

THE IMPLEMENTATION OF STUDENT PORTFOLIOS TO IMPROVE GRADE 9 STUDENTS' POSITIVE ATTITUDES TOWARD ASSESSMENTS AT AN INTERNATIONAL SCHOOL IN BOGOR

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ABSTRACT

As an integral part of learning, assessments play important roles in determining the effectiveness of students' learning. However, in a grade 9 extended mathematics class at an International located in Bogor, it was found that the students showed negative behaviors during the test and learning processes as a manifestation of their attitudes toward assessments. Therefore, the Classroom Action Research modelled by Robert Pelton was conducted to improve students' positive attitudes toward both formative assessment and summative assessment. As a result, by implementing the student portfolios in sixteen meetings, the students' positive attitudes toward assessments were developing. This improvement was influenced by the involvement of cognitive, affective, and behavioral responses while the students were developing the student portfolios in this CAR scope and sequence.

Keywords: positive attitudes, formative assessment, summative assessment.

INTRODUCTION

A Christian education is trying to encourage students making judgements and decisions within Biblical framework as their accountability to participate on a redemptive life in Christ (Van Brummelen, 2009). By making judgements and decisions within Biblical framework, people should always show positive attitudes toward everything happens in their lives. The positive attitudes would be fundamentally seen from the understanding that everyone is created in God's images who has fallen in sins, but already redeemed by God. Those who are realizing the work of redemption would put all efforts to always get better, as their responsibility to lead themselves and others creation to be glorified in the eternity (Tarigan, 2019)

Erwin (2001) stated that defining attitudes, people should reflect on the fundamental nature of the objects being defined. Therefore, defining the positive attitudes toward assessments, people should also try to find the fundamental nature of assessments itself. Isaac et al. (2003) differentiated the type of assessment based on the purpose of gathering the evidence; formative assessment is supporting learning through feedbacks, summative assessment is making summary judgements, and continuous assessment that might have dual function of both summative and formative. Thus, students' positive

attitudes toward assessments could be measured by how far the students considering the nature of assessments and manifesting their consideration in the classroom.

The students of grade 9 Extended Mathematics Class, were not able to understand the nature of assessments; they saw the summative assessments as their purposes of studies. The students were not able to use assessment as a tool for them acknowledging their learning progress and document their achievements. Therefore, researcher conducted the CAR to see whether the Student Portfolios would improve students' positive attitudes toward assessments and how it could be working. The researcher chose student portfolios because it could be helping students to monitor their learning progress progressively; as it has lists of learning evidences, feedbacks, and reflections owned personally by each student.

LITERATURE REVIEW

Students' Positive Attitudes toward Assessments

Eagly & Chaiken (1993) defined that attitude is a tendency to respond such an entity on an affective, cognitive, or behavioral basis with a particular degree (positive or negative) of evaluation toward an object. In addition, Allport (as cited in Erwin, 2001) stated that as predisposition to think, to feel, and to behave toward an object, attitude is constructed by experiences that involve cognitive, affective, and behavioral responses. Thus, positive attitudes toward assessments could be defined as positive predisposition to think, to feel, and to behave toward assessments that could be constructed by experiences which involve the cognitive, affective, and behavioral responses.

Further, Box (2019) explained that formative assessment is the learner – centered structural framework that enables, supports, and measures students' growth in the learning process. In the other hand, Fautley & Savage (2008) explained that summative assessment is an important part of work in the classroom that helps students to look back on their learning, documents their achievements, and plays role as the evidence of learning. Thus, the positive attitudes toward assessments could be measured by looking at how well the students treat the formative assessment (to enable, to support, and to measure students' growth in learning) and summative assessment (to look back on their learning, to document their achievement, and to play role as the evidence of learning) according to its nature.

The Formation of Attitudes

As one of the key aspects in an inner life which is formed by God as the main former and people as His partners, attitudes play important roles in determining and affecting the way people behave and respond to their lives (Issler, 2009). Through the cognitive, affective, and behavioral processes, attitudes are formed (Brecklier, Greenwald, Insko & Schopler, Triandis, Zanna & Rempel, as cited in Eagly & Chaiken, 1993). Crano & Prislin (2008) also

explained that the attitudes are formed when the cognitive and affective reactions are summarized and resided in memory as the evaluative judgements. Thus, by increasing the familiarity of an object and encountering directly the attitudes object the positive attitudes would be also formed (Zajonc as cited in Crano & Prislin, 2008; Zanna & Rempel as cited in Eagly & Chaiken, 1993).

Assessments in International Baccalaureate

As IB does not give specific curriculum documents to be implemented in schools, IB gives chances for teachers designing, developing, and applying their own assessments, within the criteria that are aligned with objectives to measure the level of achievements (Hayden & Thompson, 2011). As the assessment in Middle Years Program (MYP) is largely a school – based assessment, teachers should develop, administer, and provide feedback on assessment tasks so that the ongoing development of knowledge, understanding, skills, and attitudes could be described (IBO, 2014). Thus, the school – based assessments in IB MYP provide scopes for teachers designing, developing, and applying their own assessments that put their foundation and framework in IB MYP Assessments principles with clear expectations and criteria.

Student Portfolios

Box (2019) stated that portfolio is one of the tools that could be used by the students to acknowledge their growth in learning by reflecting periodically their process and progress in learning. In addition, Lam (2018) stated that portfolio is a collection of purposeful and meaningful artefacts which characterize a person's effort, professional growth, and achievements. Thus, as the organized collection of students' works that are kept in folders, students' portfolio helps students to assess and evaluate their daily work as a long – term progress (Van Brummelen, 2009).

Kniep (2000) said that portfolio would be helpful to show the documentations of students' effort and growth in learning descriptively, give opportunities for students and teachers doing self – assessments and reflections, and provide opportunities to have conversation with different audiences. However, using the portfolio is time consuming, difficult to be stored, handled, and controlled in the classroom, difficult to be analyzed and has low reliability of scores (Birgin & Baki, 2007). Therefore, while teachers would implement the student portfolios as the assessments in the classroom, they need to really consider whether their classroom conditions were able to maintain the complexity of student portfolios' implementation or not.

RESEARCH METHODOLOGY

In this research, researcher used the Classroom Action Research (CAR) modelled by Robert Pelton. Pelton (2010) defined CAR as an approach for teacher improving and reflecting their teaching practices by responding the progress of students' learning through observing and collecting data provided in every learning environment that is created in the classroom. Without reflecting the progress of students' learning, both students and teacher would never know whether they success to conduct the effective learning or not. Therefore, within the accountability of providing the meaningful learning, the CAR is the best way to help the students improving their positive attitudes toward assessments by implementing the student portfolios in the classroom.

The research was conducted at grade 9 extended mathematics class, consisted of 2 boys and 10 girls, in an international school located in Sentul, Bogor, West Java. It needed two months long to conduct the research in that school. There are five steps of implementation while researcher is conducting research; issue identification, data collection, action planning, plan activation, and outcome assessments. The details timelines of conducting those steps would be provided in this following table:

Table 1 Timeline of Conducting Classroom Action Research

Date	Actions	Data Sources
September 4, 2018 – September 28, 2018	Issue Identification and Data Collection	Mentor Teacher Questionnaire, Students' Interview Report, Student Questionnaires, Lesson Plans, Journal Reflections
September 24, 2018 – September 28, 2018	Action Planning	Journal Reflections
September 28, 2018 – October 5, 2018	Plan Activation	Graded Rubrics of Student Portfolios, Mentor Teacher Questionnaires, Recapitulation of Researcher's Reflection
October 15, 2018 – October 19, 2018	Plan Activation	Graded Rubrics of Student Portfolios, Mentor Teacher Questionnaires, Recapitulation of Researcher's Reflection
October 22, 2018 – October 26, 2018	Plan Activation	Graded Rubrics of Student Portfolios, Mentor Teacher Questionnaires, Recapitulation of Researcher's Reflection,
October 29, 2018 – November 2, 2018	Plan Activation	Graded Rubrics of Student Portfolios, Mentor Teacher Questionnaires, Recapitulation of Researcher's Reflection, Student Questionnaires, Interview Report

November 2, 2018

Outcome Assessment

All Data Sources

Conducting this CAR, researcher would be using two variables; student portfolios as independent variable and students' positive attitudes toward assessments as the dependent variable, while the simple and descriptive statistics would be used to analyze the sources of data and take the inferences. The details indicators and its sources of data would be provided in the following table:

Table 2 Details of Dependent Variable Data

Indicators	Codes	Sources of Data
Treat the formative assessments well (do the practices and homework, submit the assignments, keep the worksheets and homework, show punctuality to submit the tasks).	FA-1	Graded rubrics, student questionnaire, mentor teacher questionnaire, and student interview report.
Show positive responses toward feedbacks and formative assessment given by the teacher.	FA-2	Student questionnaire, mentor teacher questionnaire, researcher journal reflections, and researcher anecdotal record on lesson plans.
Do the revisions according to the feedbacks that are given.	FA-3	Graded rubrics, student questionnaire, and mentor teacher questionnaire.
Do the self – assessment and reflection in learning.	FA-4	Graded rubrics, student questionnaire, mentor teacher questionnaire, researcher journal reflections, and researcher anecdotal record on lesson plans.
Show positive responses while the Criterion A Test was conducting.	SA-1	Mentor teacher questionnaire, researcher anecdotal record on lesson plan.
Be confident to face the test.	SA-2	Student questionnaire and mentor teacher questionnaire.
Be focus during the test.	SA-3	Mentor teacher questionnaire and researcher anecdotal records on lesson plans.
Show positive evaluation and reflection toward the test.	SA-4	Student interview reports and mentor teacher questionnaire.

Table 3 Details of Independent Variable Data

Features of Implementation	Codes	Sources of Data
Explain the purposes and regulation of implementing student portfolios.	IP-1	Mentor teacher questionnaire, researcher journal reflections, and researcher anecdotal record on lesson plans.
Explain the timeline or submission dates of the student portfolios.	IP-2	Mentor teacher questionnaire, researcher journal reflections, and researcher anecdotal record on lesson plans.
Incorporate the student portfolios in the teaching and learning processes.	IP-3	Mentor teacher questionnaire, researcher journal reflections, and researcher anecdotal record on lesson plans.
Evaluate the implementation of student portfolios in the classroom.	IP-4	Mentor teacher questionnaire and researcher anecdotal record on lesson plans.

ANALYSIS

According to the mentor teacher questionnaire, it is shown that the researcher implemented 100% features of implementation. Although it took longer time to help students considering the purposes and regulations of student portfolios, students' curiosity and open mindedness accommodated them to day by day understanding those things well. The timeline and submission date of student portfolios also changed for several times. However, the changes of submission dates were based on the students' progress in learning and were purposed to maximize students' achievements in learning.

Regarding to the third feature of implementation (IP-3), researcher also experienced that this feature of implementing student portfolios helps researcher to monitor students' progress in learning personally. Nevertheless, researcher evaluated that implementing student portfolios needed a lot of effort and took much time. Some students also said that sometimes, using portfolios was confusing as there were so many papers that needed to be collected in one folder. However, when all the papers already organized in a folder, the students were able to consider the advantages of using portfolio in learning. At the end of the implementation day, 10 out of of 12 students agreed that the implementation of student portfolios helped them to learn and to organize their learning materials. Further this organization skills helped them to master the learning materials more as they were easily getting into their learning documents and records in the classroom.

The table below would provide the specific outcomes of the implementation of student portfolios in the classroom.

Table 4 Outcomes of Independent Data Variable

Codes	Outcomes
IP-1	The teacher explained the purposes and regulations of using portfolios in the classroom in the first meeting (September 28, 2018). However, this explanation was repeated four times until the fifth meeting.
IP-2	The teacher explained the timelines and submission dates of student portfolios. Although in the beginning researcher planned to have three kinds of submissions (daily, weekly, and final submissions), researcher decided to take the progress of students in learning as the main priorities to conduct the submissions.
IP-3	The teacher incorporated the student portfolios as the integral part of learning. While incorporating the student portfolios, researcher was trying to ask the students to always reflect and to assess their own learning.
IP-4	The researcher evaluated the implementation of student portfolios by conducting interview with some students and spreading questionnaire to the students. The evaluation showed that most of the students were able to recognize the benefit and advantages of implementing student portfolios in the classroom.

The implementation of student portfolios in this CAR then influenced the students' attitudes toward assessments. The influences could be seen from the development of students' positive attitudes toward assessments, as before the student portfolios were implemented the students' attitudes toward assessments were not positive. The observed behaviors on the following tables would give description about their attitudes toward assessments before the CAR was conducted.

Table 5 Students' Observed Behaviors before CAR

No	Observed Behaviors
1	The students did not submit the homework / worksheet given by the teacher.
2	The students did not keep the worksheets that were given by the teacher.
3	The students did not reflect on their learning well.
4	The students tended to reject the feedbacks of formative and summative test that were given by the teacher.
5	The students did not show positive responses toward the summative test.
6	The students showed complaints about the test.
7	The students were not optimist to do the test and too worry about their scores.
8	The students underestimated themselves would get the bad scores in the summative test.
9	The students were frustrated when they knew their grades.

10	The students said that the pressures of the test influence their performance in test.
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The observed behaviors above would be the directly linked to the indicators used in this CAR. As the observed behaviors indicated the negative attitudes toward assessment, therefore the development of students' positive attitudes toward assessments would be understood as the improvement in this CAR. Besides the qualitative data used to analyze the research, researcher also used the quantitative data to explain. Researcher analyzed the quantitative data using simple statistics by measuring the average of each quantitative data source such as graded rubrics, students' questionnaire, mentor teacher questionnaire, and then take its average to get the general percentages as it is shown in the table below:

Table 6 Students' Positive Attitudes toward Assessments

Indicators	Percentages	Description
FA-1	91.29 %	Most of the students considered the importance of formative assessments by showing their willingness and awareness in learning. The familiarity toward regulations of implementing student portfolios triggered the students to treat the formative assessments well at the last meetings the implementation of portfolios.
FA-2	86.50 %	At the end of this implementation, the students responded to the feedbacks well and considered the importance of feedback given by the teacher. By considering the importance of feedbacks, their attitudes toward summative assessments were also improved as feedbacks helped them to recognize their positions in learning.
FA-3	60.17 %	Although not all the students did the revisions given by the teacher, but this percentage indicated the good things because before the CAR was conducted, the students did not want to even receive the feedbacks that would be given by the teacher.
FA-4	90.92 %	The students reflected their learning well as they considered their positions and the way how to conduct the better learning.
SA-1	100 %	The students reached out this percentage as they performed better in the summative test after the implementation was conducted. They did not show negative responses that they showed before and followed the instructions given by the teacher during the test well.
SA-2	71.69 %	The students' confidence was improved if it was compared with their confidence in test before the implementation was conducted.
SA-3	100 %	The students were focus to do the test as they were not busy with others' business, they were not showed complaints, and they were not breaking the rules given by the teacher during the test.
SA-4	100 %	The students showed positive evaluation toward the test as they acknowledged the things they did well and they did not do well during the test. They also responded to the feedbacks well and even knew the way to conduct the better learning.

From the data above, we could see that in average, the students showed 82.22 % positive attitudes toward formative assessments (measured by indicators FA-1, FA-2, FA-3,

FA-4) and 90.56 % positive attitudes toward summative assessments (measured by indicators SA-1, SA-2, SA-3, SA-4). Thus, in general, the students showed 86.39 % positive attitudes toward assessments. Also as the considered features of student portfolios were 100% implemented, it could be inferred that the implementation of student portfolios helped students to improve their positive attitudes toward assessments in the classroom.

Issler (2009) said that attitudes play important roles in determining and affecting the way people behave and respond to their lives. Thus, looking at the students' improvements in changing their negative behaviors in the classrooms, it could be inferred that the students also started to change their attitudes inside. Allport as cited in Erwin (2001) said that the involvement of cognitive, affective, and behavioral responses in such experiences would construct the attitudes toward an object. In this CAR, the involvement of cognitive (what students think about the advantages of implementing student portfolios), affective (how student feels while they were experiencing portfolio), and behavioral (how the student responds to the nature and regulations of portfolio) responses constructed students' attitude toward student portfolios that played their roles as both formative and summative assessments.

As formative assessments, student portfolios supported students in learning by improving their reflection skills toward the unit learning so that the students could acknowledge their growth in learning (Lam, 2018; Kniep, 2000). Further, researcher also experienced what Box (2019) said about the role of feedbacks in helping students considering the progress and their position in learning. Through this CAR, researcher also found that the increasing familiarity with self – assessments would help students to develop their skills, and this was aligned with what Amyot, McCracken, Woldt, & Brennan (2012) said.

On the other hand, as summative assessments, student portfolios helped students to look back on their learning, document their achievement, and provide the learning evidence (Fautley & Savage, 2008). In this CAR, the students considered that the student portfolios took much time and effort to be implemented, and this was aligned with what Joshi, Gupta, & Singh (2015); Birgin & Baki (2007); and Educational Resources Information Center (1999) said about the limitation of student portfolios. Nevertheless, the student portfolios helped the students to remove the stress of facing Criterion A Test by creating a motivating atmosphere and encouraging learners to become independent thinker as what Caudery (as cited in Dafnoudi & Kofou, 2016) stated.

Anditya, Panggabean, & Hidayat (2018) explained that students who are valuing learning positively will not set their learning purposes merely to get the high score in test. Therefore, as in this CAR students were taking advantages of the assessments, they started not to see assessments; especially summative assessments, as something that would be the main purposes of learning. In opposites, students were started to see assessments as the

tools to help them improving and acknowledging their achievements in learning. Thus, getting the higher score would no longer be the main reason of why they should come and learn in schools. In conclusion, through the implementation of student portfolios, students started to see and considered assessments as tools that helped them to set goals, obtain positive treatments while they were making mistakes, and reflect on their performance in learning as what Van Brummelen (2009) said about the purposes and natures of assessments.

CONCLUSION

As the students showed 86.39% positive attitudes toward assessments and the teacher implemented 100% implementation features of student portfolios, it could be inferred that in this CAR the implementation of student portfolios improved the students' positive attitudes toward assessments. Further, the implementation feature that significantly influenced the improvement of students' positive attitudes toward assessments is incorporating the student portfolios in teaching and learning processes. As through this feature, the cognitive, affective, and behavioral responses while students were developing student portfolios constructed students' attitudes toward assessments both formative and summative assessment.

Improving students' positive attitudes toward assessments is not easy. However, by providing chances for students taking advantages of assessments, researcher succeeded to invite students understanding the nature and essence of assessments. By developing students' positive attitudes toward assessments, students are also invited to see that learning is not just purposed to get the high scores in tests. Further, learning would prepare and nurture them, so that they could be more responsible in practicing out their commitment to serve others in their community.

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