JOURNAL OF COMMUNITY DEVELOPMENT (J-COMDEV)

Vol.2 No.1 (2025) pp. 16-20
Universitas Jambi
Magister Program of English Education Department
Jl. Raden Mattaher No.16, Pasar Jambi, Kota Jambi, Jambi, Indonesia, 36123
Homepage: https://online-journal.unja.ac.id/index.php/comdev

Technology-based Assessment Development Evaluation in SMPN 8 Muaro Jambi

No	Nama Penulis	Affiliation	Email
1	Reli Handayani*	English Education Study Program, Universitas Jambi, Jambi, Indonesia	reli_handayani@unja.ac.id
2	Ilham Falani	Mathematics Education Study Program, Universitas Jambi, Jambi, Indonesia	ilhamfalani@unja.ac.id
3	Mukhlash Abrar	English Education Study Program, Universitas Jambi, Jambi, Indonesia	mukhlash.abrar@unja.ac.id
4	Nunung Fajaryani	English Education Study Program, Universitas Jambi, Jambi, Indonesia	nunung.fajaryani@unja.ac.id

* (corresponding author)

Abstract

This service activity was carried out at SMPN 8 Muaro Jambi entitled improving teachers' abilities in carrying out diagnostic, formative and instrumental assessments. The team focused on this activity responding to the problem faced by teachers at SMPN 8 Muaro Jambi. They admitted that they had problems in developing learning assessments. Meanwhile, learning assessment was carried out before, during and after learning aimed to ensure the fulfillment of learning objectives. This training used four methods including delivery of material, demonstration of instrument development, practice in using learning assessment applications, and mentoring. This training is expected to improve the quality of learning in the classroom and support the development of teacher competence related to the development of assessment application. There were 50 teachers who joined this workshop enthusiastically. They fully agreed on the importance and relevance of this workshop towards the real practice in their classes. Moreover, the output of this service activity includes scientific publications in national journals with ISSN, publications in mass media (electronic), dissemination certificates at local seminars, and video documentation.

Keywords: Assessment workshop, technology, community service, SMPN 8 Muaro Jambi

1. Introduction

Assessment is an important aspect of learning. Based on the implementation period, assessment can be divided into three, namely diagnostic assessment, formative assessment and summative assessment (Dwyer, 2008). Diagnostic assessment is carried out at the beginning of the learning process to determine students' initial abilities and identify students' strengths and weaknesses (Gardner, 2006). Furthermore, the results of this assessment can be used as a reference for teachers in designing learning strategies that are relevant to students' needs.

Formative assessment is an assessment carried out during the learning process (OECD, 2005). Through the assessment process, students obtain feedback that is useful for their self-improvement (Harlen, 2006). For example, when students see positive results, they will be more motivated to continue learning. Likewise, when students get negative results, they will be challenged to improve themselves. Meanwhile, summative assessment is carried out at the end of the learning period and functions as a measuring tool for student learning outcomes (Black et al., 2006; Quellmalz & Kozma, 2003). Through this assessment, teachers can find out the extent of students' mastery of the material and the achievement of learning objectives, which influences students' final grades and graduation.

In other words, learning assessment is a measure of learning success. This happens because learning assessment can be used to evaluate the effectiveness of the teaching methods that have been used and measure student competence. For teaching methods that do not support student performance, teachers must make modifications and improvements. Meanwhile, competency-based assessments ensure students can apply their knowledge and skills in the real world, not just memorize information.

***Info Artikel:**
Diterima: 03/07/2025
Disetujui: 21/07/2025
Terbit: 25/07/2025

The application of these three types of assessment allows each student to learn effectively according to their characteristics and needs. Therefore, teachers as assessment implementers must have theoretical and practical understanding regarding these three types of assessment. Based on interviews with the principal of SMPN 8 Muaro Jambi, the service team identified that teachers at the school had difficulties in developing these three types of assessment. Therefore, the service team provides diagnostic, formative and summative assessment training in order to improve the skills of SMPN 8 Muaro Jambi teachers.

Referring to the situation analysis described above, the problems that will be discussed are:

1. How to increase teachers' understanding regarding the development of diagnostic, formative and summative learning evaluation instruments?
2. How to improve teachers' abilities in developing diagnostic, formative and summative learning evaluation instruments?
3. How to improve teacher skills in using technology as a technology-based diagnostic, formative and summative learning evaluation instrument?
4. How relevant the assessment workshop towards the teachers' knowledge and abilities?

2. Method

Before the team conducted the workshop, an observation was carried out at the target location to obtain information about the obstacles faced by teachers at SMPN 8 Muaro Jambi. Based on the results of observations and needs analysis of teachers at SMPN 8 Muaro Jambi, the teachers admitted that they had problems in developing three types of assessments. Meanwhile, these three types of assessment each play a role in ensuring the success of learning. Therefore, training activities for making diagnostic, formative and summative assessments was a solution to answer this problem. The service team then contacted the school regarding the administration of permits for service activities at the school. After that, the service team made a proposal contains the activity objectives, training materials, approach used, funding and time schedule. At the same time, the service team also held discussions to achieve a common perception regarding the implementation of activities. Starting from identifying teachers' knowledge regarding learning assessment, the service team planned several stages of problem solving which were delivering relevant material, demonstrating instrument development, practicing using learning assessment applications, and mentoring.

3. Findings and Discussions

3.1. Community Outreach

In order to achieve maximum results, this activity conducted in two meetings and each meeting taking 6 hours. The first meeting opened with introduction from the team members equipped with explanation about the activity's objectives. As the initial step, the team also hold a brain storming regarding the teachers' knowledge on learning assessment in order to identify the extent of the teachers' understanding. After that, the team presented material both theoretical and practical to 50 teachers at SMPN 8 Muaro Jambi.

Picture 1. Presentation about learning evaluation by Dr. Dra. Rachmawati, M.Pd

Picture 2. Presentation about RASCH model by Dr. Ilham Falani, M.Sc

The second presentation of material was delivered by Dr. Ilham Falani, M.Sc. regarding the development of learning evaluation using RASCH model. After delivering the material, this activity continued with discussion and answer session between the presenters and the participants.

Picture 3. Question and answer session

At the second meeting, the service team provided training regarding several applications that can be used in learning evaluation such as kahoot, plickers, formative, and quiziz. The presentation of the third material regarding automation of making AI Quizziz assessments was delivered by one of the students. This session was the evidence of student involvement in community service activities. Nowadays, the use of applications is currently an effort to provide learning assessments in more attractive format for the students. The material delivery system was elaborated to include practice in creating questions using the application, so that the participants could involved technology in their classes later on.

Picture 4. Training about the use of Quizziz for assessments

3.2 Feedback Survey

This service activity ended with filling out an online survey using Google Form. The aim of this survey was to determine participants' responses to service activities. This survey was filled out by service participants who are teachers of various subjects such as counseling guidance, Indonesian, English, natural sciences, social sciences, mathematics, sports, arts and culture. In this survey, the team asked several questions related to clarity of material delivery, increase of knowledge gained, relevance of material, usefulness of activity, and possibility of application in the classroom.

Figure 1. Result of first questionnaire item

Figure 2. Result of second questionnaire item

Figure 3. Result of third questionnaire item

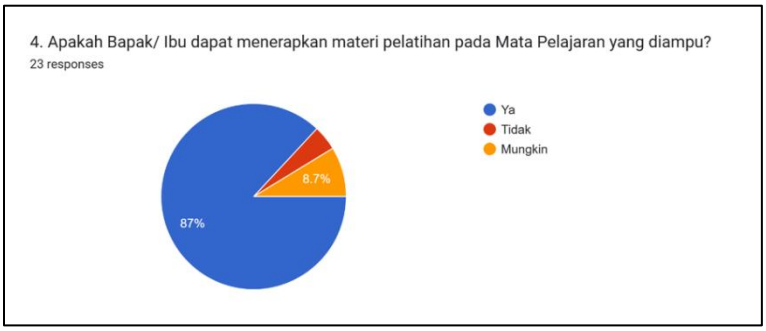

Figure 4. Result of fourth questionnaire item

Figure 5. Result of fifth questionnaire item

Apart from the aspects mentioned above, the team also asked what positive impacts were obtained after participating in the training and what suggestions could be given regarding the implementation of the training. In general, most of the participants agreed that this training increased their knowledge regarding Rasch model assessment. In addition, they gained insight that technology could be involved in developing assessment instruments such as mini step and quizzes applications. The participants also provided several suggestions such as increasing the frequency of similar activities in the future, adjusting assessment materials specifically for junior high schools students, adding more material on the involvement of technology, and assessments that are oriented towards students' affective and psychomotor abilities.

4. Conclusion

This service activity ran smoothly and participants participated in the activity enthusiastically. There were 50 teachers of SMPN 8 Muaro Jambi who joined this workshop. Based on testimony given by one of the participants, this kind of training was essential to improve the teachers' quality. This service activity has been published through electronic mass media (Genta FKIP) and disseminated in the 2nd ISOLLEAC international seminar held on 13-14 September 2024.

References

Black, P., McCormick, R., James, M., & Pedder, D. (2006). Learning how to learn and assessment for learning: A theoretical inquiry. *Research Papers in Education, 21*(2), 119–132. https://doi.org/10.1080/02671520600615612.

Dwyer, C. A. (Ed.). (2008). *The future of assessment: Shaping teaching and learning* (1st ed.). Routledge. https://doi.org/10.4324/9781315086545.

Gardner, J. (Ed.). (2006). *Assessment and learning* (1st ed.). Sage Publications.

Harlen, W. (2006). The role of assessment in developing motivation for learning. In J. Gardner (Ed.), *Assessment and learning* (pp. 61–80). Sage Publications.

OECD. (2005). *Formative assessment: Improving learning in secondary classrooms*. OECD Publishing. https://doi.org/10.1787/9789264007413-en.

Quellmalz, E. S., & Kozma, R. (2003). Designing assessments of learning with technology. *Assessment in Education: Principles, Policy & Practice, 10*(3), 389–408. https://doi.org/10.1080/0969594032000148183.