



# IMPLEMENTATION OF WASTE BANK PROGRAM THROUGH EXTRACURRICULAR BASED ON PROJECT LEARNING (PJBL) TOWARDS STRENGTHENING PANCASILA STUDENT PROFILES IN PUBLIC HIGH SCHOOL 2 PAGUYAMAN

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<p><b>Received:</b> June, 20<sup>th</sup> 2022 <b>Accepted:</b> July, 20<sup>th</sup> 2022 <b>Published:</b> August, 24<sup>th</sup> 2022</p>	<p>This study aims to describe the implementation of the waste bank program through project-based extracurricular learning (PjBL) towards strengthening the profile of Pancasila students at Public High School 2 Paguyaman. In addition, to find out whether the implementation of the program has an effect on strengthening the profile of Pancasila students and whether there are dimensions of the Pancasila student profile that have changed significantly. This research is a quasi-experimental pre-posttest non-control class with a quantitative approach. The population of this study were all students of class X, XI at SMA Negeri 2 Paguyaman with a total sample of 71 students. The sampling technique is simple random sampling. Data collection techniques were carried out by: (1) pre-posttest questionnaires and tests, and (2) implementation of learning to collect data on (1) the effect of program implementation on strengthening the profile of Pencil students; and (2) the dimensions of the Pancasila student profile that changed significantly. The results showed: (1) there was an effect of program implementation on strengthening the profile of Pancasila, seen in the results of measuring the moral dimension to nature on the value of identifying problems, the critical reasoning dimension on the value of analyzing information and the creative dimension on the value of finding ideas and; (2) there are dimensions of the Pancasila student profile that have changed significantly. Seen in the results of the measurement of the profile of Pancasila students, namely the critical reasoning dimension has a higher value (-0.11 logit) than the moral to nature (-0.08) and the creative dimension (0.01 logit). Based on the results of this study, several suggestions were put forward as follows: (1) Schools make programs that involve maximum student activities in order to develop moral values to nature, critical and creative reasoning abilities as an effort to realize the profile of Pancasila students; (2) Teachers should have a strong motivation to design learning by paying attention to the needs of students, namely differentiated learning.</p>

**Keywords:** Pancasila Student Profile, Waste Bank Extracurricular, PjBL.

## INTRODUCTION

Superior human resources are those who have characteristics as lifelong learners, have global competencies and internalize Pancasila values in their behavior. This is as expected by the government through the Ministry of Education, Culture, Research and Technology (Kemendikbudristek) which is called the Pancasila student profile. Efforts to prepare a capable generation of the nation in the age of science and technology that continue to develop are intensely carried out by the government. We can observe starting from curriculum adjustments, increasing teacher competence, to thinking about the learning process that focuses more on the needs of students and their environment.

The dimensions of the Pancasila student profile that are expected to be realized in Indonesian students are 6 dimensions, namely: faith, fear of God Almighty and noble character, global diversity, mutual cooperation, independence, critical reasoning, and creativity as a result of the learning process so that Pancasila students This is able to answer the challenges in the era of globalization. This Pancasila student profile becomes a guideline for Indonesian education, both at the national and regional levels. The role of the teacher as the spearhead in its implementation is very important considering that the teacher directly relates to students at school, both in the

classroom in the teaching and learning process and outside the classroom, namely in extracurricular activities where the implementation requires the full involvement of teachers and students.

The impact of the learning process that has not been in favor of students includes the achievement of quality and relevance of student learning outcomes on indicators of numeracy ability below the minimum competence while the character is still in the developing stage.

The dimensions of faith, piety to God Almighty and noble character, namely the moral element to nature as part of the environment, expects Pancasila students to have a sense of responsibility, love, and care for the natural environment. These values still need to be achieved because only 28% of students at Public High School 2 Paguyaman have a sense of responsibility, compassion, and care for their natural environment.

The critical reasoning dimension expects students to be able to objectively process both qualitative and quantitative information, build relationships between various information, analyze information, evaluate and conclude it. The elements of critical reasoning are obtaining and processing information and ideas, analyzing and evaluating reasoning, reflecting on thoughts and thought processes in making decisions. extracurricular. The results of the supervision of the implementation of learning found that curiosity, processing information, analyzing information and making decisions which are the values on the elements of critical reasoning, the average percentage achievement is still low at 19%.

The creative dimension expects creative students to be able to modify and produce something original, meaningful, useful, and impactful. The key elements of creativity consist of generating original ideas and producing original works and actions and having flexibility of thinking in finding alternative solutions to problems. Based on the supervision of the assessment tool, the average achievement of this element is only 10%. Students are less able to provide ideas, create original works and modify works for the better.

The thing that causes these conditions is that the teacher has not implemented differentiated learning. The learning design that has been made has not involved students optimally. In the learning process, teachers are less skilled at giving challenging questions and assignments that do not stimulate their brains, so that students are less able to develop their thinking and creativity skills, even though creativity is very important for students in continuing their lives.

Creativity will help students in solving problems encountered and can find new concepts. According to Chaplin (in Sagala, 2009) that creative (creative) relates to the use or efforts to enable productive mental abilities in solving or solving problems, or efforts to develop artistic and mechanical forms, usually with the intention that people are able to use information that does not come from sources. experience or sources of information. The results of supervision on the assessment tool show that the form of assignment given as part of the assessment of the skills domain does not direct students to take critical and creative actions as a result of the learning process. This condition implies the need for improvement through the learning process that can develop critical and creative thinking skills which are part of the dimensions of the Pancasila student profile that students want to manifest in themselves. Extracurricular activities are alternative activities that support the teaching and learning process in the classroom as an effort to develop students' critical and creative thinking skills. These extracurricular activities, if collaborated with learning models that involve maximum student activities, will have a very good impact on the development of abilities learners.

The Project-based Learning (PjBL) model is one of the options in instilling and developing students' creative thinking skills, because PjBL is a learning model that involves the activeness of students in solving problems, carried out in groups/independently through scientific stages with a certain time limit set forth. in a product for further presentation to others. This model is expected to be a stimulus for strengthening the profile of Pancasila students in students. Rahayuningsih (2021) writes that the profile of Pancasila students can be built through school culture, intra-curricular, co-curricular, and extra-curricular learning within each individual student. Fitria, M (2015) found that school waste banks contribute to creating a clean environment. The activities carried out at the waste bank teach students to care about the environment which is part of the aspect of having character to nature and developing critical and creative thinking power. In an effort to foster a sense of affection, care and responsibility as well as to improve the ability to reason.

Being critical and creative in students as well as an effort to realize the school's vision and mission, namely "Creating human beings with character, achievement and environmental culture", SMA Negeri 2 Paguyaman created a waste bank program called "Independent Waste Bank" which was carried out in learning-based extracurricular activities the project (PjBL) as a form of real action to achieve the school's vision and can improve coaching to students as a whole as an effort to strengthen the profile of Pancasila students in the dimensions of faith and piety, namely in the aspect of having character to nature, critical and creative reasoning.

Based on the descriptions about the importance of the learning process that involves students maximally both during class hours or outside of class as an effort to strengthen the profile of Pancasila students, the researchers made this a problem topic in conducting research with the formulation of the title "Implementation of the Waste Bank Program Through Extracurricular Learning Project-Based (PjBL) on Strengthening the Profile of Pancasila Students at SMA Negeri 2 Paguyaman"

### RESEARCH METHODOLOGY

In this study, the place and location of the research is Public High School 2 Paguyaman, located in Bongo IV Village, Paguyaman District, Boalemo Regency. The selection of this research location is because at Public High School

2 Paguyaman teaching and extracurricular activities carried out have not shown an involved process so that student activities are maximized so that the learning objectives have not been maximally achieved, and the dimensions of the Pancasila student profile that are expected to be realized have not been seen, especially in the dimensions of Faith, pious to TYE and have noble character, moral elements to nature, critical and creative reasoning. The research was carried out from February to June 2022.

This research is a quantitative study using a quasi-experimental pre-post test design without a control class because the object of this research is all students of Public High School 2 Paguyaman who take part in the waste bank extracurricular program. In this study, the population was all students of Public High School 2 Paguyaman with a sample of 71. Data was collected using 2 techniques, namely pre-posttest and implementation of learning. Data analysis uses Rasch model analysis with stacking techniques to analyze changes at the individual level and racking techniques to determine changes at the level items. Wright (in Laliyo, 2021:37).

### RESEARCH RESULT DATA DESCRIPTION

Data analysis was carried out using stacking and racking techniques to describe the variable data of Pancasila student profiles and the waste bank program through project-based extracurricular activities (PjBL).

#### 1. Stacking Technique

##### a. Pancasila Student Profile Variables

Based on table 4.2 above, there are 6 students who change in a positive direction with a mean of 1.32 logit. There were 26 students whose values changed from a small value to a larger value with a mean of 0.90 logit, there were 34 students whose values changed in a negative direction with a mean of -1.65 logit and there were 2 students who did not experience a change.

##### b. Waste Bank Program

Variables Based on table 4.4, there are 49 students whose values change in a positive direction with a mean of 1.09 logit. There were 4 students whose values changed from a small value to a larger value with a mean of 0.40 logit, there were 11 students whose scores remained in the negative direction with a mean of -0.42 logit and there were 6 students who did not change.

#### 2. Racking Technique

##### a. Pancasila Student Profile Variables

Based on table 4.5 above, there is a change in the group of items on the moral dimension to nature whose values change in a negative direction with a mean Pre-test of 0.18 logit, post-test 0.10 logit and a difference of -0.08 logit. In the critical reasoning dimension group, the value changed in a negative direction with a mean Pre-test of 0.22 logit, post-test 0.11 logit and a difference of -0.11 logit. For the creative dimension group, the value changed with the mean Pre-test - 0.29 logit, post-test -0.28 logit and a difference of 0.01 logit.

##### b. Waste Bank Program Variables

Based on table 4.6, there is a change in the group of waste types, the value changes in a negative direction with a mean difference of -0.38 logit. In the group on the impact of waste on the environment, the value changes in a negative direction with a mean difference of -0.45 logit. For the waste bank management group which contains the dimensions of the Pancasila student profile, the value changes in a negative direction with a mean difference of -0.64 logit.

#### 3. Hypothesis Testing

- a. The measurement results on the personal pre-posttest of the Pancasila student profile variable and the waste bank program variable through project learning-based extracurricular activities (PjBL) show that the number is not equal to zero. This means that the implementation of the waste bank program through extracurricular project-based learning has an effect on strengthening the profile of Pancasila students at SMA Negeri 2 Paguyaman.
- b. Based on tables 4.5 and 4.6 regarding the results of the pre-posttest item variable profiles of Pancasila students and the waste bank program, there is a difference in scores on the dimensions of the Pancasila student profile, namely the critical reasoning dimension that has a higher value (-0.11 logit) than the moral element to nature (-0.08 logit) and the creative dimension (0.01 logit). This shows that the implementation of the waste bank program through project learning-based extracurriculars provides a significant change to the dimensions of the Pancasila student profile, namely critical reasoning.

### DISCUSSION

#### 1. Changes in the Dimensions of the Pancasila Student Profile on the Pancasila Student Profile Variable and the Waste Bank Extracurricular through Project Learning (PjBL)

Changes in the dimensions of the Pancasila student profile include changes in the individual abilities of students to the dimensions of Pancasila students and mastery of the waste bank concept. Changes at the individual level of students are determined by comparing the size (logit person value) pre-posttest, using the staking Rasch model technique.

Table 4.7 presents the results of measuring the average understanding of the change in students' Pre-Posttest understanding on the Pancasila student profile variable and the waste bank program variable experiencing a greater change in value, confirming a change for the better.

Changes in the size of students' abilities that are positive indicate students have increased thinking skills which have an impact on decision making on alternative answers as a result of the learning process. Changes in the size of the ability to negative at the individual level can be taken into consideration for teachers to explore information about the condition of students, so that teachers can adjust the learning process as needed.

### **a. Dimensions of Faith, Fear of God Almighty and Noble Morals in the Elements of Morals to Nature.**

In this dimension, students are expected to become students who have character in their relationship with God Almighty. He understands religious teachings and beliefs and applies these understandings in his daily life.

The academic report card for Public High School 2 Paguyaman in 2021 on the dimensions of Faith, Faith in God Almighty and with Noble Morals has reached the stage of being cultured. But on the moral element to nature based on student picket data for the 2021/2022 school year, it shows that not all students have a sense of affection for nature, responsibility and care for the environment. The fact that the behavior of living clean, caring and responsible still really needs to be improved so that cultural achievements in this dimension can still be maintained in the results of the next year's analysis, including the contribution of the moral element to nature.

There is an increase in the percentage in the dimensions of Faith, Fear of God Almighty and Noble Moral Elements of Nature. In this program, above 50% of students have been able to identify problems that give rise to a sense of care, responsibility and affection.

The different responses of students depicted through the results of data processing provide information that to make a change, especially in things that lead to attitudes and behavior is not something that can be done easily. It takes a little time. Many factors influence the change in students' attitudes, both internal factors, namely their desire to change and external factors such as family, living environment and learning environment. Schools are institutions that contribute to creating students who have a good relationship with God Almighty, including morals towards nature. The affection embedded in students for their environment will encourage them to feel concerned and responsible for the environment and the natural surroundings and be able to identify problems that arise and find solutions. This needs to be fostered through sustainable programs so that the good values that exist in students can continue to grow and develop.

### **b. Dimensions of Critical Reasoning**

The critical reasoning dimension expects students to be able to objectively process both qualitative and quantitative information, build relationships between various information, analyze information, evaluate and conclude it. The results of the analysis of the academic report cards for Public High School 2 Paguyaman in 2021, the dimensions of critical reasoning reach the developing stage. Data on the supervision of the implementation of learning shows that students are less active in the teaching and learning process, do not dare to ask questions and are less able to answer questions.

Based on table 4.11 on the average results of changes in the value of the Pancasila student profile on the dimensions of critical reasoning, it can be seen that there is a change after treatment. Better changes occur in the value of analyzing information followed by decision making and analysis of ideas. This explains that learning can provide changes to the way of thinking. The right learning media will stimulate students to manage their thoughts, ask questions about things they don't know, look for reasons why and in the end they can make decisions about what is the focus of what they learn. These things if done continuously will train students to learn to manage their minds better.

In the waste bank extracurricular program at Public High School 2 Paguyaman, 90% of students actively ask questions, analyze information and ideas that produce decisions based on facts and sources of information.

### **c. Creative Dimension**

The creative dimension expects students to be creative, able to modify and produce something original, meaningful, useful, and impactful. Based on the academic report card for SMA Negeri 2 Paguyaman in 2021, the creative dimension has reached a developing stage. The assessment data of subject teachers also shows a low percentage of the creative dimension of elements generating original ideas, producing original works and actions and having flexibility of thinking in finding alternative solutions to problems.

Based on table 4.13 about the results of the average change in value on the creative dimension after treatment. Changes occur better in the value of finding ideas followed by the value of modifying ideas and creating works. This proves that learning by doing becomes a valuable experience as well as fosters creativity. Finding ideas, modifying works and creating works will appear when students get learning that involves their activities to the fullest.

In this program, 90% of students are active and together can find ideas or ideas which are then followed up on modifying ideas and creating works. Schools in this case teachers have an important role in facilitating students to develop their creativity, through the learning and assessment process as well as other school programs.

Based on table 4.14, it can be seen that there is an effect of the waste bank program through extracurricular project-based learning on strengthening the profile of Pancasila students. There are several dimensions of the Pancasila student profile that appear. Love, care and responsibility as the embodiment of the moral dimension to nature, reason critically, creatively and generate new ideas or ideas as a result of the learning process at each stage of project learning. This shows that the waste bank program through project learning-based extracurricular activities (PjBL) can be used to stimulate the development of students' thinking which leads to the realization of a Pancasila student profile.

The unique characteristics of each student become homework for the teacher to design learning and assessments that favor his development as a whole person. Differentiated learning in the independent learning curriculum that is carried out in the drive school program sharpens the mandate of character education in the 2013 curriculum. The goal is to create students who are critical, creative, collaborative and skilled. are 1) Development of soft skills and character according to the implementation of the waste bank program through project learning-based extracurricular activities (PjBL) held at Public High School 2 Paguyaman illustrates that maximum student involvement can develop thinking skills, attitudes and skills. Appropriate treatment will have an influence on individuals in thinking and acting as a feature of a change. The results of data processing at Public High School 2 Paguyaman showed significant changes in student behavior both in attitudes and understanding of concepts before and after doing project learning-based waste bank extracurricular activities (PjBL).

Changes that occur after treatment can be seen in changes in small values to larger values, some changes to smaller values, and there are even students who do not experience changes. It can be explained that not all students who are actively involved in learning activities get better learning outcomes. This happens because students are not familiar with new learning models because they are not often used. In addition, not all students can be given project-based learning. According to Yulita (2016) there are some students who have weaknesses in carrying out project activities and data collection even though the process is done in groups.

Anselmi, 2015 (in Laliyo, 2020) writes that knowing changes at the individual level is considered important because it is possible for teachers to identify the characteristics of each child and their reasons for responding to interventions. This information can be used by teachers to plan interventions that are suitable for each individual, because the characteristics of each child are different.

### **2. Changes in Item Difficulty in the Dimensions of the Pancasila Student Profile**

Changes in the item level of students were determined by comparing the size (logit item value) pre-posttest, on the student profile variable for Pancasila and the Waste bank program using the Racking Rasch model technique.

Based on table 4.10, it is known that in: 1) the Pancasila student profile variable there is a change in the average level of difficulty of the critical reasoning dimension item with a mean difference (-0.11 logit) from the mean creative dimension item difference (0.01 logit); and the dimension of noble character, the measure of the mean difference between items (0.18 logit); and 2) the variable implementation of the waste bank program through project learning-based extracurricular activities, there is a change in the average level of difficulty of waste management items containing the Pancasila student profile which is greater with the mean difference (-0.64 logit) than the mean item size of the impact of waste on the environment (-0.53 logit); and types of waste with a difference (-0.38 logit).

The size of the difficulty level of the item changes is defined as a change in the average size (logit) of the difficulty level of the students' pre-posttest items. There are two possible changes in the item difficulty level: 1) the nature of the change in the difficulty level of the students' pre-posttest items is positive, if in the pre-test conditions, the location of the difficulty level of certain items on the Wright map, changes to be lower (easy) in the post-test conditions. test, or the size of the pre-posttest item changes from large to small; 2) the nature of the change in the difficulty level of a student's pre-posttest item is negative, if in the pre-test condition, the location of the difficulty level of a particular item on the Wright map, changes to be higher (difficult) in the post-test condition, or the size of the pre-posttest item changed from small to big.

Based on the research findings above, it can be said that the change in the level of difficulty of the pre-posttest items both in the dimensions of the Pancasila student profile and the concept of the waste bank has changed to a negative or positive value, which means that the item difficulty level becomes easier. This means that changes in the location or size of items, which are positive or negative, are simply caused by the waste bank program through project learning-based extracurricular activities (PjBL). This also confirms that the dimensions of the Pancasila student profile have changed significantly, namely the critical reasoning dimension (-0.11) compared to the moral dimension to nature (-0.08) and the creative dimension (0.01).

In line with the change in item difficulty level, the project results from the implementation of the waste bank program through project-based extracurricular activities (PjBL) confirm changes in the critical reasoning dimension which is marked by the birth of new creative ideas. The emergence of ideas is certainly related to the ability of students to interpret the concepts given so that students can make decisions based on thoughts and facts in this case about waste management.

Furthermore, the Rasch model analysis can diagnose the nature of changes at the individual level through staking techniques and changes in the difficulty level of questions through racking techniques. The results of this measurement can be used by teachers to analyze the effect of the application of the learning model implemented in learning.

In this study, it was also found that students changed their answers to the same item during the post-test (the answers to the pre-test were correct), including students numbered 21,29,53,63 on question item number 17 as shown in the excerpt of the list of test results.

Changes in test answer results can be explained that student number 21 in the post-test condition, the ability measure (1.29 logit) and the difficulty level of the item number 17 (1.23 logit) should not change the answer during the post-test because the size of the ability is greater than the difficulty level of the item. number 17. So why did student number 21 change the answer to number 17? Let's look at the concept of question number 17. For question number 17 the level of thinking used is C3, which is the application according to the level of thinking of Bloom's taxonomy,

where students have gone through the levels of thinking of remembering (C1) and understanding (C2). Theoretically, after receiving treatment in the form of project learning-based waste bank extracurricular activities (PjBL), their thinking skills will develop better. However, this does not apply to student number 21 to item number 17, this indicates that students do not understand the concept even though they are already involved in the learning process. This confirms that changes in the ability of students to interpret the learning process depend on the learning model used. One learning model is not necessarily suitable for all students. Duschl et al., 2011; Park et al., 2017; Wilson, 2009. (in Laliyo, 2020:) wrote that

Changes in the abilities and progress of students are largely determined by their learning practices and learning experiences. From this fact, teachers need to analyze the condition of students before deciding to use learning and assessment models that will be used in the learning process so that all children are served their needs so that their potential can develop properly and the goals of national education will be achieved.

### CONCLUSION

1. The effect of program implementation is seen in the change in the value of each dimension of the Pancasila student profile studied. In the dimension of Faith, Fear of God Almighty and noble character, moral elements to nature, identifying problems experiencing changes for the better followed by the values of responsibility, care and compassion. For the critical reasoning dimension, analyzing information has changed better than decision making and idea analysis. While in the creative dimension, finding ideas changes for the better, then followed by modifying ideas and creating works. This shows that learning that involves students maximally can develop the potential of students. Learning by doing will provide a meaningful learning experience.
2. The dimensions of the Pancasila student profile changed significantly after the implementation of the waste bank program through project learning-based extracurricular activities (PjBL). found in the critical reasoning dimension, followed by the moral dimension to nature and the creative dimension. The results of the analysis show that students' thinking abilities are easier to change than attitudes and behavior. Ways of thinking and creativity are easier to grow in a short time compared to changing habits or behavior

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