Portfolio Assessment Trial on Learning of Citizenship in Elementary School

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This research is background by the field’s fact which indicates the decreasing of Indonesian educational quality recently and also the criticism from society and educational observer to the civic Education (PKN) material which is less ‘Praxis’ contents and rather politically and indoctrination tools oriented. These matters give the impression of a stiff learning method in the teaching and learning process; less flexibility, less democratic and tend to be teacher oriented. So, it is necessary to create a learning method which can stimulate and challenge the students to increase their capability. Among others, by applying the Portfolio Assessment on the civic Education Lesson. Through an experimental method on a three times research sample test (RPP 01, RPP 02 and RPP 03) by applying a Comparative Test (t – test), it resulted in a very significant differentiation between before and after the learning process. This has led to the idea that there is a capability differentiation before and after a civic Education learning process with an applying of a Portfolio Assessment. One conclusion that can be drawn that based on the experimental research test result, is that it can be surely confirmed that the application of Portfolio Assessment in the civic Education Learning Process had shown an increase of students’ capability at SD GMIM Sonder.

Keywords: Portfolio Assessment, Students’ performance
INTRODUCTION

Citizenship education subjects (PPKn) aim for students to have the following abilities: (1) think critically, rationally and creatively in responding to various issues; (2) participate actively and responsibly, and act intelligently in the activities of society, nation and state and corruption; (3) develop positively and democratically to form themselves based on the characteristics of the Indonesian people in order to live together with other nations; (4) interact with other nations in the world arena directly or indirectly with utilising information and communication technology (Fauzi, Arianto, & Solihatin, 2013; Kurniawan, 2013; Martati, Hasyim, & Surahman, 2014).

Besides that, Citizenship Education can help students develop understanding, both material and intellectual and participatory skills in school activities so that later, students can develop and apply intellectual and participatory skills that can understand the meaning of the government from, by and for people (Kerr, 2003; Lawy & Biesta, 2006, 2006). PPKn has a role as Pancasila Values and Moral Education, as political education, as Citizenship education, as Legal and Social Education (Wahab & Iswandi, 2018).

Citizenship education, thus, encompasses questions around citizenship and identity (Park, 2018). It defines who is part of a community and who does not belong to the political, national or local collective or group, and it implies an active participation and/or expression of that belonging and has the capacity and willingness to be an active citizen. Implications for citizenship education are that if the core elements are accepted then the aim can be to ensure that individuals both know about the passive elements (Davidson & Liu, 2018).

The experience of the author observes public criticism of civics subject matter so far, which lacks praxis values but is only a political or an indoctrination tool for the benefit of government power. This makes learning methods in the teaching and learning process seem rigid, less flexible, less democratic and teachers tend to be more dominant. It would be wise if the teaching and learning process is interspersed with methods that challenge students to try to improve their abilities, including the application of portfolio assessment models.

In the opinion of education experts, they illustrate that the assessment of education is as important as the purpose of the method. This turned out to not get enough attention that "the assessment program is one of the vital and crucial elements" that must accompany the development of teacher education programs; but this is often forgotten (Borko, Liston, & Whitcomb, 2007; Iasha, Sumantri, Sarkadi, & Rachmadtullah, 2018; Kennedy, 2010; Stiggins & Duke, 2008).

The most serious shortcomings experienced by teachers generally in the field of assessment are, determining the valuation techniques that will be used to assess each aspect of the objectives to be achieved, namely cognitive, affective and psychomotor. One of the reasons is that some teachers
do not understand the assessment in depth. Most teachers do not have a formal education background, specifically in educational assessment (Cizek, Fitzgerald, & Rachor, 1995; Ingersoll, Merrill, & May, 2014). Teachers often feel well following the development of various teaching methods, but claim to have difficulty following the development of educational assessments (Borman & Kimball, 2005).

Therefore, it is necessary to think of an assessment that can see the progress of student learning continuously, which is an assessment process that pays attention to each student's work. The student's work results are documented in the portfolio in the classroom and are used to see the progress of their learning (Delett, Barnhardt, & Kevorkian, 2001; Koretz, Stecher, Klein, & McCaffrey, 1994; Lam, 2018). In this assessment process the teacher directs students to be careful in completing civics tasks so that students can pay attention to, while correcting the mistakes. All that has been done and understood by students can be feedback for students or teachers, thus PKn tasks are a very valuable material in the assessment process.

One class-based assessment that can provide an overview of student progress over time during the learning process is portfolio assessment. A portfolio is an organised collection of evidence accumulated over time a students’ or group’s academic progress, achievements, skills, and attitudes (Lam, 2018; Tierney, 1991; Wolf, 1989). It consists of work samples and written rationale connecting the separate items into more complete and holistic view of the student’s achievement or progress toward learning goals (Rokhman, Tobroni, In’am, & Nurhakim, 2019).

In education, portfolios refer to systematic collection of students’ work. Although the application of portfolios in education has been a relatively recent phenomenon, portfolios have been widely used in a number of other fields for many years. Besides this understanding, portfolios can focus on the teaching and learning process and can provide information about the strengths and weaknesses of students (Ellis, 2017; Nunes, 2004; Wade, Abrami, & Sclater, 2005; Wolf, 1989).

It is illustrated that the portfolio is a collection of student jobs. Portfolios display the best student work or student work that is most meaningful as a result of their activities in the classroom. Portfolios can display past work and the latest work, so that it illustrates the progress of student learning. One model of teacher assessment assesses student work not only in terms of products but also in the process (Ellis, 2017; O’Malley & Pierce, 1996, 1996).

The portfolio assessment is to assess the extent to which the student's ability to construct and reflect a job / task / work by collecting or collecting materials relevant to the goals and desires constructed by students so that the results of construction can be commented (Abidin, 2016; Sukanti, 2010). Portfolio assessment can focus on the process and results of assessment in the learning process. According to the Ministry of National Education's Balitbang (2003:40), portfolio assessments can: (a) be described as the continuous development of students to show changes in students from
beginning to end in a certain period, (b) provide opportunities for students and teachers to examine the suitability of work with goals learning, and (c) able to reflect important changes in the process of students' intellectual abilities over time (Abidin, 2016; Jaenudin, 2003).

In this connection, this research is also based on the opinion of Piaget and Lawrence Kohlberg on moral development. Piaget gives meaning as a behaviour attitude that is demanded to be displayed because it is adhered to, believed and done by the person / community in question (Miedema, 2012). Similarly, Kolberg in his book Moral Development Stages, said; "Valuation and moral conduct are essentially rational. Moral decision is not a matter of feeling or ‘value’, but always contains a cognitive interpretation of the state of moral dilemma, and is constructively cognitive active, of the point of view of each participant and group involved, while considering all kinds of demands, rights, obligations, and the involvement of each individual / group towards the good and the fair". (Goess & Smith, 2018; Kohlberg, 1971; Krebs & Denton, 2005).

In this sense moral reasoning does not merely mean an action, so it can be assessed whether the action is good or bad, but is the reason for an action. Thus, moral reasoning is not what is good and what is bad (in terms of content), but is a structure, namely how a person thinks and gets to the decision of something is good or bad. Based on this view that, someone will be able to make decisions about what is good and what is bad if the person possesses sufficient knowledge and intelligence.

Portfolio assessment will also be able to reveal the achievement of the learning objectives that have been set, namely competency standards, basic competencies, and indicators of achievement of learning outcomes in the curriculum (Wade et al., 2005; Wolf, 1989). The achievement of learning objectives can be seen from the performance of students (performance) or the work of students including how and how far students complete the task given by the teacher.

The portfolio is used by students to collect all documents related to science that are learned both in the classroom and outside the classroom including outside school. So that it can be said that the more diligent students look for learning resources outside the classroom, the more portfolio documents they have in accordance with the tasks given by the teacher.

So that portfolio assessment in civics learning can be used as a tool to see the development of children's abilities and behaviors. In addition, the application of portfolio assessments can help conscious students improve themselves by reading and writing. While reading and writing activities can increase students' knowledge, or achievements in the lesson. With this assumption, student performance / achievement will be better because students have awareness to read or learn. Thus, it can be said that the application of portfolio assessment in civics learning will be able to improve student performance.
Through portfolio performance assessments students can improve student learning activities in the classroom, so as to improve learning outcomes and be able to communicate what has been achieved, the assessment results also give students productive feedback on the achievement of learning outcomes (Chang, Tseng, Liang, & Chen, 2013; McMillan, 2013). Portfolio assessment can also communicate to parents and guardians of students about how far students have progressed towards their achievements in learning.

Portfolios using notebooks provide many benefits / satisfying results. Among the results obtained are: students can organise the learning material that has been obtained, students can use the notebook to face the test, students can use the ability to organise learning materials in other lessons, and parents can monitor / follow the progress of their children's learning (Christensen, Gegelman, Grooters, & Olson, 2004; Sawmiller, 2010). The purpose of this study was to determine the performance of students in civics learning by using portfolio assessments, so that a Portfolio Assessment of Citizenship Learning in Class IV GMIM Sonder Primary School was conducted.

**METHOD**

This research is categorised as quasi-experimental research. This study wants to see how the students' performance in learning Citizenship Education by using portfolio assessments, through experimental designs using one group pretest-posttest design.

The population in this study were fourth grade students of GMIM elementary school Sonder Kab. Minahasa North Sulawesi 2007/2008 school year consisting of two classes of 20 students each. While the research sample was IVB class students totaling 20 students.

The measuring instruments used are 1) an Observation Sheet for Student Activity Observation which is used to observe student activities during learning activities with portfolio assessment conducted by two observers using a percentage formula; and 2) a Learning Outcomes Test, to reveal the maximum performance of students in mastering materials or material during the learning process with portfolio assessment.

Both instruments are developed from the theory used and the reliability and validity levels have been measured. Using the percentage of agreement formula from Emmer and Millett (1970) that has the average reliability of the instrument observing student activity as 94.60% or has a reliability coefficient of 0.94, so it is said to be reliable (Borich, 1994). Data collection in this study used two tests, namely (1) the initial test (before the experiment) and (2) the civics learning outcomes test (after the experiment). Initial tests and final tests (learning outcomes) of civics are the same. This test is prepared and developed by the researcher based on the adviser's advice, which refers to the Competency Standards, Basic Competencies and learning indicators. To make it easier for researchers to obtain data to be analysed 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) observing, and (c) asking students for written answers for the questions given to them. The data analysis technique used is t-test. The statistical analysis is done with a computer through the SPSS program. Hypothesis testing criteria are: accept H0, if \( \mu_1 = \mu_2 \), (not different) and accept H1, if \( \mu_1 \neq \mu_2 \), (different).

**RESULTS**

Observation of student activities is carried out 3 times, namely at the end of each meeting in one RPP. Observations were made for two class hours (2 x 35 minutes) by observing student behavior / activities every two minutes. From the results of the analysis of the percentage of student activity during learning using portfolio assessment obtained the average percentage of student activity is:

1) aspects that want to ask questions about the material / concepts that have not been understood that is an average of 10.87%;
2) those that want to discuss and work together is 10.43%;
3) aspects of paying attention to the presentation of friends is 10.13%;
4) listening to the teacher's explanation is 9.80%;
5) wanting to express ideas is 9.77%;
6) concluding that his work / learning material is 9.60%;
7) would like to report on the work of the group without being appointed is 7.53%;
8) then want to answer a friend / teacher's question is 7.37%;
9) and the lowest is write which is not relevant to KBM of 5.80%.

In addition, observations of student activities carried out in this study found that, as a whole the results of observations of student activities in learning with portfolio assessments in each RPP experienced an increase in activities related to performance.

To test the differences in learning outcomes, the hypothesis proposed is, "There are differences in student performance / achievement in civics lessons before and after learning with portfolio assessment". The purpose of the hypothesis is done by t-test, using the SPSS 13.0 program, the results of the analysis can be described as follows:

RPP 01 with n = 20 obtained the mean before = 2.30, and the mean after = 7.75. By using df = n-1 and consulted in the table value of "t", both at a significance level of 5% and a significance level of 1%, it turns out that with df = 19, the critical value of t on the 5% identification table is 2.09 and criticism of t on the table a significance level of 1% was obtained 2.80. By comparing the magnitude of t we get in RPP 01 which is th = 30.06, and the magnitude of t in the table the value of t (tt.5% = 2.09 and tt.1% = 2.70), it can be seen that tcount > ttable 5%, 1% is th = 30.06 > 2.095% and th = 30.06 > 2.80. Because the t-count is greater than tt (th > tt), the No Hypothesis (Ho) submitted 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 in the table value of "t", both at a significance level of 5% and a significance level of 1%, it turns out that with df = 19, the critical value of t on the 5% identification table is 2.09 and criticism of t on the table a significance level of 1% was obtained 2.80. Furthermore, compared to the magnitude of t that we obtained in RPP 02, namely th = 21.07, and the magnitude of t in the
table t value (tt.5% = 2.09 and tt.1% = 2.80), it can be seen that t<sub>count</sub> > t<sub>table</sub> 5%, 1% is t = 21.07 > 2.095% and t = 21.07 > 2.80. Because the t<sub>count</sub> is greater than t<sub>t</sub> (t<sub>count</sub> > tt), the No Hypothesis (Ho) submitted is rejected and the Alternative Hypothesis (Ha) is accepted.

RPP 03 with n = 20 obtained the mean before = 4.55, and the mean after = 9.05. By using df = n - 1 and consulted in the table value of "t", both at a significance level of 5% and a significance level of 1%, it turns out that with df = 19, the critical value of t on the 5% identification table is 2.09 and criticism of t on the table a significance level of 1% was obtained 2.80. Furthermore, compared to the magnitude of t obtained in RPP 03, namely t = 22.65, and the magnitude of t in the table value of t (tt.5% = 2.09 and tt.1% = 2.80), it can be seen that t<sub>count</sub> > t<sub>table</sub> 5%, 1% is t = 22.65 > 2.095% and t = 22.65 > 2.80. Because the t<sub>count</sub> is greater than t<sub>t</sub> (t<sub>count</sub> > tt), the No Hypothesis (Ho) submitted is rejected and the Alternative Hypothesis (Ha) is accepted.

Based on the analysis of the significance test with the t test on RPP 01, RPP 02 and RPP 03 shows that overall t<sub>count</sub> > t<sub>table</sub> 5%, 1% and has a very strong correlation between before and after learning with portfolio assessment. This means that there are differences in the performance / achievements of students in civics learning before and after learning with portfolio assessment, is a significant difference or a convincing difference (significant).

DISCUSSION

Student Activity

Based on the description of observations of student activities during the learning activities with portfolio assessment, it can be concluded that the activities carried out by students after participating in learning with portfolio assessments have increased. Of the three observations of student activities carried out at the end of each lesson in this study, it was found that, overall the observations of students' activities in civics learning with portfolio assessments at the end of each lesson had an increase in student activity with regard to performance. Observing student activity at the end of RPP 01 shows the percentage of student activity is 74.10%, then the observation at the end of RPP 02 is 81.0%, and at the end of learning with portfolio assessment RPP 03 becomes 88.80%.

From the results of the analysis of the percentage of student activity during learning using portfolio assessment, it was found that the average percentage of student activity is: aspects of willing to ask questions about material / concepts that have not been understood has an average of 10.87%; those that want to discuss and work together is 10.43% those aspects of attention in the presentation of their friend is 10.13%; listening to the teacher's explanation is 9.80%; wanting to express ideas is 9.77%; concluding their work / learning material is 9.60%; willing to report the work of the group without being appointed is 7.53%; and then want to answer the friend / teacher's question is 7.37%, and who the lowest is writing that is not relevant to KBM of 5.80%. In addition, it was also
found that the most prominent aspect after learning with portfolio assessment was the aspect of expressing ideas by 15.2%, and being willing to ask questions about the material / concepts that had not been understood is by 14.3%.

**Learning Outcomes Test**

Based on the analysis of the description of the data obtained the average value of student learning outcomes before and after civics learning with portfolio assessment. 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%. While in RPP 02 obtained the average student learning outcomes before learning takes place is 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 are obtained on average 4.55 and after learning 9.05, there is a 4.5 point gap. Thus, student learning outcomes after learning with portfolio assessment increased to 90.5%.

Aiming the hypothesis with the t-test, using the SPSS 13.0 program, found that; at 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 table value "t", both at the significance level of 5% and the significance level of 1%, it turns out that with \( df = 19 \), the price of criticism \( t \) at the 5% significance level is 2.09 and the criticism is \( t \) table 1% significance level obtained 2.80. By comparing the magnitude of \( t \) we get in RPP 01 that is \( t_{count} = 30.06 \), and the amount of \( t \) in the table of the value of \( t \) (\( tt_{.5\%} = 2.09 \) and \( tt_{.1\%} = 2.70 \)) it can be seen that \( t_{count} > t \) table 5%, 1% is \( t = 30.06 > 2.095 \) and \( t = 30.06 > 2.801 \% \).

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 table value "t", both at the significance level of 5% and the significance level of 1%, it turns out that with \( df = 19 \), the price of criticism \( t \) at the 5% significance level is 2.09 and the criticism is \( t \) table 1% significance level obtained 2.80. Furthermore, compared to the amount of \( t \) we get in RPP 02 that is \( t = 21.07 \), and the amount of \( t \) in the table of the value of \( t \) (\( tt_{.5\%} = 2.09 \) and \( tt_{.1\%} = 2.80 \)) it can be seen that \( t_{count} > t \) table 5%, 1% is \( t = 21.07 > 2.095 \) and \( t = 21.07 > 2.801 \% \).

Analysis of RPP 03 with \( n = 20 \) obtained the mean before = 4.55, and the mean after = 9.05. By using \( df = n-1 \) and consulted on the table value "t", both at the significance level of 5% and the significance level of 1%, it turns out that with \( df = 19 \), the price of criticism \( t \) at the 5% significance level is 2.09 and the criticism is \( t \) table 1% significance level obtained 2.80. Furthermore, compared to the amount of \( t \) obtained in RP 03, that is \( t = 22.65 \), and the amount of \( t \) in the table of the value of \( t \) (\( tt_{.5\%} = 2.09 \) and \( tt_{.1\%} = 2.80 \)), it can be seen that \( t_{count} > t \) table 5%, 1% is \( t = 22.65 > 2.095 \) and \( t = 22.65 > 2.801 \% \).
Of the three differences in the analysis of the difference test, it was found that overall t count is greater than t table (th> tt), then the Zero Hypothesis (Ho) proposed is rejected and the Alternative Hypothesis (Ha) is accepted. This means that there is a difference in student performance/achievement in civics lessons before and after learning with portfolio assessment. The differences in student performance before and after participating in civics learning with portfolio assessment are significant differences or convincing (significant) differences. Thus, based on the results of the study, a portfolio assessment on civics learning can be conclusively stated, it has shown an improvement in the performance (learning outcomes) of fourth grade students in SD GMIM Sonder.

Based on the results, through portfolio performance assessments students can improve student learning activities in the classroom (Chang et al., 2013; McMillan, 2013). Furthermore, it indicates that to improve learning outcomes and to be able to communicate what has been achieved, the assessment results also give students productive feedback on the achievement of learning outcomes (Davis & Ponnampereuma, 2005; Davis, Ponnampereuma, & Ker, 2009; van Wesel & Prop, 2008).

Conclusion

The purpose of this study was to determine the performance of students in civics learning by using portfolio assessments, so that a Portfolio Assessment of Citizenship Learning in Class IV GMIM Sonder Primary School was conducted. This means that there is a difference in student performance/achievement in civics lessons before and after learning with portfolio assessment. The differences in student performance before and after participating in civics learning with portfolio assessment are significant differences or convincing (significant) differences. Thus, based on the results of the study, a portfolio assessment on civics learning can be conclusively stated as it has shown an improvement in the performance (learning outcomes) of fourth grade students in SD GMIM Sonder. Based on the results, through portfolio performance assessments students can improve student learning activities in the classroom.
References


Ingersoll, R., Merrill, L., & May, H. (2014). *What are the effects of teacher education and preparation on beginning teacher attrition?*


