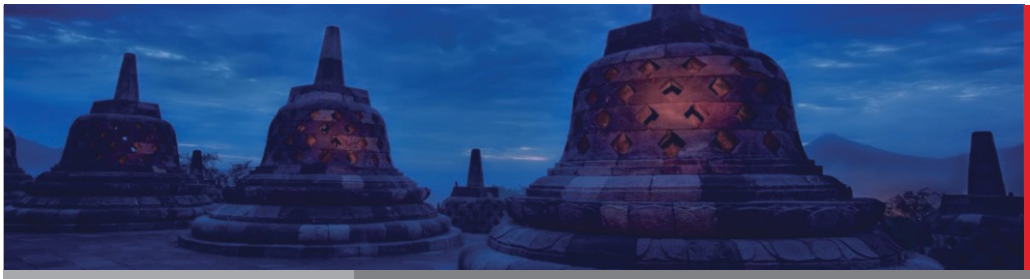

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PROCEEDING

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"Assessment for Improving Students' Performance"

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Yogyakarta State University
Indonesia

Organized by:
Study Program of Educational Research and Evaluation
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Foreword of the Chairman

Assalamualaikum wr. wb.

Good morning ladies and gentlemen.

Praise be to Allah who has given abundant blessings so that we can hold this international conference.

This conference is aimed at improving the quality of assessment implemented in schools and other institutions. The quality of assessment determines students' ways of learning, so that it is hoped that the quality of education improves. Besides, this conference is a means of information exchanges in the forms of seminars dealing with results of research in educational assessment and evaluation. The expectation is that there is always improvement in educational assessment and evaluation methods, including in it is the instrument – both cognitive and noncognitive instruments.

The participants of this conference are the lecturers and teachers who teach educational assessment and evaluation, practitioners of assessment and evaluation, and researchers of assessment and evaluation. This conference can be held in cooperation with the Graduate School, Yogyakarta State University, Association of Educational Evaluation of Indonesia (HEPI), and Centre for Educational Research, Ministry of Education and Culture of Indonesia, supported by the Australian Council for Educational Research (ACER), Intel, Intan Pariwara Publisher, and many other institutions. For this reason, on behalf of the Organizing Committee, I would like to thank the Rector of Yogyakarta State University, Prof. Dr. Rochmat Wahab, M.Pd., M.A., and the Director of Graduate School, Yogyakarta State University, Prof. Dr. Zuhdan Kun Prasetyo, M.Ed., and all other institutions for their assistance and contribution that have made this conference possible. I would like to thank HEPI's Local Coordination Unit and all sponsors for supporting this conference and also all the audience for participating in this conference.

To the committee members, both in Jakarta and Yogyakarta, I would like to thank them for the hard work they have performed and for the togetherness so that this conference can be held.

Last but not least, we apologize for all the incoveniences you might encounter during this conference. Please enjoy the conference.

Wassalamu'alaikum wr. wb.

Prof. Djemari Mardapi, Ph.D.

Foreword of the Chairman of Himpunan Evaluasi Pendidikan Indonesia (HEPI)

Assalamu'alaikum Wr. Wb.

Indonesian Association for Educational Evaluation (HEPI) is a professional organization in education holding in the high esteem the principles of professionalism and knowledge development in the field of educational and psychological measurement, assessment, and evaluation. HEPI was established in November 19, 2000 in Yogyakarta, with a vision to become a professional organization that excels in the field of evaluation and measurement in education and psychology in Indonesia. Its mission is to develop up-to-date methodologies of evaluation, assessment, measurement, and data analysis in education and psychology, as well as studies of policies and technical implementation of the field for improving Indonesian education quality.

As a professional organization, HEPI brings together experts, practitioners and interested persons in the field of evaluation, assessment, and measurement of education, psychology and other social sciences. HEPI is open to anyone who has the interest the field with no restriction in terms of educational background and working experiences. Hopefully, through HEPI, members of the association can sustainably develop themselves as professionals. The existence of HEPI is also expected to contribute to the improvement of the quality of national education through research, consultancy, seminar, conference, publication, and training for members of the organization and for public audiences.

HEPI organizes annual workshop and conference in cooperation with the Regional Chapter of HEPI and universities. In 2016, for the first time HEPI organized **International Conference on Educational Research and Evaluation: Assessment for Improving Student's Performance** in May 29-30 2016 in Yogyakarta. This conference is jointly organized by HEPI and Yogyakarta State University and supported by the Center for Educational Assessment the Ministry of Education and Culture, Australian Council for Educational Research (ACER), INTEL Indonesia, and Intan Pariwara Publisher.

It is important to note that the choice of the HEPI 2016 conference theme is driven by the fact that the quality of our national education is still under expectation as shown by the results from School National Exam and international surveys conducted by some international agencies. HEPI believes that a number of factors contribute to the low quality of national education, including low teacher's knowledge and skills in classroom and school assessment. Therefore, improving the competence of teachers in classroom and school assessment is urgently required. In this context HEPI as a professional organization and individual members of the organization have to play an active role in improving teachers' competence in quality learning assessment.

In line with 2016 conference theme, HEPI invited two respected guest speakers , namely, Professor Geofferey Masters, Ph.D., Director of the Australian Council for Educational Research (ACER), who presented a paper on Assessment to Improve Student Competency and Professor Frederick Leung, Ph.D., from the University of Hong Kong, who delivered a paper on the International Assessment for Improving Classroom Assessment.

As a tradition, in 2016 conference HEPI organized two pre-conference workshops. The first workshop is on the conceptual introduction of Rasch model by Jahja Umar, Ph.D., senior lecturer at the Faculty of Psychology, State Islamic University Jakarta and the second workshop was delivered by Heru Widiatmo, Ph.D., researcher at American College Testing (ACT) Iowa, United States on Measuring Higher Order Thinking Skills (HOTS).

On behalf of HEPI, I would like to express my heartfelt gratitude to Rector of the Yogyakarta State University, invited speakers, resource persons, HEPI regional chapters, sponsors, speakers, participants, invited guests, and organizing committee who have worked hard in making this international coneference a success. Thank you very much for your participation and support and we are looking forward to seeing you in the next conference.

Last but not least, we hope that all of us get much benefit from this conference for enhancing Indonesian quality education through quality assessment.

Wassalamualaikum wr. wb.

Chairman,
BAHRUL HAYAT, Ph.D.

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Application of Instructional Model of Daily Assessment for Improvement of Processes Quality and Instructional Outcomes

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Abstract—This research is conducted to improve the quality of process and outcome of instructional using daily assessment model. Daily Assessment is an Instructional Model that applies the principles of observation and assessment every day, especially on each of the instructional process. Some of the approaches taken in the application of this model are the use of the collaborative method, group and individual tasks, the group and individual presentation, as well as discussion and quiz conducted on every learning activity. The results showed that students responded very well to the model used that led to significant increase of students' learning activity. The increasing performance of students was shown by the students' test results

Keywords: *Daily assessment, Learning model, Learning process*

I. INTRODUCTION

Instructional is a process of interaction between students and teachers in a learning environment where teachers and students exchange information. There are a variety of instructional objectives, but basically, instructional objective is the behavioral changes that are expected to occur, owned and controlled by learners after participating in instructional activities. In order to achieve the maximum result of instructional objectives, then the quality of the instructional process needs to be improved.

Improvement of instructional quality can be done in various ways and approaches, using some models, methods and strategies of instructional. Improving the quality of teaching and learning can also be done by using the assessment. Assessment is vital to the instructional process. Assessment is a technique and instrument that is essential in the instructional process. Traditionally, assessment is used to measure how much students have learned a particular course point in a specific range of time. Assessment is also used to improve the quality of instructional process. Assessment is an approach designed to help lecturers find out what students are learning in the classroom and how well they are learning it. The assessment should be related to the instructional outcomes established for the instructional.

There are two types of assessment, summative and formative assessment. Summative assessment are used to measured what student have learnt at the end of a unit, to promote students, to ensure they have met required standards on the way to earning certification for school completion or to enter certain occupations, or as method for selecting students for entry into further education. On the other hand, formative assessment refers to frequent, interactive assessment of student progress and understanding to identify learning needs and adjust teaching appropriate [1]. In short, the primary purpose of formative assessment is the improvement of instructional outcomes. However, it cannot be implemented properly yet.

The problem is how to conduct formative assessment effectively in order to improve the quality of instructional process and instructional outcomes. The assessment should be useful for both teachers and students. Benefits for teachers, among others, is that it is not difficult to assess, as for students, the assessment can be directly used to increase their learning performance. Upon using the results of the assessment, the students are expected to know what is known and what is unknown, the students know what to do and what not to do. In short, the students will learn their strengths and weaknesses in instructional process. In addition, students will also learn what action should and needs to do to increase the quality of instruction. In other words, students should use the feedback on assessment to improve their learning and the quality of the instructional process

Assessment, especially formative assessment is essentially giving feedback both to the teacher and to the student regarding present understanding and skill development in order to determine the way forward. Feedback on assessment is an important part of the instructional process. However, both students and lecturers frequently show disappointment and frustration in relation to the conduct of the feedback process. Student complain that feedback on assessment is unhelpful, unclear, or sometimes even upsetting. Furthermore, students show that they are not given guidance as to how to use feedback to improve subsequence performance. Even worse, students also notice that the feedback is handed back to the students either too late or less relevance to their needs. On the other hand, lecturers frequently make comment that students are not interested in the feedback comments and are only concerned with the grade. Additionally, lecturers express frustration that student happen to not incorporate feedback advice into subsequent task [2].

Assessment feedback need to be given as soon as possible upon the completion of the learning task. Student also need to see that feed-forward comments can be incorporated into subsequent performance and overall influence the quality of their learning in positive ways [2]. Furthermore, temporarily withholding feedback is needed to allow the students to internalize and process the demands of the task [3].

Therefore, teachers need an instructional model so that they can make the assessment as soon as possible without having to wait until the middle or end of the semester. At the same time students/teachers can find out his weaknesses as soon as possible. Thus, students can undertake the necessary efforts so that the learning objectives can be achieved.

Thus, there are some questions that need to be answered. How to improve the quality of learning and teaching by using the assessment? Is it true that the quality of learning can be enhanced by using assessment? How can the quality of learning and teaching be improved by using the daily assessment? When should the daily assessment should be used? How can daily assessment work more effectively to improve instructional outcomes? In order to answer these questions, it is necessary to conduct a study to prove that the instructional model of daily assessment can be used to enhance the process and the outcome of instructional.

II. RESEARCH METHOD

This research was conducted in the University of Papua in Manokwari West Papua, It was participated by approximately 40 students majoring in Mathematics Education. The students studied are from three classes that researchers taught during the semester.

This research was carried out by using action research method. In this type of research, there is a reflexive process in which lecturers systematically study the problems in order to guide, correct, and evaluate the decisions and actions regarding to the improvement of instructional. There are several procedures *in running* this research, as follow:

- **Reconnainssance**. This stage had been done before the implementation of the lectures because of the character and abilities of each student lecture participants already well known by researchers. The students also have already had many years of learning in researcher‘s classes. At this stage, the researcher also did a series of observations of the characters of the course materials to be adapted in the assessment.
- **Application**. The second stage is the application stage of daily assessment model. Daily Assessment is a Learning Model that applies the principles of observation and assessment in daily basis, especially on each of the learning process. Some of the approaches taken in the application of this model are the use of the collaborative method, group and individual tasks, the group and individual presentation, as well as discussion on every learning activity.
- **Observation, data collection, and reflection**. In this stage, the reseracher did a series of observations to collect the data for the purposes of reflections. The reflections were done by the students participants and the teachers participants. This activity was meant to give both sides.
  Below are several steps done by the researcher in order to check students' understanding;
  Summaries, *Students demonstated what they had heard or read, and derived personal meaning from their learning experiences.*
  Lists, Charts, and Graphic, *Students organize information, made connections, and noted relationships through the use of various graphics.*

Group Activities *Students have the opportunity to communicate with others as they develop and demonstrate their understanding of concepts.*

- **Follow-up actions**. At this stage, any information obtained previously, is occupied to formulate action in the future activity. The data obtained in this study were analyzed with students as the class continues. Students are requested to figure out its weaknesses through self-evaluation, the assistance of the group mate, and a peer from the other groups. Researchers in this case merely acts as a facilitator and motivator.

In addition to performing the daily assessment, the researchers also used the test instrument and the non-test instrument at the beginning, middle, and end of the course. The non-test instrument was used to measure the various activities of students in instructional, while the test instrument was to measure students' ability to understand the learning materials. Some of the students' activities were observe were: the ability to ask, the ability to answer, the ability to propose ideas, activity, and discipline. In addition, the performance of the students in understanding the learning materials to be measured are knowledge, comprehension, application, analysis, and synthesis.

III. Research Finding and Discussions

A. Instructional Activitiy

Instructional activity means student' activity during the lectures that have a direct relationship with their instructional achievement. Results of research on instructional activities shown by students are presented in Table 1.

TABLE 1. DEVELOPMENT OF STUDENT INSTRUCTIONAL ACTIVITIES ON SOME INDICATORS

Indicator	Number of Student (%)		
	Before	***mid***	***after***
Asking	32.50	45.00	85.00
Answer	40.00	52.50	70.00
Activeness	50.00	65.00	70.00
discipline	62.50	70.00	80.00
Asking Idea	25.00	40.00	60.00

Table 1 shows that there are significant changes in several indicators during the research. Students tend to have better learning activity at the end of the study compared to the early and mid-lecture. The study showed that the highest percentage in instructional activities of students was in their ability in asking questions.

Questioning skills is an ability that is very important in learning. Asking questions is the desire to find information that is not yet known. In general, education experts believe that students who have the good ability to ask tend to have good learning performance as well.

Students performance improving in several indicators studied, particularly the ability to deliver question due to use of the instructional model of daily assessment. There are several types of assessment used in this study. By varying the type of assessment, according to [4], lecturers can get a more accurate picture of what students know and understand, obtaining a "multiple-measure assessment window' into student understanding". Using at least one formative assessment daily enables lecturers to evaluate and assess the quality of the learning that is taking place in your classroom and answer these driving questions: How is this student evolving as a learner? What can I do to assist this learner on his path to mastery?

B. Instructional Outcome

The instructional outcomes are the ability shown by students after studying a particular subject. Instructional outcomes are learning outcomes that are observable, measurable, and assessable statements of the end product of student learning including knowledge, skills, competencies, and attitudes. Students performance on instructional outcomes observed in this study are presented in Table 2 below.

TABLE 2. DEVELOPMENT OF STUDENT'S PERFORMANCE ON SOME INDICATOR

Performance	Percentage (%)		
	Before	***mid***	***after***
Knowledge	52.50	70.00	87.25
Comprehension	60.00	62.50	77.25
Application	50.00	67.25	70.00
Analysis	42.50	50.00	60.00
Synthesis	35.00	55.00	60.00

Table 2 shows that a significant increase in student performance in all aspects observed. The success of the students in the activities and performance in the instructional benefited by using this model. By making the daily assessment led to students will learn their weaknesses, what should be corrected, what should be improved, what should to avoid, and what they should do to improve learning achievement.

The use of the assessment as an instrument for the evaluation has been done. However, students generally do not use the results of the assessment properly. Some education experts stated that: It is also possible that student do not pay attention to comments because they don't make sense to them [5] or that they do not understand the purpose of the feedback process. This is accentuated when feedback is delivered solely by the lecturers and is often associated with students as the marking of what is right and wrong. Many lecturers may also tend to focus on the correctional rather than the instructional aspects of feedback [3].

C. Correlation between Performance and Activities of Students

Correlation is a statistical value that indicates the closeness and direction of the relationship between the two variables. Correlation between performance and activities of student is a value that indicates the relationship between the two variables. Correlation between performance and activities of student observed in this study are presented in Table 3.

TABLE 3. CORRELATION OF SOME PERFORMANCE AND ACTIVITIES OF STUDENT

Performance	Instructional Activities				
	Asking	**Answer**	**Activeness**	**discipline**	**Asking Idea**
Knowledge	0.76	0.67	0.63	0.78	0.70
Comprehension	0.66	0.67	0.60	0.70	0.70
Application	0.65	0.66	0.66	0.70	0.62
Analysis	0.86	0.77	0.80	0.86	0.78
Synthesis	0.70	0.60	0.65	0.56	0.64

Table 3 shows that there are significant correlations between students' performance and activities. A very close relationship occurs between the analysis and all components of students' activities. This shows that the better the learning activity, the better the performance achieved by the students, vice versa.

This results from the implementation of daily assessment model, in which students and lecturers work together. This instructional model does not only belong to the lecturers, but also to the students as this model is an integral part of instructional process. According to [6], when teacher' classroom assessments become an integral part of the instructional process and a central ingredient in their effort to help students learn, the benefits of assessment for both students and teachers will be boundless.

In addition, during the implementation of daily assessment model where students perform self-evaluation, researchers merely play a role as the observer. This helps lecturers to carry out more qualified learning activities. In this parts, the students deliver carefully listen to feedback, deliver thoughtful questions, and give reflective responses.

IV. Conclusions and Suggestions

Based on the results of research and discussion above, it can be concluded that the instructional model of daily assessment can improve the instructional process and instructional outcomes of mathematics education students UNIPA. Students are becoming increasingly active in a variety of instructional activities. The instructional model also provides an optimal instructional outcomes.

Based on the research results, there is an alternative way to increase instructional process and instructional outcome, it can be suggested on the following steps:

1. Provide the student to understand the learning objective.
2. Learn the characteristics of students and the characteristics of the subject matter.
3. Choose the appropriate form of assessment for each instructional activity.
4. Teach students to assess themselves.

Several steps done by the researcher in order to check students' understanding:

1. Summaries**,** Students demonstate what they have heard or read, derive personal meaning from their learning experiences.
2. Lists, Charts, and Graphic**,** Students organize information, make connections, and note relationships through the use of various graphic.
3. Group Activities, Students have the opportunity to communicate with others as they develop and demonstrate their understanding of concepts.

Acknowledgment

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