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Description of Assessment: Assessment for Learning and Assessment as Learning on Teacher Learning Assessment

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ABSTRAK

Asesmen menjadi instruksi pembelajaran yang mengembangkan diri serta memerlukan fokus yang lebih luas pada intervensi umpan balik terutama respons pembelajar terhadap umpan balik dan lingkungan belajar di mana umpan balik bekerja. Kajian tentang kemampuan guru merefleksi penerapan asesmen dalam proses pembelajaran di kelas. Tujuan dari penelitian ini adalah untuk menganalisis Assessment for Learning (AfL) dan Assessment as Learning (AaL) dalam proses pembelajaran di kelas. Pada penelitian ini menggunakan metode dengan wawancara terfokus (focused interview) secara mendalam. Teknik pengumpulan data berupa reflektif yang dianalisis menggunakan reduksi, penyajian dan penarikan kesimpulan dari data. Hasil wawancara menunjukkan bahwa asesmen sering kali dijadikan sebagai ukuran keberhasilan belajar semata, tanpa memperhatikan penerapan umpan balik yang konstruktif untuk membantu siswa memperbaiki kompetensi pencapaian dalam pembelajaran matematika. Asesmen masih difokuskan pada pemberian nilai atau peringkat yang dapat mengakibatkan persaingan antara siswa sehingga belum memusatkan pada perhatian peningkatan proses pembelajaran. Sintetis ini memberikan pandangan yang jelas dan terpadu kepada pemangku kepentingan tentang bagaimana asesmen pendidikan terkait dengan pembelajaran, dan dapat bermanfaat bagi pendidik dalam membantu dan merancang praktik asesmen. Gagasan Assessment for Learning (AfL) dan Assessment as Learning (AaL) harus dilihat secara konsisten satu sama lain untuk membangun budaya asesmen yang memaksimalkan pembelajaran siswa..

ABSTRACT

Assessment becomes a self-developing learning instruction and requires a broader focus on feedback interventions, especially learners' responses to feedback and the learning environment in which feedback works. Study of the ability of teachers to reflect on the application of assessment in the learning process in the classroom. The purpose of this study is to analyze Assessment for Learning (AfL) and Assessment as Learning (AaL) in the learning process in the classroom. The research method used is a qualitative research method using an in-depth, focused interview. Data collection techniques in the form of reflective are analyzed using reduction analysis, presentation, and drawing conclusions from the data. The results of the interviews show that assessment is often used as a measure of learning success alone, without regard to the application of constructive feedback to help students improve their achievement competencies in mathematics learning. Assessment is still focused on giving grades or rankings that can result in competition between students, so they have not focused on improving the learning process. It gives stakeholders a clear and unified picture of how educational assessments relate to learning and can help educators assist and design assessment practices. The construct of Assessment for Learning (AfL) and Assessment as Learning (AaL) must be looked at consistently with each other to build an assessment culture that maximizes student learning.

1. INTRODUCTION

The educational system is a cohesive, interconnected sub-system or component. These elements consist of the system's goals, curriculum, resources, tools, techniques, Teacher, pupils, facilities, tools, and approaches. Education must be adaptive and dynamic in responding to the changes brought about by various scientific developments. This can be a provision for the development of students' lives so that an independent curriculum appears (Purwaningsih et al., 2022; Rosidah et al., 2021). The curriculum must be accompanied by a good assessment system and provide an improved quality of learning. This assessment is very different from a final test conducted to achieve graduation from study. Instead, then only testing knowledge, assessments are meant to gauge students' capacity for critical thought (Dishon & Gilead, 2020; Forsyth & Evans, 2019). Assessment for Learning (AfL) is the procedure of gathering and analyzing the data that students and their teacher use to identify where a student is, where they should go, and the most

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effective route to get there (Budiyono & Mardiyana, 2019; Schellekens et al., 2021). Assessment for Learning (AfL) places a strong emphasis on teachers using assessment as an investigative tool to learn as much as they can about what students know and can do, how they feel about the learning process, and any biases or gaps they may have (Sherlyane Hendri et al., 2019; Tjendani et al., 2019). To enhance the learning process, Assessment as Learning (AaL) includes the active participation of students in autonomous learning and self-assessment. Emphasizing the importance of students as a vital link between assessment and A significant element of Assessment as Learning (AaL) is the learning process (Bichi et al., 2019; Fadillah et al., 2021). Holistic assessment is designed to achieve multipurpose assessment, i.e., for formative purposes, Assessment for Learning (AfL), Assessment as Learning (AaL), and summative functions, Assessment of Learning (AoL), with formative assessment comprising a larger portion (Chust et al., 2013; Sumardi, 2017). Furthermore, the integration of deductive methods with holistic assessment makes a significant contribution to teaching English grammar to English language education students. Assessment for Learning (AfL) should be used to enable instructors to obtain information for their instructional assessments in teaching situations and provide effective feedback to students. Assessment as Learning (AaL) should be used where students are subject to assessment and examine and adapt their own knowledge for further learning (Cohen et al., 2020; Han & Ellis, 2019).

Assessment for Learning (AfL) teachers use assessment as an investigative tool to find out as much as possible about students, what they know and can do, and what confusion, prejudices, or gaps they may have. Teachers also use Assessment for Learning (AfL) to increase students' motivation and commitment to learning. When teachers commit to learning as the focus of assessment, they turn the classroom culture into one of student success (Cohen et al., 2020; Strømme & Mork, 2021). They make visible what students believe to be true and use that information to help students move forward in ways that are manageable, efficient, and respectful. Assessment as Learning (AaL) focuses on the student and emphasizes assessment as a metacognitive process (knowledge of one's own thought process) for students. The goal in Assessment as Learning (AaL) is for students to acquire the skills and habits of the mind to be metacognitively aware with increased independence. Assessment as Learning (AaL) focuses on explicitly developing students' capacity over time to become their own best assessors, but teachers need to start by presenting and modeling external and structured opportunities for students to assess themselves (Ibarra-Sáiz et al., 2021; Vargo et al., 2003). Assessments look for information about student learning experiences and are used for feedback intended to teach students. Although feedback was one of the most effective interventions, the size of the effect was still relatively large for the variables. Feedback can certainly have a big impact on how well students learn, but to truly understand this impact, feedback needs to be handled cautiously (Torrance, 2007; Watling & Ginsburg, 2019). Feedback from assessments can be descriptive or include extra details, like notes on the side, writing literary responses, oral critiques, or educator conferencing, that could inform pupils and educators about the effectiveness of the educational and instructional work that was done (J. D. Brown, 2019; Tegeh et al., 2022). If advancing knowledge is really the target, teachers and students work together, employ ongoing assessment, and provide pertinent feedback. The assessment is planned and executed in line with the assessment function. The flexibility of assessment allows for the most effective application of the assessment to achieve learning objectives.

The value of education and the effectiveness of assessment in the mainstream compulsory school system have been under discussion for several years. Assessment should move from "Assessment Learning" to "Assessment for Learning (AfL)" and "Assessment as Learning (Aal)", where assessment procedures and practices are developed to support learning and support student confidence, achievement, and progress (G. T. L. Brown, 2019; Jonsson & Panadero, 2016). Assessment, in addition to providing feedback to educators, students, and parents, is an essential component of the educational process, encouraging learning, and giving thorough information. The learning process in the implementation of all classroom assessments in the traditional environment is a summative assessment that focuses on measuring learning after all material is delivered and is used to categorize students and become assessment reporting (Basyoni et al., 2020; Schellekens et al., 2021). Currently, almost all classroom assessments in a traditional environment are summative assessments that focus on measuring learning after all the material has been delivered and are used to categorize students and become assessment reports. Moreover, assessments can give teachers feedback so they can enhance their planning and instruction methods. The results of monitoring the progress of the process and ongoing learning outcomes are also feedback for teachers to improve the methods, approaches, activities, and learning resources used in responding to material needs and student needs. The application of current assessments by educators is very minimal, both in terms of knowledge and implementation. The assessment that is carried out leads to the final achievement, which becomes a recap of grades and is implemented on the report card or reporting of student learning outcomes. The assessment carried out at this time still prioritizes student

understanding of learning (Ball & Garton, 2005; Riddell, 2015). The assessment is carried out in line with the demands of the student learning, and report cards are used to report the learning outcomes. Giving grades in the assessment process by providing a digestion of a grade if students want to submit answers in front of the class helps promote interest and motivation in math learning among pupils. Based on the discussion above, there are several things that show the opposite of the assessment carried out by teachers, both Assessment for Learning (AfL) and Assessment as Learning (AaL). These two aspects become important components of education in terms of developing and facilitating effective learning processes and increasing student academic achievement. The purpose of this study is to analyze the process of implementing learning assessment by mathematics teachers in the Assessment for Learning (AfL) and Assessment as Learning (AaL) approaches. Application of feedback that educators can use in applying an assessment approach to carrying out the learning process in the classroom. This finding is very valuable because it is assessment research, and there is a need to apply assessment as a learning activity.

2. METHODS

This study uses qualitative research to discuss problems with the use of assessments conducted by mathematics teachers in classroom learning. The purpose of qualitative research is to find and understand the importance of developing assessments in the learning process in the classroom. Qualitative research is an approach to exploring and understanding the meaning of individuals or groups perceived as having social or human problems (Creswell & Creswell, 2017). The research process involves questions and procedures that arise about how to apply Assessment for Learning (AfL) and Assessment as Learning (AaL) in the mathematics learning process. The data collected is based on the teacher's understanding and knowledge of how to assess the learning process and the feedback provided. The formation of data reporting results is arranged flexibly based on the use of Assessment for Learning (AfL) and assessment as a learning approach. The subjects in this study were mathematics subject teachers and grade X students at SMA Negeri 1 Surakarta. Purposive sampling was utilized in this study to choose the research sample. Purposive sampling seeks to choose meaningful samples that are consistent with the specifications of the research question and its intended use (Tracy, 2019). One mathematics teacher based on the experience of resource persons who have taught at various levels of elementary and secondary school education. Class X is taken based on the application of the current curriculum, where progress is still being made at that level. Based on the level of knowledge and expertise required for the implementation of Assessment for Learning (AfL) and Assessment as Learning (AaL), data sources are chosen.

The data collection methods used in this study were field observation and interviews. Field observation is a method where data and information are collected from data sources surveyed by researchers. The observation data obtained are the conditions of the learning process in the application of assessment at SMA Negeri 1 Surakarta. Application of learning with assessment by interpreting the right picture related to the application of assessment by teachers and students in classroom learning. Interviews are a valued method for researchers that allows them to gain insight into respondents' lives and experiences and potentially help others understand the context of research objectives and expected data (Leavy, 2014). This interview is an activity carried out to obtain direct and detailed information, but the interview technique in this study is an intensive interview with informants, and the informant in this study is one of the grade X mathematics teachers of SMA Negeri 1 Surakarta.

Data in research, to be interpreted as scientific research, requires validity tests, one of which is the validity of the data. The validity of this research data will be determined by triangulation. To increase the validity of data, researchers are required to use different data sources for the same data or information. Data sources can be similar data sources or different types of data sources (Budiyono & Mardiyana, 2019). The data analysis technique used in this study uses qualitative data analysis techniques from the Miles and Huberman model by reducing data, presenting data, and drawing conclusions to provide an overview of research results. Researchers use observation and interviews to collect field data to carry out assessments in classroom learning. Data reduction with researchers describes the application of the assessment approach carried out by teachers during the learning process in class based on the results of interviews with grade X mathematics teachers. So that a conclusion can be drawn regarding the application of Assessment for Learning (AfL) and Assessment as Learning (AaL) as forms of assessment by mathematics teachers in the learning process in the classroom.

3. RESULT AND DISCUSSION

Results

Assessment of mathematics learning is an integral part of the mathematics education process. Efforts to improve the quality of mathematics education can be made by improving the quality of learning and the quality of the assessment system. The quality of this learning can be seen from the assessment results. Conversely, a good assessment system can encourage teachers to determine the right strategies and motivate students to learn better. Assessment is one of the most important things done to help students learn. If you want to gain qualification, you must participate in an assessment process that is designed and implemented. To that end, individually and collectively, explore how you can do your best to ensure that assessment practices help rather than hinder learning. The results showed that the assessment has undergone various approaches that are interconnected with each other, with changes adjusted to the conditions of the curriculum applied. Assessment does not only focus on numbers but also considers aspects of feedback in improving the learning process and student development in developing student metacognitive skills in the learning process in the classroom. In the learning process in the classroom, assessments carried out to evaluate the ability and development of students provides a more complete picture. However, the process is reversed in terms of application by teachers. Learners, when developed by the teacher to demonstrate their abilities progressively, are perceived by the teacher as an opportunity to evaluate the understanding of mathematical material demonstrated by the student. Observations are made by teachers on how learners work, the extent to which tasks can be managed effectively, and the extent to which the quality of work is demonstrated based on the task.

Education assessments are mostly learning assessments designed to accredit or assess student work. Sometimes it has been assessed for learning, with feedback to ensure that students are cued to review their learning and move forward. The approach to teaching mathematics carried out by teachers requires students to do independent learning first related to the material to be learned to ensure students' basic understanding of the material. Explanation of the material to be learned and a summary of the material given by the teacher to students. After understanding the material is achieved, students are given practice questions to test their understanding. These questions, both in the form of multiple choice and description, are then corrected by the teacher to assess the extent of mastery of the material by students. Assessment is one of the most important things done to help students learn. If they want to gain qualifications, they must participate in an assessment process that is designed and implemented. To that end, individually and collectively, explore how you can do your best to ensure that assessment practices help rather than hinder learning. The assessment that is expected and pursued in large areas is a learning assessment, designed to accredit or assess student work. Sometimes it has been assessed for learning, with feedback to ensure that students are cued to review their learning and move forward. Assessing has been seen to have the capacity to enhance learning while enhancing instruction and curriculum development. The assessment carried out by the teacher on students involves a series of tests, including daily tests and joint tests carried out by the school. Meeting tasks are also assigned to students by the teacher, and they are checked both by the teacher himself and together with the students.

In addition, students who have completed assignments are asked by the teacher to come forward and present their work on the blackboard. The process provides a boost to students' ability and motivation to do assessments. In this case, it is expected by the teacher that students who work directly in front have high motivation to do the task and can practice their critical thinking and math skills. New challenges in teaching are faced by teachers, one of which is the development of technology. Therefore, in dealing with students in this technological era, assessments given by teachers in the form of assignments are designed to encourage students to try and encourage them to think. The implementation of teaching methods by the teacher aims to make students active in the learning process and encourage them to develop mathematical skills well. All assessments change because there are many forms of assessment and a myriad of purposes intended to serve them. Assessment is not used to make decisions that directly affect individual students but uses results for accountability and monitoring to influence students through its impact on teaching and curriculum. Assessment and teaching that involve material explanation, question practice, re-assessment, and assignment are sought so that students become more involved in learning mathematics. Assessments can be designed and implemented differently to serve different purposes. However, there are still many teachers who do not understand how to implement assessment as expected in the curriculum. Even though objectives are typically thought of as providing an overview of student learning and demonstrating how students have met learning outcomes, assessment tasks can be created to track the degree to which students engage with learning and the extent to which they meet learning outcomes so that strategies can be used to help students close the gap between where they are and where they should be in terms of learning outcomes. Considering these numerous options,

assessment can be understood as having both summative and formative purposes. Through the idea of assessment, where assessment procedures and practices dominate the learning experience. The changes to the assessment section here are very appropriate. The assessment, which in the previous policy prioritized summative assessment, was changed by adding a larger portion of formative assessment. Teachers must prioritize the assessment of the learning process over the final assessment of the learning itself. Most teachers use final grades as a measure of student success. The assessment that must be applied in schools is not only summative but also formative. Basically, assessment is applied to three approaches, namely: Assessment of Learning (AoL), Assessment for Learning (AfL), and Assessment as Learning (AaL)

Discussion

The results showed that teachers still use summative assessment when teaching students mathematics in the learning process to determine the achievement of students' abilities and understanding in learning. Mathematics learning assessment is an integral part of the mathematics education process (Han & Ellis, 2019; Kivunja, 2015). Efforts to improve the quality of mathematics education can be made by improving the quality of learning and the quality of the assessment system. The quality of this learning can be seen from the assessment results. Conversely, a good assessment system can encourage teachers to determine appropriate strategies and motivate students to learn better. Formative assessment is rarely used by teachers to determine the extent of students' involvement in learning mathematics. Formative assessment is an important part of math learning because it allows teachers to help students in need more effectively and improves overall learning (Brady et al., 2021; Na et al., 2021). Therefore, the active role of teachers is needed in implementing formative assessment as an integral part of mathematics learning so that teachers can strengthen student understanding and achievement. As part of mathematics learning, assessment contributes significantly to the quality of learning. Assessment provides information about student progress and how and to what extent students acquire skills and abilities after learning mathematical material. From a student's point of view, this assessment activity is an opportunity to show students what they know and what they can do (Indarta et al., 2022; Putri, 2018). Teachers use assessment to check students' understanding of learning material, train confidence, encourage students to recall the material presented to them, check the level of change in student behavior, and determine which students will excel. It would be useful to know if additional training could be provided for children with below-average developmental abilities (Kumar & Nanda, 2019; Solekhah, 2020). There are two important approaches to the use of assessment in learning that can be applied by teachers in the mathematics learning process: Assessment for Learning (AfL) and Assessment as Learning (AaL). Assessment must be done by many teachers in the classroom through Assessment as Learning (AaL) and Assessment for Learning (AfL). Ideally, the application by teachers in the classroom is Assessment as Learning (AaL) and Assessment for Learning (AfL).

Teachers who support their belief in Assessment for Learning (AfL) use many techniques related to Assessment for Learning (AfL), including peer and self-assessment, but they are mostly used as practical assessments for final summative assessment or classroom management tools. This pattern repeats itself in primary and secondary schools in different parts of the world (Aunio & Räsänen, 2016; Miqawati, 2019). Assessment for Learning (AfL) is an information-rich approach in which assessment programs are used to collect and combine information from multiple sources to inform students about their strengths and weaknesses with the aim of optimizing their learning. So, the goal is not whether one student is better than another, but to determine whether the student is maximally better today than he was yesterday or whether the student will be maximally better tomorrow than he is today, and how to achieve this. Teachers provide learners with continuous access to descriptive feedback, consisting not only of grades or scores but also focused guidance specific to learning targets (Hwang et al., 2022; Johansson, 2020). Thus, the foundation was laid for students to learn to assess themselves and set goals. Assessment for Learning (AfL) maintains where students are in relation to where they want to be. Assessment for Learning (AfL) engages teachers in providing specific, detailed descriptive feedback to students to ensure the quality of the assessment process. Assessment for Learning (AfL) helps teachers see how students understand the material, analyze their metacognitive and discover strategies and methods students use to support or challenge their understanding (Silalahi, 2020; Zandkarimi., 2013). They also plan corrective actions accordingly. Using learning-focused assessment and feedback that provides appropriate direction, students can gain a better understanding and achieve better learning outcomes in math and other subjects. The Assessment as Learning (AaL) idea places a strong emphasis on students actively engaging in independent learning and self-evaluation as distinct tasks to advance the learning process. To expand the function of Assessment as Learning (AaL), it is important to emphasize the significance of students as a vital link between the assessment and the learning process. This viewpoint sees students as interested and active evaluators to help the development of metacognitive and

self-regulated learning skills (Kim et al., 2021; Schellekens et al., 2021). Focusing on the student, Assessment as Learning (AaL) emphasizes the metacognitive process or understanding of the student's own mental process. Assessment as Learning (AaL) learning is based on the premise that knowledge is not simply passed from the knowledgeable to the uneducated but rather is actively restructured when people interact with new information (Earl & Katz, 2006). Assessment as Learning (AaL) involves more than just cosmetic changes. This is a fundamental shift in how we view teaching, assessment, and their interrelationship. The concepts presented in the book can serve as a starting point for discussions that can deepen awareness of the role that assessment can play in learning and what teachers must be aware of and prepare for when using assessment to maximize student learning (Akmalia et al., 2021; Suryawirawati et al., 2018). The objectives of Assessment for Learning (AfL) and Assessment as Learning (AaL) are distinct but similar. Finding the ideal balance is not always simple. Assessment for Learning (AfL) and Assessment as Learning (AaL) have a significantly higher profile than learning assessment if you wish to increase learning for all students (Ernayanti et al., 2019; Spinczyk et al., 2019). Assessment for Learning (AfL) and Assessment as Learning (AaL) aim to improve student learning using assessment. Assessment for Learning (AfL) helps teachers use assessment to provide information about planning and teaching, while Assessment as Learning (AaL) makes students an active subject in the development of their understanding and metacognitive skills. By incorporating these two approaches into teaching practice, teachers can create a student-centered learning environment, encouraging understanding.

The concept of providing feedback to students for their learning is an important factor in understanding the potential differences between educators' use of the term Assessment for Learning (AfL) (Fadillah et al., 2021; Watkins & D'Alessio, 2009). There is no simple explanation for how feedback affects learning regarding feedback as a component of Assessment as Learning (AaL) or self-regulation as a process in which feedback may be used to impact learning. What has become more obvious is that students with various levels of sophistication can use feedback as a component of the learning environment. Perhaps the most important thing is not the invitation itself, but how students approach it and how sensitive they are to the motivations and other emotional states they bring to the learning experience (Papanthymou & Darra, 2019; Wang & Liu, 2020).

Feedback is described as information given to students with the intention of altering their behavior or way of thinking to better their learning. For example, marginal notes, prose responses, verbal criticism, and teacher conferences can educate students and teachers about language learning and related educational effects (J. D. Brown, 2019; Watling & Ginsburg, 2019). Feedback needs to be quick, precise, usable, and task focused. Students are more likely to apply criticism they view as valid and helpful, and they may ignore criticism they believe to be of low quality. Accurate feedback typically originates from trustworthy sources and is gleaned from firsthand observation of student performance. Action plans that advise and direct students on how to enhance their learning are part of constructive feedback. The benefits of assessment that have been mentioned in the literature, such as maintaining metacognition, improving understanding of assessment criteria, enhancing learner awareness and engagement, encouraging self- and lifelong reflective learners, and enhancing the process of improving self-performance. This is in line with the idea that assessment may alter the power dynamics between teachers and students and can engage, empower, and inspire students by giving the process more diversity and participation (Aprilliyah, 2014; Cohen et al., 2020). If assessment is to be an integral part of learning, The teacher decides whether to choose an assessment that can be used and applied in the learning process in the classroom. It depends on the teacher's feedback and the teacher's own thinking. Teachers can choose between Assessment for Learning (AfL) and Assessment as Learning (AaL) to correct errors and improve student learning. What teachers should pay attention to when assessing the quality of assessments and how others can use them appropriately and responsibly (Schildkamp et al., 2020; Shine & Heath, 2020). The general characteristics of Assessment for Learning (AfL) and Assessment as Learning (AaL) have resulted in themes relating to the relationship between educational assessment and the learning process. This synthesis reflects the relationship between the idea of assessment and learning and emphasizes that assessment itself is a learning process. Giving feedback to students is not a simple task since the effectiveness of different types of feedback and their use may vary. High-achieving students may already have extensive learning strategies, whereas low-achieving students may need step-by-step guidance from teachers and peers. It is important that the message or activity provided is directly related to the established success criteria. If there is a desire to change assessment practices and expand forms of assessment, as this study suggests, it will be difficult to achieve this without the support of other factors, such as student and teacher involvement, that can maximize their effectiveness. The results of this review provide clear and integrative insights to stakeholders on the relationship between education assessment and learning, which is a prerequisite step for improving the overall assessment culture.

4. CONCLUSION

Assessment is an integral component in the daily practice of students, teachers, and peers that aims to collect, reflect, and respond to information through dialogue, demonstration, and observation with the goal of encouraging continuous learning. To ensure that assessment is integrated into the learning process, a learner-centered approach that reflects a learner-oriented curriculum is required. Assessment methods and approaches should focus on gathering evidence of achievement rather than simply presenting information. This implies a reduced emphasis on traditional written assessment, especially time-constrained exams, and an increased focus on assessment instruments that measure not only knowledge of remembered facts but also students' ability to apply that knowledge in real-life contexts. This perspective plays an important role in building a learning-oriented assessment culture. This synthesis makes a useful contribution to teachers in improving their daily practice with students as well as to learning development programs that aim to train teachers more effectively. In addition, the synthesis also provides guidance for institutions on improving their assessment structures and programs.

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