The Effect of Portfolio Assessments on Student Learning Outcomes in Learning for Civic Education in Primary School

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Abstract—The purpose of this study was to determine the performance of students in Civics Education learning by using portfolio assessment. This study was categorized in quasi-experimental research. This study wanted to see how the performance of students in Civics Education learning using portfolio assessment, through experimental designs using one group pretest-posttest design. The results of the study showed that there was an increase in the percentage of student performance after following the study using portfolio assessment. The results of observations of student activities showed an increase in activity or performance after participating in learning with portfolio assessment. Observation of student activities in RPP 01 obtained an activity percentage of 74%, in RPP 02 the percentage of activity was 81% and at the end of learning the portfolio assessment in RPP 03 increased to 88.80%. From the three analysis of differences in significance analysis, it was found that overall tcount was ttable (t66 > t4), then null hypothesis (Ho) hypothesis proposed was rejected and the Alternative Hypothesis (Ha) was accepted. Based on the results of the study, it can be conclusively said that portfolio assessment in Civics Education learning has shown an increase in performance of fourth grade students at SD GMIM Sonder.

Keywords—portfolio assessment, students performance, civic education.

I. INTRODUCTION

Law No. 20 of 2003, concerning the National Education System, states that Civic education is a subject that focuses on self-formation that varies in terms of religion, socioculture, language, age, and ethnicity to become intelligent, skilled and Indonesian citizens. Character in accordance with that mandated by Pancasila and the 1945 Constitution [3].

Furthermore, according to Warsono (2006: 10) civic education aims to shape the moral, personality and national identity based on Pancasila. In connection with the opinions and objectives of the national education, the learning of civic education at the elementary and secondary education level, conceptually contains a major commitment in achieving the dimensions of the goal of developing a solid, intelligent and independent personality and sense of social and national responsibility.

When reviewing and observing public criticism of civic education subject matter so far it must be admitted that civic education subject matter lacks praxis values but is only political or an indoctrination tool for the benefit of government power. This makes the learning method in the teaching and learning process seem rigid, less flexible, less democratic and the teacher tends to be more dominant. It would be wise if the teaching and learning process was interspersed with methods that challenged students to try to improve their abilities, including the application of a portfolio assessment model.

Most education experts argue that educational assessment is as important as goals and methods. However, this has not received enough attention, as expressed by Ariyanto (2002: 3), which cites the opinion of Thormon Blanc, which states that the assessment program is one of the vital and crucial elements that must accompany the development of teacher education programs, however this often forgotten. This certainly has an impact on the quality of learning both for teachers and students.

In general, teachers have difficulty determining the assessment techniques that will be used to assess each aspect of the objectives to be achieved, namely cognitive, affective and psychomotor. One reason is because some teachers do not understand the assessment in depth. Most teachers do not have a formal education background specifically in educational assessment [9]. Teachers often feel well following the development of various teaching methods, but claim to have difficulty following developments in educational assessment.

Therefore, it is necessary to think of an assessment that can see the progress of student learning continuously, which is a process of assessment that pays attention to each student's work. The results of the student's work are documented in the portfolio in the class and used to see the progress of their learning. In this assessment process the teacher directs students to be careful in completing Civic education assignments so students can pay attention to their mistakes while correcting these errors.

Portfolio assessment as a valuation model can improve learning activities, so it is expected to improve the level of understanding and learning outcomes and can improve student performance in elementary schools.
It is also expected to motivate students to find their own knowledge and understanding in learning. One class-based assessment that can provide an overview of student progress over time during the learning process is portfolio assessment. Johnson and Johnson [5] define, a portfolio is an organized collection of evidence accumulated over time students' or group's academic progress, achievements, skills, and attitudes. It consists of work samples and written rationale connecting separate items into more complete and holistic views of the student's achievement or progress toward learning goals.

From the quote above, it is illustrated that the portfolio is a collection of student jobs. Portfolios display the best student work or student work that is the most meaningful as a result of their activities in the class. The portfolio can display the previous work and the latest work so that it illustrates student learning progress. One teacher assessment model assesses student work not only in terms of product but also in the process [7].

The portfolio assessment can focus on the process and results of the assessment in the learning process. According to Balitbang Depdiknas (2003: 40), portfolio assessment can: (a) be described as a continuous development of students to show students' self-changes from the beginning to the end of a certain period, (b) provide opportunities for students and teachers to examine the suitability of work with goals learning, (c) able to reflect important changes in the process of students' intellectual abilities over time.

In this regard, this research is also based on the opinion of Piaget and Lawrence Kohlberg about moral development. Piaget gives the meaning that the attitude of behavior demanded is displayed because it is adopted, believed and carried out by the person or community concerned [4]. Likewise with Kolberg in his book Stages of Moral Development, saying that moral judgments and deeds are essentially rational. Moral decisions are not a matter of feeling or value, but always contain a cognitive interpretation of the state of moral dilemma, and are actively constructive cognitive, towards the points of view of each participant and group involved, while considering all kinds of demands, rights, obligations, and involvement of each person / group towards the good and fair.

II. METHOD

This research is categorized as quasi-experimental research. This study wanted to see how the students' performance in learning Civic education using portfolio assessment, through experimental designs using one group pretest-posttest design. The population in this study were fourth grade students of GMIM Elementary School Sonder Kab. North Sulawesi Minahasa academic year 20217/2018 which consists of two classes, each of which consists of 20 students. While the research sample is class IVB students, amounting to 20 students.

Measuring instruments used are: observation sheet observation of student activities, used to observe student activities during learning activities with portfolio assessment conducted by two observers using the percentage formula. Test of learning outcomes, to reveal the students' maximum performance in mastering materials or materials during the learning process with portfolio assessment. Test is a tool or procedure that is used to know or measure something in the atmosphere, by means and rules that have been determined (Nasution, 2002: 53).

Both of these instruments were developed from the theories used and have measured the level of reliability and validity. By using the percentage of agreement formula from Emmer and Millett (1970) in Borich (1994: 385), it is obtained that the average reliability of the observation instrument of student activities is 94.60% or has a reliability coefficient of 0.94, so it is said to be reliable. Data collection in this study used two tests, namely (1) the initial test (before the experiment) and (2) the test results of learning civic education (after the experiment). Initial tests and final tests (learning outcomes) of civic education are the same. This test is compiled and developed by the researcher based on the counselor's advice which refers to the Competency Standards, Basic Competencies and Learning Indicators.

To make it easier for researchers to obtain the data to be analyzed so that it is clearer, in detail the data needed in this study is collected in three ways, namely: (a) giving tests to students, (b) making observations, (c) asking written answers to students for the questions given to them. The data analysis technique used is the t-test. The statistical analysis was carried out using computers through the SPSS program. The hypothesis testing criteria are: accept H0, if µ1 = µ2, (not different) and accept H1, if µ1 ≠ µ2, (different).

III. RESULTS AND DISCUSSION

Observation of student activities is carried out 3 times, which is at the end of each meeting in one lesson plan. Observations were carried out for two lesson hours (2x35 minutes) by observing student behavior / activities every two minutes. From the results of the analysis of the percentage of student activities during learning using portfolio assessment, the average percentage of student activity was, aspects of asking questions about the material / concepts that were not understood, namely an average of 10.87%, discussing and working together 10.43%, aspects paying attention to the presentation of friends 10.13%, listening to the teacher's explanation of 9.80%, expressing ideas at 9.77%, concluding the results of his work / learning material 9.60%, wanting to report the results of the group's work without being appointed 7.53% then willing to answer friends / teacher's questions 7.37%, and the lowest is writing which is not relevant to KBM at 5.80%. In addition, observations of student activities carried out in this study found that, overall the results of observations of student activities in learning with portfolio assessment in each RPP experienced an increase in activities relating to performance / performance.

To test the differences in learning outcomes, the hypothesis proposed is, "There are differences in student performance/achievement in civic education before and after learning with portfolio assessment. The hypothesis
Because \( t_{\text{count}} \) is greater than \( t_{\text{table}} \) (at \( 5\% \), \( t_{\text{table}} = 2.09 \) and the \( t \) criticism of \( t_{\text{table}} \) significance level is obtained 2.80. By comparing the magnitude of \( t \) that we get in RPP 01 that is \( t_{\text{h}} = 30.06 \), and the magnitude of \( t \) in the table of value \( t \) (\( t_{5\%} = 2.09 \) and \( t_{1\%} = 2.70 \)) then it can be seen that \( t_{\text{count}} > t_{\text{table}} \) 5\% and \( t_{\text{h}} = 30.06 > 2.09 \). Because \( t_{\text{count}} \) is greater than \( t_{\text{h}} \) (\( t_{\text{h}} > t_{\text{table}} \)), the null hypothesis (Ho) proposed is rejected and the Alternative Hypothesis (Ha) is accepted.

RPP 02 with \( n = 20 \) obtained the mean before = 4.1, and the mean after = 8.45. By using \( df = n-1 \) and consulted on the value table \( "t" \), both at the 5\% significance level and 1\% significance level, it turns out that with \( df = 19 \), the critical price \( t \) is obtained at the 5\% \( t_{\text{table}} \) of 2.09 and the \( t \) criticism of \( t_{\text{table}} \) significance level is obtained 2.80. Furthermore, compared to the magnitude of \( t \) we obtained in RPP 02, namely \( t_{\text{h}} = 21.07 \), and the magnitude of \( t \) in the table of value \( t \) (\( t_{5\%} = 2.09 \) and \( t_{1\%} = 2.80 \)), it can be seen that \( t_{\text{count}} > t_{\text{table}} \) 5\% and \( t_{\text{h}} = 21.07 > 2.09 \) 5\% and \( t_{\text{h}} = 21.07 > 2.80 \) 1\%. Because \( t_{\text{count}} \) is greater than \( t_{\text{h}} \) (\( t_{\text{h}} > t_{\text{table}} \)), the null hypothesis (Ho) proposed is rejected and the Alternative Hypothesis (Ha) is accepted.

RPP 03 with \( n = 20 \) obtained the mean before = 4.55, and the mean after = 0.05. By using \( df = n-1 \) and consulted on the value table \( "t" \), both at the 5\% significance level and 1\% significance level, it turns out that with \( df = 19 \), the critical price \( t \) is obtained at the 5\% \( t_{\text{table}} \) of 2.09 and the \( t \) criticism of \( t_{\text{table}} \) significance level is obtained 2.80. Furthermore, compared to the magnitude of \( t \) obtained in RPP 03, namely \( t_{\text{h}} = 22.65 \), and the magnitude of \( t \) in the table of value \( t \) (\( t_{5\%} = 2.09 \) and \( t_{1\%} = 2.80 \)), it can be seen that \( t_{\text{count}} > t_{\text{table}} \) 5\%, 1\% \( t_{\text{h}} = 22.65 > 2.09 \) 5\% and \( t_{\text{h}} = 22.65 > 2.80 \) 1\%. Because \( t_{\text{count}} \) is greater than \( t_{\text{h}} \) (\( t_{\text{h}} > t_{\text{table}} \)), the null hypothesis (Ho) proposed is rejected and the Alternative Hypothesis (Ha) is accepted.

Based on the significance test analysis with the \( t \) test on RPP 01, RPP 02 and RPP 03 shows that overall \( t_{\text{count}} > t_{\text{table}} \) 5\%, 1\% and has a very strong correlation between before and after learning with portfolio assessment. This means that the differences in student performance/achievement in civic education before and after learning with portfolio assessment are significant differences or convincing differences (significant).

### Student Activities

Based on the description of the results of observations of student activities during the learning activities with portfolio assessment, it can be concluded that the activities carried out by students after learning with portfolio assessment have increased. From the three observations of student activities carried out at each end of learning in this study, it was found that, overall the results of observations of student activities in Civics learning with portfolio assessment at the end of each lesson plan had increased student activity with regard to performance. Observation of student activities at the end of RPP 01 shows the percentage of student activity at 74.10\%, then observations at the end of RPP 02 at 81.0\%, and at the end of learning with portfolio assessment RPP 03 to 88.80\%.

From the data from the analysis of the percentage of student activities during learning using portfolio assessment, it was found that the average percentage of student activity was the aspect of asking questions about the material / concepts that were not understood, that is, an average of 10.87\%, discussing and working together 10.43\%, aspects of paying attention presentation of his friend 10.13\%, listening to the teacher's explanation of 9.80\%, wanting to express ideas at 9.77\%, concluding the results of his work / learning material 9.60\%, willing to report the results of group work without being appointed 7.53\% then willing to answer friend / teacher questions 7.37\%, and who the lowest is writing that is not relevant to KBM at 5.80\%. In addition, it was also found that the most prominent aspects after learning with portfolio assessment were aspects of expressing ideas at 15.2\%, and willing to ask questions about material / concepts that were not understood at 14.3\%.

### Learning Outcomes Test

Based on the analysis of data description obtained the average value of student learning outcomes before and after learning civic education with portfolio assessment. The average student learning outcomes in RPP 01 before learning takes place is 2.30, and after learning is 7.75, so the average value of student learning outcomes after learning increases by 5.45 points or becomes 77.5\%. Whereas in RPP 02 the average student learning outcomes before learning took place were 4.1 and after learning 8.45, or increased by 4.35 points or increased to 84.5\%. The average student learning outcomes in RPP 03 before learning is obtained by an average of 4.55 and after learning 9.05, there is a selection of 4.5 points. Thus student learning outcomes after learning with portfolio assessment increased to 90.5\%.

The hypothesis is \( t \)-test, using the SPSS 13.0 program, found that: in RPP 01 with \( n = 20 \) obtained the mean before = 2.30, and the mean after = 7.75. By using \( df = n-1 \) and consulted on the value table \( "t" \), both at the 5\% significance level and 1\% significance level, it turns out that with \( df = 19 \), the critical price \( t \) is obtained at the 5\% \( t_{\text{table}} \) of 2.09 and the \( t \) criticism of \( t_{\text{table}} \) significance level is obtained 2.80. By comparing the magnitude of \( t \) that we get in RPP 01 that is \( t_{\text{h}} = 30.06 \), and the magnitude of \( t \) in the table of value \( t \) (\( t_{5\%} = 2.09 \) and \( t_{1\%} = 2.70 \)) then it can be seen that \( t_{\text{count}} > t_{\text{table}} \) 5\% and \( t_{\text{h}} = 30.06 > 2.09 \) 5\% and \( t_{\text{h}} = 30.06 > 2.80 \) 1\%. The results of the analysis on RPP 02 with \( n = 20 \) obtained the mean before = 4.1, and the mean after = 8.45. By using \( df = n-1 \) and consulted on the value table \( "t" \), both at the 5\% significance level and 1\% significance level, it turns out that with \( df = 19 \), the critical price \( t \) is obtained at the 5\% \( t_{\text{table}} \) of 2.09 and the \( t \)
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...t obtained in RPP 02, namely $t_b = 21.07$, and the magnitude of $t$ in the table of value $t$ ($t_c, 5\% = 2.09$ and $t_c, 1\% = 2.80$), it can be seen that $t_{	ext{count}} > t_{	ext{table}} 5\%$ and $t_{	ext{criticism of } t} = 2.65 > 2.80$. Furthermore, compared to the magnitude of $t$ in the table of value $t$ ($tt. 5\% = 2.09$ and $tt. 1\% = 2.80$), it can be seen that $t_{	ext{count}} > t_{	ext{table}} 5\%$, $1\% > t_{	ext{table}} 5\%$ and $t_{	ext{criticism of } t} = 2.65 > 2.80$.

RPP 03 with $n = 20$ obtained the mean before $= 4.55$, and the mean after $= 0.05$. By using $df = n-1$ and consulted on the value table $"t/$, both at the $5\%$ significance level and $1\%$ significance level, it turns out that with $df = 19$, the critical price $t$ is obtained at the $5\%$ significance level and $1\%$ significance level, it turns out to be $t_{	ext{table of}} 2.09$ and the $t$ criticism of $t_{	ext{table}} 1\%$ significance level is obtained $2.80$. Furthermore, compared to the magnitude of $t$ obtained in RPP 03, namely $t_b = 22.65$, and the magnitude of $t$ in the table of value $t$ ($t_c, 5\% = 2.09$ and $t_c, 1\% = 2.80$), it can be seen that $t_{	ext{count}} > t_{	ext{table}} 5\%$, $1\% = t_{	ext{table}} 5\%$ and $t_{	ext{criticism of } t} = 22.65 > 2.09 5\%$ and $t_{b} = 22.65 > 2.80 1\%$.

From the three analysis of differences in significance analysis, it was found that overall $t$ count was $t_{b} > t_{c}$, then the Nil (Ho) hypothesis proposed was rejected and the Alternative Hypothesis (Ha) was accepted. This means that there are differences in student performance/achievements in civic education before and after learning with portfolio assessment. Differences in student performance before and after taking civic education with portfolio assessment, are significant differences or convincing differences (significant). Thus based on the results of the study, it can be conclusively said that the portfolio assessment on the learning of civic education has shown an increase in performance (learning outcomes) of fourth grade students at Elementary School GMIM Sonder.

IV. CONCLUSION

The results of observations of student activities show an increase in activity / performance after participating in learning with portfolio assessment. Observation of student activities in RPP 01 obtained an activity percentage of $74\%$, in RPP 02 the percentage of activity was $81\%$ and at the end of learning the portfolio assessment in RPP 03 increased to $88.80\%$.

The most dominant student activities are willing to express ideas at $15.2\%$, and want to ask questions about material / concepts that are not yet understood at $14.3\%$.

Student learning outcomes after learning with portfolio assessment have increased, in RPP 01 student learning outcomes amounted to $77.5\%$, in RPP 02 it increased to $8.45\%$ and at the end of lesson plans RPP 03 student learning outcomes became $90.5\%$.

The results of inferential analysis indicate a difference in student learning outcomes before and after learning using portfolio assessment. The results of different test analysis of learning outcomes test also show significant differences, so that it can conclusively be said that portfolio assessment in learning civic education can improve student performance/learning outcomes.

Based on the results of the study, it can be conclusively said that the portfolio assessment on the learning of civic education has shown an increase in performance (learning outcomes) of students in Elementary School GMIM Sonder.

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