

The Analysis of Implementation of Assessment for Learning and Assessment

Haditya Aprita Lora
Physics Education, FKIP
Universitas Lampung,
Bandar Lampung, Indonesia.

Undang Rosidin
Physics Education, FKIP
Universitas Lampung,
Bandar Lampung, Indonesia.
undang.rosidin@fkip.unila.id

I Wayan Distrik
Physics Education, FKIP
Universitas Lampung,
Bandar Lampung, Indonesia.

Abstract— This study aimed at analyzing the implementation of assessment for learning and assessment as learning in Physics learning. The method used was the survey with questionnaires as the data collecting instruments. The respondents were 71 Physics teachers in Lampung. The results of data analysis showed that 47.9% of teachers knew assessment for learning; 53.5 % of teachers knew assessment as learning. The assessment, in the pre-learning, was frequently carried out by 5.6% of teachers; during the learning, carried out by 16.9% of teachers; and in post-learning, carried out by 23.9% of teachers. The data showed that most of the teachers conducted assessments in post-learning more than during and in pre-learning. The results of the data analysis identified that the teachers experienced several obstacles, namely, lack of time, unavailability of assessment instruments, lack of training or the teachers were not used to conducting the assessment, too many students to assess, and the differences of the students' capabilities and characteristics. The data showed that the assessment for and as learning carried out in the learning process had not been fully implemented. Therefore, a follow-up was needed to overcome these obstacles so that the assessment in the learning process can be completed.

Keywords: *analysis, assessment for learning, assessment*

I. INTRODUCTION

The quality of education can be seen from the quality of assessment. According to [1], one of the important factors to achieve educational goals is the learning process, and also for the effectiveness of the learning. Assessment is no longer considered separate from the learning process, so assessment becomes a tool for learning [2]. Assessment can help to learn if it is able to provide information that can be used by teachers and students as feedback in assessing themselves and each other, and in modifying teaching and learning activities in which they are involved [3].

Explained that assessment must be seen as one of the important factors to determine the success of the process and learning outcomes, not merely as a means used to assess learning outcomes [4]. Assessment activities must provide

information to teachers to improve their teaching abilities and help students achieve optimal learning [5]. In the class and individual level, assessment is generally intended to perform a variety of functions, both summative and formative, more directly related to individual learning and teaching [6].

Assessment is also important for student motivation and autonomy in learning - such as questions, feedback requiring students to respond comments with further work, and peer and independent assessments in order to make students better understand learning [7]. So far, the assessment has only focused on examinations. Though, the meaning of assessment is not only limited to that. In the official documentary assessment, assessment has a primary and secondary focus. The main focus is characterized by terms such as results, measurement, and integrity. The secondary focus involves terms such as feedback, improvement, and learning as a process. There are also some signs of tertiary focus on future learning, although there is only one example in the illustration above. There is a ready relationship between this difference and the general purpose of assessment: assessment for certification (summative), assessment for direct learning (formative), and assessment for long-term learning (ongoing) [8].

The teacher needs to obtain an overall picture of students' learning development to ensure that students experience a good learning process because the description of learning progress is needed during the learning process, not only at the end of the period [9]. The data collected by the teacher identified that students experience a bottleneck in learning. The teacher can immediately take appropriate actions so that students are free from these learning problems. One way to find out the overall picture is through the implementation of assessment as learning and assessment for learning.

Assessment as learning is about imparting assessment into students, teachers, schools, and broader system practices [10]. Assessment as learning focuses on teaching students how to assess themselves and others, which consists of self-assessment, peer assessment, and sharing criteria with students

enabling students to be critical evaluators of their own work [11]. To do this assessment, students need to understand how they learn and what they must do to improve the quality of their learning. They need support to interpret assessments from various sources and use them to make decisions about their own learning and development [10].

Assessment for learning is related to assessing students' work and understanding to enable teachers to modify and change daily lesson plans and student routines [11]. Assessment for learning generally has a focus on improving learning and teaching [10]. It is also known as 'formative assessment' defined by [12] as all activities carried out by teachers and by their students in assessing themselves, providing information to use as feedback to modify teaching and learning activities in which they are involved. Good assessment practices should be promoted through providing immediate oral and written feedback during the preparation of student assignments and after completion, encouraging students' self-evaluation of their work, with specific reference to stated criteria, fostering peer collaboration and feedback during the assignment process [13].

Based on the elaboration above, the assessment in the learning process is very important. Therefore, the researchers conducted this study aiming to analyze the implementation of assessment for learning and assessment as learning in learning Physics by teachers in Lampung. The information obtained can be used as evaluation material in conducting assessments and can be followed up to overcome obstacles in learning physics.

II. METHOD

The research method used was a survey. The respondents in this study were 71 Physics teachers in Lampung. The data collection technique used was the questionnaire. The questionnaire contained questions that explore the period of teachers' teaching experience, the teacher's frequency in conducting assessments in class, and the problems faced in conducting assessments. The data was taken from 20th to 30th July 2019. The data collected was, then, analyzed using qualitative descriptive analysis techniques

III. RESULTS AND DISCUSSION

Based on the recapitulation of the questionnaire responses, it was obtained the following percentage data:

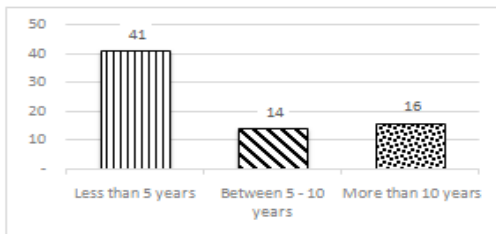


Fig. 1. The percentage of the teachers teaching period

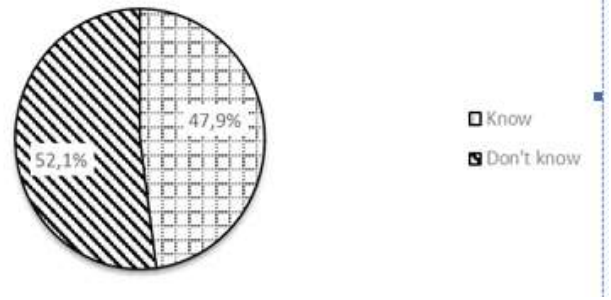


Fig. 2. Percentage of teachers knowing the concept of assessment for learning

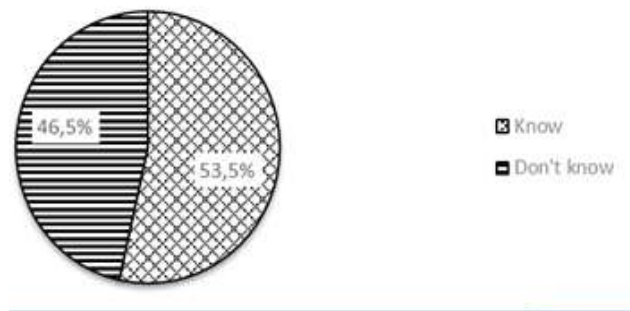


Fig. 3. Percentage of teachers knowing the concept of assessment as learning

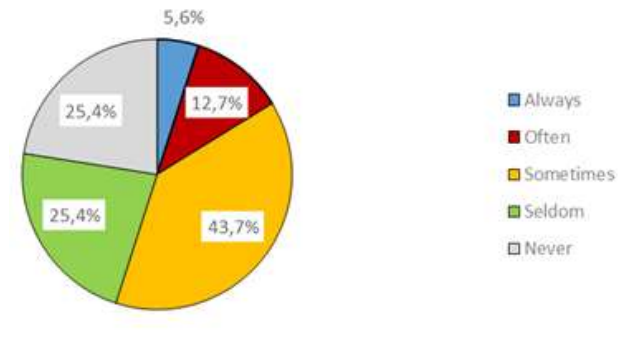


Fig. 4. Percentage of teachers' frequency of conducting assessment before learning

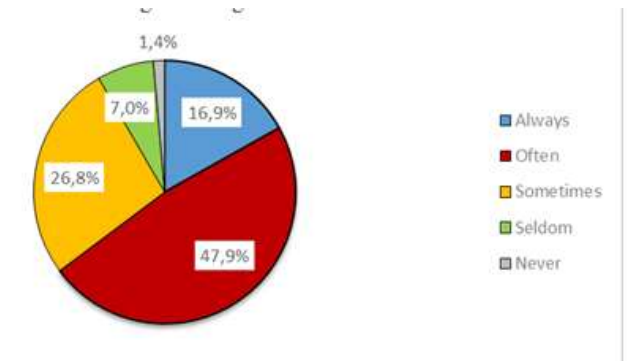


Fig. 5. Percentage of teachers' frequency of conducting assessment during learning

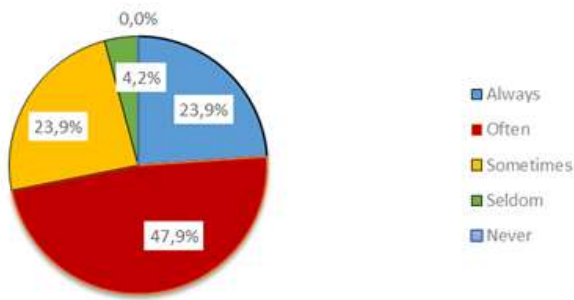


Fig. 6. Percentage of teachers' frequency of conducting assessment after learning

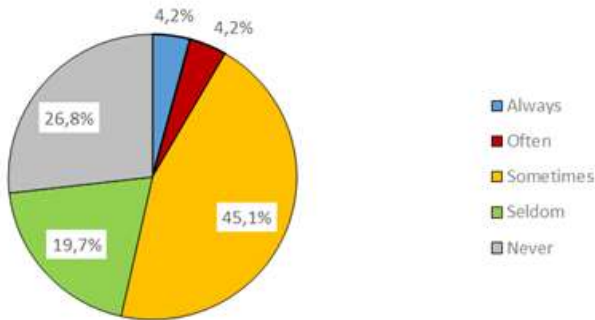


Fig. 7. Percentage of teachers' frequency in doing self-assessment

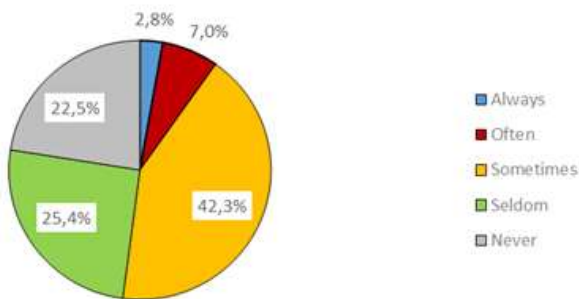


Fig. 8. Percentage of teachers' frequency in doing self-assessment

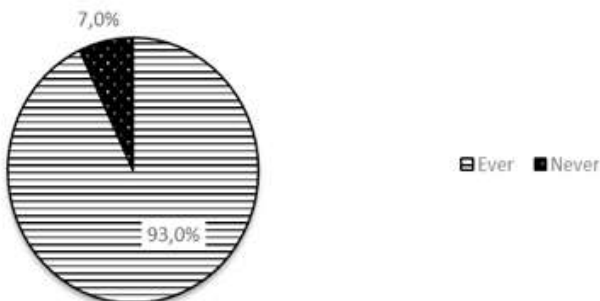


Fig. 9. Percentage of teachers who have difficulties doing assessments in class

Based on the data obtained, it was estimated that the teacher assessed more often at the end of the learning compared to before and during the learning process, as discussed in Diagrams 4, 5, and 6. Seldom did the students do self and peer assessment, as shown in Diagram 7 and 8. The analysis results indicated that teachers still did an assessment at the end of learning more often than before and during the learning process, including the students' self and peer assessment. It showed that the implementation of 'during' learning assessment had not been completely done as the learning process is an important activity to determine the indicator achievement in learning.

One of the reasons for not implementing an assessment during the learning process was the lack of teachers' knowledge about the concept of assessment as learning and assessment for learning. This discussed the data from the analysis of Diagram 2 and 3. In addition, the results of the analysis showed that the teachers' having obstacles in assessing the students during the learning was 93%, as showed in Diagram 9. Based on these data, it was revealed that lack of time was faced by 75% of teachers; the unavailability of assessment instruments was faced by 22.1 % teachers; 8.8% of teachers found themselves lack of training or unaccustomed to doing the assessment. Besides, the large number of students taught made it difficult to do the assessment for each student, and the differences between the students' capabilities and characteristics were also the problem.

IV. CONCLUSION

Based on the results of data analysis, it was found that the implementation of assessment as learning and assessment for learning had not been fully implemented. This was caused by several constraints namely the teachers' feeling lack of time to make an assessment in the learning process, the unavailability of assessment instruments, lack of training or the unaccustomed teachers to doing the assessment, the large number of students and classes taught make it difficult for teachers to do the assessment for each student, and the differences of the students' capabilities and characteristics.

Based on the results of the analysis, it is necessary to follow up to improve the quality of assessment in the learning process, to increase students' understanding of learning, and to overcome the obstacles mentioned so that assessment in the learning process can be fully carried out.

REFERENCES

[1] Widyoko, E. P. Evaluasi program pembelajaran. 2009. Retrieved from <http://umpwr.ac.id/download/publikasi-ilmiah/Evaluasi%20Program%20Pembelajaran.pdf> on 14 August 2019 at 04.03 AM.

[2] Al-Samadi, M., Wesiak, M., Guetl, C., Holzinger, A. 2012. Assessment for/as Learning: Integrated Automatic Assessment in Complex Learning Resources for Self-directed Learning. IEEE Computer Society. Page

929-934. DOI 10.1109/CISIS.2012.210. Retrieved on 26 July 2019 at 09.55 AM.

- [3] Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2004). Working inside the black box: Assessment for learning in the classroom. *Phi Delta Kappan*, 86(1), 8–21. DOI:10.1177/003172170408600105.
- [4] Arifin, Z. (2013). *Evaluasi pembelajaran*. Bandung: PT Remaja Rosdakarya.
- [5] Pratama, I. & Salirawati, D. 2018. Pengembangan penilaian pembelajaran e-learning berbasis moodle materi stokiometri untuk peserta didik kelas X SMA/MA. Retrieved from <http://journal.student.uny.ac.id/ojs/ojs/index.php/pkimia/article/viewFile/13359/12902> on 14 August 2019 at 04.20 AM
- [6] Sanisbury, E.J. & Walker, R.A.. 2008. Assessment as a vehicle for learning extending collaboration into testing. Routledge. Do DOI: 10.1080/02602930601127844 on 14 August 2019 at 4.40 AM.
- [7] Hume, A. dan Richard K. Coll. 2009. Assessment of learning, for learning, and as learning: New zealand case studies. DOI: 10.1080/09695940903319661. Retrieved on 29 July 2019 at 09.48 AM.
- [8] Boud, D. (2007). Reframing assessment as if learning was important. In Boud, D. & Falchikov, N. (Eds.) *Rethinking Assessment for Higher Education: Learning for the Longer Term*. London: Routledge, ISBN10: 0-415-39779-2. 14-25. Retrieved from https://www.researchgate.net/profile/David_Boud/publication/305060897_Reframing_assessment_as_if_learning_were_important/links/58e9e7d8aca2729d8cd2d386/Reframing-assessment-as-if-learning-were-important.pdf on 14 August 2019 at 05.00 AM.
- [9] Yunus, A. 2012. Model Penilaian Otentik dalam pembelajaran membaca pemahaman berorientasi pendidikan karakter. *Jurnal Pendidikan Karakter*. Retrieved from <https://journal.uny.ac.id/index.php/jpka/article/viewFile/1301/1082> on 14 August 2019 at 08.55 AM.
- [10] Mutch, C. 2012. Assessment for, of and as Learning developing a sustainable assessment culture in New Zealand schools. *Policy Futures in Education*. Vol. 10 Number 4. Retrieved from <http://dx.doi.org/10.2304/pfie.2012.10.4.374> on 14 August 2019 at 04.00 PM.
- [11] Macmath, S., John Wallace, Xiaohong Chi. 2009. Curriculum integration: opportunities to maximize assessment as, of, and for learning. *McGill Journal of Education*. Vol 44 No. 3. DOI: 10.7202/039949ar. Retrieved from <http://cyber.sci-hub.tw/MTAuNzIwMi8wMzk5NDlhcg==/10.7202%40039949ar.pdf> on 26 July 2019 at 10.09 AM.
- [12] Black, P. J., & Wiliam, D. (1998a) Assessment and classroom learning. *Assessment in Education: Principles Policy and Practice*, 5(1), 7-73.
- [13] Carless, D. R. 2002. The ‘Mini-Viva’ as a Tool to Enhance Assessment for Learning. *Assessment & Evaluation in Higher Education*. Vol. 27, No. 4. DOI: 10.1080/0260293022000001364. Retrieved on 27 July 2019 from <http://cyber.sci-hub.tw/MTAuMTA4MC8wMjYwMjkzMDIyMDAwMDAxMzY0/10.1080%400260293022000001364.pdf> at 09.00 AM.