

## Implementation of the Project Based Learning Model to Improve the Character of Responsibility in Elementary School Students

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### 1. Abstract

The character of responsibility must be developed in students. The purpose of this study was to find out the process and results of increasing the character of responsibility using the project based learning model in class III A students at SDN Ungaran 1 Yogyakarta. This type of research is a class action research with a total of 28 class III A students at SDN Ungaran 1 Yogyakarta. The research design uses the Kemmis and Mc Taggart models. Data collection techniques using a scale and observation. While the data analysis techniques use qualitative and quantitative descriptions. The results showed an increase in the percentage of responsibility in the high category from before the action of 25% to 57.14% in cycle I. Implementing improvements in the form of increasing students' attention to learning instructions, monitoring the division of tasks for each group member, and guiding the group to carry out each stage of the project task, can increase the responsibility of students by 21.43% from cycle I by 57.14% to 78.57% in cycle II. Thus, it can be concluded that the application of the project based learning model can improve the character of the responsibilities of class III A students at SDN Ungaran 1 Yogyakarta.

**Keywords:** *character of responsibility, Project Based Learning model*

## **2. Introduction**

Character plays an important role for humans in facing life, because it becomes a guide in thinking, behaving, and making decisions (Mumpuni, 2018: 12). The Ministry of Education and Culture seeks to build a civilized society through the implementation of character education in schools. Character education is an integral part of the national education goals stipulated in the National Education System Law Number 20 of 2003 Article 3, which emphasizes that national education is an effort to form students with character who can control themselves and have competencies and skills that are beneficial to them, society, nation, and state. To form a generation that has morals, morals, and character based on Pancasila values, the Ministry of Education and Culture has formulated character values that must be developed in students from elementary school to university. One example of an emphasized character is the character of responsibility (Martawijaya, 2016: 31).

Responsible character development can be carried out both in official and non-official educational institutions. School as an official educational institution is a strategic place in shaping the character values of students (Bafirman, 2016: 64). The formation of character in schools is expected to bring changes in improving affective aspects such as the character of responsibility. In the context of learning, the character of student responsibility can be seen during the learning process. The responsibility of students is reflected in their dedication to following and completing learning in class. Narwanti (2014: 69) states that

responsible students will always complete assignments according to the agreement, and are responsible for the actions they take. Another opinion from Bacon (Bartlett, 2009: 52-53) states that students can be said to be responsible if they can complete assignments on time, follow the rules, pay attention to teacher instructions, learn to acquire knowledge, try to complete assignments, and accept and carry out responsibilities properly. Good. From the description of the characteristics of these responsibilities, several behaviors are inconsistent with the character of responsibility in class IIIA students at SDN Ungaran 1 Yogyakarta, due to the low character of responsibility in that class.

Based on observations carried out April 11-18 2023 in class IIIA SDN Ungaran 1 Yogyakarta, it showed that most students showed a lack of responsibility. This problem occurs when thematic learning takes place. Students are less serious about carrying out the task. Students choose to delay doing assignments by telling stories and joking with friends. In addition, 6 students looked for excuses for not completing assignments immediately by frequently leaving class. When the teacher instructs them to collect assignments, most students are late in collecting assignments and some don't even do it. Another problem found is that the participation of students during learning is lacking. This can be seen when students chat with friends when the teacher delivers the material. In addition, students were less active in asking questions or answering teacher questions. Students are less concentrated by playing with pencils or erasers. There are even some students who bring toys into class and play with them during class time. These problems are influenced by several factors, one of which is the selection of an inappropriate learning model so that learning is not optimal.

Some of these problems can be overcome by maximizing the teacher's role in managing the learning process. Teachers must be able to manage the class so that it remains conducive, provide corrective action on student behavior, and apply learning models that are following the characteristics of students. Based on the literature review, the appropriate learning model to improve the character of student responsibility is Project Based Learning (PjBL). Ergul and Kargin (2014: 537) state that PjBL trains students to be responsible for their work during the learning process, and increases creativity in finding solutions to problems encountered by collaborating in groups.

According to the results of research conducted by Devi, et al. (2019: 57) stated that the application of the project based learning model in thematic learning not only increases learning outcomes but also increases independence in the form of a character of responsibility. Previous research was also conducted by Susetyarini, Permata, and Gunarta in 2019 showing that the Project Based Learning model can improve students' character of responsibility and motivation. Research conducted by Susetyarini, Permata, and Gunarta (2019) entitled "Student Motivation and Responsibility in Project-Based Learning A Classroom Action Research" describes that there is an increase in the percentage of the character of responsibility and motivation of students after being given action, namely by implementing project-based learning. The results of the study showed that the character of the student's responsibility increased from 58.82% in cycle I to 85.29% in cycle II. In addition, students' learning motivation increased from 70.59% in cycle I to 88.23% in cycle II.

Based on the above research it is proven that the Project Based Learning model can improve the character of student responsibility. As explained by Chiang and Lee (2016:

709) project-based learning is a learner-centered learning model, focusing activities on solving problems through investigations related to learning topics, carried out in collaboration with group members to create meaningful products. Through learning with the Project Based Learning model, it is hoped that the character of the responsibilities of class III A students at SDN Ungaran 1 Yogyakarta can increase.

### **3. Method**

#### **3.1. Participants and context**

This research was conducted at SDN Ungaran 1 Yogyakarta with class IIIA students for the 2022/2023 school year, a total of 28 students. This research was conducted from April to May 2023. This research is a collaborative classroom action research. This means that there is a collaboration between researchers and class III A teachers at SDN Ungaran 1 Yogyakarta and with field supervisors. The focus of this research is to improve the character of student responsibility through the use of the Project Based Learning (PjBL) model.

#### **3.2. Material**

The type of research used is Classroom Action Research (CAR). According to Stringer (2013: 1) Classroom action research is research carried out directly and is relevant to improving student learning quality and increasing teacher professionalism, especially in managing learning. The research procedure used is a cyclical activity. The cycle will be stopped if it has been seen that the achievement of learning success is according to predetermined indicators. While the research design used in this study is the Kemmis and Mc Taggart model in which there are three steps: (1) planning, (2) action & observation, and (3) reflection (Kemmis, Taggart & Nixon, 2014: 18). Meanwhile, the data collection

techniques used in this study are observation and scale. The data collection instruments used in this study included (1) teacher and student observation sheets and (2) a character scale of responsibility.

### 3.3. Data collection and analysis

Data analysis techniques in this study used qualitative descriptive data analysis techniques and quantitative descriptive data analysis techniques. Qualitative descriptive data analysis is used to explain the data obtained from the results of filling out the observation sheets of teachers and students. While the analysis of quantitative descriptive data is used to measure the percentage of the character of the responsibility of students through the implementation of project-based learning model learning. Quantitative data analysis was obtained from the character scale of responsibility. After obtaining data from the student's responsibility character scale sheets, then categorizing them into three categories, namely low, medium, and high. The categorization is calculated using the following formula according to Azwar (2012: 149).

Table 1. Categorization Formulas

Score Range	Category
$(\mu + 1.0\sigma) \leq X$	High
$(\mu - 1.0\sigma) \leq X < (\mu + 1.0\sigma)$	Currently
$X < (\mu - 1.0\sigma)$	Low

Information:

X : total score

$\mu$  : standard deviation

$\sigma$  : mean

Furthermore, the frequency distribution is determined based on the following categories.

Table 2. Scale Assessment Criteria

Score Range	Category
$60 \leq X$	High
$40 \leq X < 60$	Currently
$X < 40$	Low

Student activities during learning activities using the project based learning model are processed using the percentage formula, which is as follows (Arikunto, 2010: 191).

$$\text{Percentage} = \frac{\text{score acquisition}}{\text{maximum score}} \times 100\%$$

The success criterion is marked by a minimum of 75% of the number of students having a responsibility character score in the high category with a score of  $\geq 60$ .

### 3.4. Ethical Considerations

This activity was carried out to find out the strengths and weaknesses observed in cycle I, namely in the form of an assessment of the activities of teachers and students and the level of responsibility of students in learning. The results of this reflection are used as material for planning learning in the next cycle. If the expected results have not been achieved, improvements will be made in cycle II until the indicator can be achieved .

### 3.5. Research Limitations

Limitations in this study include the limited research time. In addition, the results of this study are local and contextual. Because this study was conducted in a classroom setting only, the results may not be widely generalizable to the larger population .

## 4. Results and Discussion

Based on the results of the research that has been done, there has been an increase in the character of student responsibilities through the application of the Project Based Learning (PjBL) model. This is indicated by an increase in the character of the responsibility of students in cycle I and cycle II when compared to the pre-cycle stage. Comparison of student responsibility character achievements through the application of the Project Based Learning (PjBL) learning model Theme 8 Praja Muda Karana, Sub-theme 3 I Like Adventure, and Sub-theme 4 I Like to Work "at the pre-action stage, cycle I and cycle II are presented in Table 3.

Table 3. Achievement of the Percentage of Results of the Responsibility Character Scale Students in Pre-action, Cycle I, and Cycle II

Category	Formula	Pre action	Cycle I	Cycle II
Low	$X < 40$	14.29%	0%	0%
Currently	$40 \leq X < 60$	60.71%	42.86%	17.86%
High	$60 \leq X$	25%	57.14%	78.57%

Based on table 3, it can be seen that the percentage of students' responsibility character results based on categories in pre-action, cycle I, and cycle II. The percentage of students showing the character of responsibility in the low category at pre-action was



14.29% to 0% in cycle I then got a percentage of 0%. The percentage of students showing the character of responsibility in the medium category from pre-action was 60.71% to 42.86% in cycle I then got a percentage of 17.86% in cycle II. The percentage of students showing the character of responsibility in the high category increased from pre-action by 25% to 57.14% in cycle I then in cycle II to 78.57%. The results of achieving student responsibility character data are also detailed in each aspect. The following is a comparison of the achievement of the character scale of responsibility for each aspect in percentage form.

Table 4. Comparison of Percentage of Characteristics of Responsibility  
Students in Pre-action, Cycle I, and Cycle II

No	Aspect	Pre Action	Cycle I	Cycle II
1.	Pay close attention to the teacher's instructions	70.71%	75.54%	81.79%
2.	Obey the rules during the lesson	66.43%	72.50%	78.21%
3.	Doing the job well	69.64%	73.75%	84.82%
4.	Complete group assignments together	68.04%	76.25%	87.14%

Based on the data in table 4, it can be explained that all aspects of the character of the students' responsibilities have increased from the pre-cycle, cycle I, and cycle II. The magnitude of the increase in each aspect varies. In addition, based on the results of observations, the implementation of learning using the project based learning model from the first meeting to the second cycle II meeting was good. Overall the teacher has carried out all stages of the project based learning model and carried out all the activities contained in the lesson plan and carried out the points contained in the observation sheet of the

implementation of learning. In cycle II, the teacher has been able to increase the effectiveness of learning compared to cycle I. So the teacher has succeeded in carrying out all the targeted aspects .

## **5. Conclusion**

Based on the results of the research and discussion, it can be concluded that the application of the project-based learning model can improve the character of the responsibilities of class IIIA students at SDN Ungaran 1 Yogyakarta. The percentage of responsible characters in the high category increased from before the action to cycle I, namely 25% to 57.14%. Furthermore, the character of student responsibility in cycle II showed an increase after improvements were made. The percentage of student responsibility characters who are in the high category increased from 57.14% in cycle I to 78.57% in cycle II. Thus, the character of student responsibility continues to increase in each cycle through the implementation of Project Based Learning model in the learning process.

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