology, community involvement, and innovative learning models in strengthening the implementation of the Pancasila Student Profile as part of efforts to develop competent, responsible, and character-based Indonesian students.

ACKNOWLEDGEMENTS

The researcher would like to thank Sekolah Alam (SAPA) Palembang located in Jakabaring Palembang which has facilitated the researcher in conducting research with the title Realizing the Pancasila Students Profile in Elementary Schools Through Zero Waste, Science Project, Cultural Literacy Week, Language Literacy Week, City Tour (Survival).

AUTHOR CONTRIBUTIONS

Husnul Fatihah: Conceptualization, methodology, investigation, data curation, formal analysis, writing original draft, and visualization. **Dadang Sundawa:** Supervision and validation. **Asep Mahfudz:** writing review and editing, and project administration. **Vina Amilia:** Conceptualization and methodology. **Rahmawati:** supervision and validation. **Diva Amanda:** writing review, editing, and resources. All authors have read, reviewed, and approved the final version of the manuscript and agree to be accountable for all aspects of the work.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

STATEMENT ON THE USE OF AI OR DIGITAL TOOLS IN WRITING

AI tools were used only for language editing, grammar improvement, and discussion support. The authors take full responsibility for all aspects of the research and the final content of the manuscript.

REFERENCES

- Aningsih, M. S., Zulela, Neolaka, A., Iasha, V., & Setiawan, B. (2022). How is the education character implemented? The case study in Indonesian elementary school. *Journal of Educational and Social Research*, 12(1), 371–380. <https://doi.org/10.36941/jesr-2022-0029>
- Benawa, A., & Sihombing, A. A. (2023). The significance influence of Pancasila education and religion education on the formation of Pancasila student profile by hybrid

- learning. *E3S Web of Conferences*, 426, Article 01068. <https://doi.org/10.1051/e3sconf/202342601068>
- Brown, D. E. (1992). Using examples and analogies to remediate misconceptions in physics: Factors influencing conceptual change. *Journal of Research in Science Teaching*, 29(1), 17–34. <https://doi.org/10.1002/tea.3660290104>
- Dunbar, K. (2008). Problem solving. In P. Thagard (Ed.), *A companion to cognitive science* (pp. 289–298). Wiley-Blackwell. <https://doi.org/10.1002/9781405164535.ch20>
- Fatihah, H., & Waluyati, S. A. (2020). Development of learning tools for multicultural education subjects in the development of shame and guilt attitudes. In *Proceedings of the 1st International Conference on Character Education (ICCE 2020)* (Vol. 513, pp. 151–156). Atlantis Press. <https://doi.org/10.2991/assehr.k.201230.098>
- Gong, L., Song, Y., Cheng, S., Du, J., & Liang, J. (2025). Analysis of growth and development levels and influencing factors in children aged 3–12 years in a certain region: A cross-sectional study. *Frontiers in Public Health*, 13, Article 1523626. <https://doi.org/10.3389/fpubh.2025.1523626>
- Hendrawan, P. (2022, June). Festival di Sekolah Alam Palembang: Mengenal budaya, bahasa, kuliner dari 11 suku. *Tempo.co*. <https://www.tempo.co/hiburan/festival-di-sekolah-alam-palembang-mengenal-budaya-bahasa-kuliner-dari-11-suku-332610>
- Huang, Z., & Noknoi, K. (2025). The application of Chinese folk ritual dance in teaching: The integration of cultural identity inheritance and innovative education. *International Journal of Education and Literacy Studies*, 13(2), 460–468. <https://doi.org/10.7575/aiac.ijels.v.13n.2p.460>
- Indriani, F., Cahyanti, G., & Tumiran, M. A. (2024). Transformation of Pancasila student profile: Integration of religious dimensions through school culture and character education in elementary schools. *Jurnal Cakrawala Pendidikan*, 21(2), 199–205. <https://doi.org/10.21831/jc.v21i2.71140>
- Kurniawan, M. I. (2018). Pancasila as a basis for nation's character education. In *Proceedings of the International Conference on Indonesian Values and Character in Globalization Era (ICIGR 2017)* (Vol. 125, pp. 268–270). Atlantis Press. <https://doi.org/10.2991/icigr-17.2018.64>
- Monaro, S., Gullick, J., & West, S. (2022). Qualitative data analysis for health research: A step-by-step example of phenomenological interpretation. *The Qualitative Report*, 27(4), 1040–1057. <https://doi.org/10.46743/2160-3715/2022.5249>
- Mudana, I. G. A. M. G. (2019). Membangun karakter dalam perspektif filsafat pendidikan Ki Hadjar Dewantara. *Jurnal Filsafat Indonesia*, 2(2), 75–81. <https://doi.org/10.23887/jfi.v2i2.21285>
- Najmi, A. H., Alameer, Y. R., & Alhalafawy, W. S. (2024). Exploring the enablers of IoT in education: A qualitative analysis of expert tweets. *Journal of Infrastructure, Policy and Development*, 8(10), 5079. <https://doi.org/10.24294/jipd.v8i10.5079>
- Napitupulu, E. L. (2023, October 2). Kemampuan memahami bacaan masih rendah. *Kompas.id*. <https://www.kompas.id/baca/humaniora/2023/10/02/kemampuan-memahami-bacaan-masih-rendah>
- Nurhidayah, I. J., Wibowo, F. C., & Astra, I. M. (2021). Project based learning (PjBL) learning model in science learning: Literature review. *Journal of Physics: Conference Series*, 2019(1), Article 012043. <https://doi.org/10.1088/1742-6596/2019/1/012043>

- Onde, F. M., Pungay, C. C. S., Sanchez, K. L., & Anan, N. C. V. (2025). Voices of teachers on waste disposal management in Valentin N. Daquio Elementary School: Basis for cleaner school improvement. *International Journal of Research and Innovation in Social Science*, 9(8), 1329–1356. <https://doi.org/10.47772/IJRISS.2025.908000111>
- Pangalila, T., & Fatimah, S. (2023). The influence of civic education learning and the Pancasila Student Profile Program on improving ideological values understanding. *Jurnal Civics: Media Kajian Kewarganegaraan*, 20(2), 359–369. <https://doi.org/10.21831/jc.v20i2.61511>
- Parwati, N. P. Y., & Suastra, I. W. (2024). Critical study of educational philosophy: Implementation of character education in the Pancasila student profile. *Indonesian Journal of Educational Development*, 4(4), 492–499. <https://doi.org/10.59672/ijed.v4i4.3397>
- Pratiwi, H., Ismail, M., & Riwanda, A. (2024). Questioning inclusive city quality: Teachers' perspectives and experiences in sexuality education for children with special needs in Indonesia. *International Journal of Educational Research*, 127, 102419. <https://doi.org/10.1016/j.ijer.2024.102419>
- Presiden Republik Indonesia. (2003). *Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional*. Lembaran Negara Republik Indonesia Tahun 2003 Nomor 78, Tambahan Lembaran Negara Republik Indonesia Nomor 4301. <https://peraturan.bpk.go.id/Details/43920/uu-no-20-tahun-2003>
- Redjeki, D. S. S., Imron, A., Rasdiana, R., Wiyono, B. B., Prestiadi, D., Wahed, A., Purwati, E., Dami, Z. A., Margariena, I. N., Maulina, S., & Sinon, I. L. S. (2025). The nexus of Nusantara archipelagic cultural values in pupil management and its activities on social harmony through national identity revitalization. *Frontiers in Education*, 10, Article 1524105. <https://doi.org/10.3389/feduc.2025.1524105>
- Saiz, C., & Rivas, S. F. (2023). Critical thinking, formation, and change. *Journal of Intelligence*, 11(12), 219. <https://doi.org/10.3390/jintelligence11120219>
- Sakti, A. D., Rinasti, A. N., Agustina, E., Diastomo, H., Muhammad, F., Anna, Z., & Wikantika, K. (2021). Multi-scenario model of plastic waste accumulation potential in Indonesia using integrated remote sensing, statistic and socio-demographic data. *ISPRS International Journal of Geo-Information*, 10(7), 481. <https://doi.org/10.3390/ijgi10070481>
- Sasongko, J. (2023, February 20). Mengenal event Zero Waste for Humanity dari Sekolah Alam Palembang. *Sonora.id*. <https://sonorapalembang.com/mengenal-event-zero-waste-for-humanity-dari-sekolah-alam-palembang/>
- Şensoy, Ö., & Kocakuşak, M. (2025). Determination of middle school students' alternative concepts in the structure and motion of celestial bodies. *International Journal of Contemporary Educational Research*, 12(1), 71–89. <https://doi.org/10.52380/ijcer.2025.12.1.665>
- Susanti, A., Darmansyah, A., Tyas, D. N., Hidayat, R., Syahputri, D. O., Wulandari, S., & Rahmasari, A. (2023). The implementation of project for strengthening the profile of Pancasila students in the independent curriculum for elementary school students. *IJECA (International Journal of Education and Curriculum Application)*, 6(2), 113–122. <https://doi.org/10.31764/ijeca.v6i2.15474>
- Triansyah, Y. (2023, February 25). Menuju nol sampah, Pusri gelar Zero Waste Challenge Week. *Tribun Sumsel*. <https://palembang.tribunnews.com/2023/02/25/menuju-nol-sampah-pusri-gelar-zero-waste-challenge-week>

- Wagner, L. (2019). Good character is what we look for in a friend: Character strengths are positively related to peer acceptance and friendship quality in early adolescents. *The Journal of Early Adolescence*, 39(6), 864–903. <https://doi.org/10.1177/0272431618791286>
- Yatim, H., Jayadi, K., Jamilah, J., Abduh, A., & Prusdianto, P. (2025). Integrating cultural heritage into education: The supportive role of schools in traditional festivals in West Sulawesi. *Discover Education*, 4(1), 379. <https://doi.org/10.1007/s44217-025-00847-2>
- Yoniartini, D. M., Rasna, I. W., Suandi, I. N., & Dewantara, M. (2025). Revitalising local language and literature through the ethnopedagogical practice of cultural Saturday in elementary education. *Journal of Cultural Analysis and Social Change*, 10(3), 1560–1568. <https://doi.org/10.64753/jcasc.v10i3.2629>

***Husnul Fatihah (Corresponding Author)**

Department of Early Childhood Education, Faculty of Teacher Training and Education, Universitas Sriwijaya
Jl. Raya Palembang–Prabumulih Km. 32, Indralaya, Ogan Ilir Regency, South Sumatra 30662, Indonesia
Email: husnulfatihah@fkip.unsri.ac.id

Dadang Sundawa

Department of Civic Education, Faculty of Social Sciences Education, Universitas Pendidikan Indonesia
Jl. Dr. Setiabudi No. 229, Isola, Sukasari District, Bandung City, West Java 40154, Indonesia
Email: dadangsundawa@upi.edu

Asep Mahfudz

Department of Civic Education, Faculty of Social Sciences Education, Universitas Pendidikan Indonesia
Jl. Dr. Setiabudi No. 229, Isola, Sukasari District, Bandung City, West Java 40154, Indonesia
Email: asepmahpudz@upi.edu

Vina Amilia

Department of Early Childhood Education, Faculty of Teacher Training and Education, Universitas Sriwijaya
Jl. Raya Palembang–Prabumulih Km. 32, Indralaya, Ogan Ilir Regency, South Sumatra 30662, Indonesia
Email: vinaamilia@fkip.unsri.ac.id

Rahmawati

Department of Civic Education, Faculty of Social Sciences Education, Universitas Pendidikan Indonesia
Jl. Dr. Setiabudi No. 229, Isola, Sukasari District, Bandung City, West Java 40154, Indonesia
Email: rahmawati10@upi.edu

Diva Amanda

Department of Educational Administration, Faculty of Education, Universitas Negeri Yogyakarta
Jl. Colombo No. 1, Karangmalang, Depok District, Sleman Regency, Special Region of Yogyakarta 55281, Indonesia
Email: divaamanda.2025@student.uny.ac.id
