



A COMPARATIVE STUDY OF THE QUALITY OF MATHEMATICS LEARNING ASSESSMENT INSTRUMENTS BASED ON THE 2013 CURRICULUM AND THE MERDEKA CURRICULUM FROM THE PERSPECTIVE OF TEACHERS IN JUNIOR HIGH SCHOOLS IN WEST TONDANO DISTRICT

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Abstract

The transition period between the 2013 Curriculum and the Independent Curriculum presents challenges for teachers in designing and implementing mathematics learning assessment instruments that align with curriculum requirements. The problem in this research stems from teachers' suboptimal understanding of how to develop assessment instruments for both curricula. This study aims to describe the quality of mathematics learning assessment instruments and examine their comparison based on teachers' experiences implementing the 2013 Curriculum and the Independent Curriculum in junior high schools in West Tondano District. This study used a qualitative phenomenological approach to understand teachers' subjective experiences in designing and using assessment instruments. Data were collected through in-depth interviews, observations, and documentation with mathematics teachers who have implemented both curricula. Data analysis was conducted through phenomenological reduction, grouping themes into meaningful themes, and extracting the essence of teachers' experiences related to assessment practices. Data validity was maintained through triangulation and member checking. The results showed that teachers perceived the assessment instruments in both curricula as accommodating aspects of knowledge, attitudes, and skills and utilizing diagnostic, formative, and summative assessments on an ongoing basis. However, teachers' experiences indicated that the Independent Curriculum provided more flexibility in developing contextual assessments and using technology, while the 2013 Curriculum was more structured in its assessment procedures. These findings confirm that assessment quality is not solely determined by the curriculum, but by how teachers interpret and implement assessment in their learning practices.

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INTRODUCTION

The curriculum constitutes the foundation for the implementation of instruction, as it encompasses objectives, content, methods, and evaluation serving as guidelines for the learning process. In Indonesia, the curriculum has undergone various reforms, beginning in 1947 through the 2013 Curriculum, with the most recent being the Merdeka Curriculum [1]. The Merdeka Curriculum was implemented as an effort to recover the education sector following the Covid-19 pandemic and aims to address the learning crisis [2]. Curriculum changes do not affect all components; rather, they emphasize refinement in specific aspects, including learning assessment [3]. One of the primary challenges in curriculum implementation is assessment. Assessment constitutes an integral component of the overall instructional process. It provides information regarding the extent to which students have successfully learned and teachers have effectively facilitated learning, thereby simultaneously functioning as feedback [4]. Assessment in education can be classified into several types based on its purpose and timing, namely: (1) diagnostic assessment, which is conducted prior to the instructional process to identify students' prior knowledge and learning needs [5]; (2) formative assessment, defined as the process of collecting data during instruction concerning the extent to which learners are progressing toward mastering the competencies to be achieved [6]; and

(3) summative assessment, which is designed to systematically document learners' overall achievement [6].

Within the 2013 Curriculum, many teachers had not yet understood the distinction between Criterion-Referenced Assessment (CRA) and Norm-Referenced Assessment (NRA). These forms of assessment fall under reference-based assessment, namely the classification of assessment based on the reference standard employed to determine students' learning outcomes. CRA and NRA constitute evaluative approaches in educational assessment that are not inherently tied to a specific curriculum.

However, competency-based curricula, such as the 2013 Curriculum and the Merdeka Curriculum, place greater emphasis on the use of Criterion-Referenced Assessment (CRA), as it aligns with the principles of mastery learning and the attainment of student competencies [7]. Meanwhile, under the Merdeka Curriculum, some teachers remain unfamiliar with diagnostic assessment, which represents an essential component of the instructional process [8].

Another analysis by [9] examines a comparative study of the implementation of the Merdeka Curriculum and the 2013 Curriculum. In terms of assessment, both curricula employ authentic assessment methods. In this regard, the focus of evaluation is comprehensive, encompassing the domains of knowledge, attitudes, and skills. In addition, both curricula incorporate formative and summative

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assessments. Under the 2013 Curriculum, the assessment of knowledge, attitudes, and skills is conducted separately. Students' knowledge is evaluated through written tests or examinations that measure conceptual and factual understanding. Students' attitudes are assessed through direct teacher observation of their behavior across various instructional contexts. Meanwhile, students' skills are evaluated through assignments or projects requiring the application of skills in real-world contexts. By contrast, the Merdeka Curriculum does not separate the assessment of knowledge, attitudes, and skills. Rather, these three domains are evaluated in an integrated manner. Students' knowledge, attitudes, and skills are assessed holistically and are not treated as distinct components. In addition to authentic assessment, both the 2013 Curriculum and the Merdeka Curriculum utilize formative and summative assessments. The principal distinction between the two curricula lies in the separation versus integration of the assessment of knowledge, attitudes, and skills. The 2013 Curriculum assesses these three domains separately, whereas the Merdeka Curriculum integrates them as a unified whole.

Another review conducted by [10] examined a comparison between the 2013 Curriculum and the Merdeka Curriculum. The findings indicate that under the 2013 Curriculum, instructional hours (JP) are regulated on a weekly basis, with educational units determining the allocation of learning time routinely each week within a semester. Consequently, students receive learning outcome

grades at the end of each semester. In contrast, the Merdeka Curriculum is structurally divided into two primary learning activities: (1) regular or routine instruction, which constitutes intracurricular activities; and (2) projects aimed at strengthening the Pancasila Student Profile. The 2013 Curriculum provides implementation guidelines, assessment guidelines, and instructional guidelines for each educational level. Meanwhile, the Merdeka Curriculum provides guidelines for learning and assessment, the development of the school's operational curriculum, project development, inclusive and individualized implementation, as well as guidance and counseling.

Based on observations conducted in five schools in West Tondano District, the researcher found that several junior high schools in the district continue to implement the 2013 Curriculum, the Merdeka Curriculum, or a combination of both across different grade levels. The schools in question include SMP Negeri 2 Tondano, SMP Negeri 4 Tondano, SMP Negeri 9 Satap Tondano, and SMP GPdI Berea Tondano. Meanwhile, SMP Katolik St. Rosa De Lima is one of the schools that has fully implemented the Merdeka Curriculum across all grade levels.

The researcher collected data from only three schools. This decision was made because SMP GPdI Berea Tondano did not yet have a mathematics teacher, while SMP Negeri 9 Satap Tondano had only one mathematics teacher who had been teaching for merely two months. Consequently, the researcher determined that the teacher could not yet be considered an appropriate

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research subject. The assessment of research subject eligibility was conducted based on specific criteria, namely the availability of a mathematics teacher, teaching experience, and involvement in the implementation of learning assessment. This evaluation was carried out through preliminary observation, initial interviews, and a review of school documentation. The results indicated that SMP GPdI Berea Tondano had not yet appointed a mathematics teacher, whereas SMP Negeri 9 Satap Tondano had only one mathematics teacher with very limited teaching experience, thus failing to meet the criteria as research subjects. Therefore, the researcher decided not to include these two schools as research sites.

This condition constitutes the background of the present study, which seeks to compare the quality of assessment instruments in mathematics instruction at junior high schools in West Tondano District from the teachers' perspective. Specifically, the study aims to examine the quality of mathematics learning assessment instruments through the perspective of teachers as developers and implementers of classroom assessment. Employing a descriptive qualitative approach, this research does not merely investigate whether the instruments are correct or incorrect, or whether they are of good or poor quality. Rather, it explores how teachers evaluate their own assessment instruments, the rationale underlying their selection and design of particular forms of assessment, and the challenges they encounter during the curriculum transition process.

This study aims to determine the quality of assessment instruments under the 2013 Curriculum and the Merdeka Learning Curriculum in junior high schools located in West Tondano District. In addition, the study seeks to describe a comparative analysis of the quality of assessment instruments between the 2013 Curriculum and the Merdeka Learning Curriculum based on the assessment instrument quality observed in these schools.

METHOD

This study employs a descriptive qualitative (phenomenological) approach aimed at portraying the quality of assessment instruments and comparing the quality of assessment instruments under the 2013 Curriculum and the Merdeka Learning Curriculum. The research subjects consist of five mathematics teachers: two from SMP Negeri 2 Tondano, two from SMP Negeri 4 Tondano, and one from SMP Katolik St. Rosa De Lima. The rationale for selecting these five teachers is that they are mathematics educators with teaching experience who have implemented both the 2013 Curriculum and the Merdeka Curriculum in their instructional practices. The teachers from SMP Negeri 2 Tondano and SMP Negeri 4 Tondano were chosen to represent public schools, while the teacher from SMP Katolik St. Rosa De Lima was selected to represent private schools. Subject selection was conducted purposively, taking into account the teachers' direct involvement in the design and utilization of assessment instruments, thereby ensuring the provision of in-depth information

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regarding the quality of assessment instruments under both curricula.

The researcher collected data using three techniques: observation, interviews, and documentation. Observations were conducted to identify schools in West Tondano District that continue to implement either the 2013 Curriculum or the Merdeka Learning Curriculum. Interviews were conducted in person at the schools of the teachers who served as research subjects. The purpose of the interviews was to obtain in-depth information regarding teachers' understanding of assessment principles, the process of developing assessment instruments, their experiences implementing assessments under the 2013 Curriculum and the Merdeka Curriculum, as well as the challenges encountered in developing mathematics assessment instruments. During the interviews, the researcher recorded the conversations using a mobile phone with the consent of the participating teachers to facilitate accurate transcription of the interview data.

The interviews utilized a question guide comprising nine indicators. Seven of these indicators were developed based on the assessment principles outlined in the Learning and Assessment Guidebook [11], namely: (1) assessment as an integral part of instruction, (2) diversity of assessment techniques, (3) student involvement, (4) provision of constructive feedback, (5) assessment designed in accordance with learning objectives, (6) fairness, validity, and reliability of assessment, and (7) use of assessment results for reflection and improvement. The eighth and ninth indicators were added by the

researcher, focusing on (8) challenges in implementing assessment principles and (9) expectations regarding future changes or improvements in assessment.

Documentation was conducted by collecting materials such as assessment items, assessment rubrics, and photographs of research activities at the schools. These documents were analyzed using the same indicators applied in the interview guide.

In analyzing the data, the researcher employed the analysis technique proposed by Miles and Huberman [12], which involves four stages: data collection, data reduction, data display, and conclusion drawing. To ensure data validity, the researcher applied source triangulation by comparing data from several junior high school teachers across different schools in West Tondano District who met the criteria previously described. The researcher also implemented method triangulation by comparing and integrating data obtained from observations, interviews, and documentation. For instance, instruments mentioned by teachers during interviews were verified against assessment documents. When data from all three techniques showed consistency, the data were considered valid, ensuring that the research findings were comprehensive, accurate, and free from bias. Additionally, the researcher conducted member checks to confirm that the interpretations of the data, particularly interview transcripts, accurately reflected the teachers' perspectives and experiences. The study was conducted over approximately one month, from May 5 to June 2, 2025.

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RESULT AND DISCUSSION

Analysis of Interview Results with Teachers Implementing the 2013 Curriculum

The research findings were obtained through interviews with two mathematics teachers implementing the 2013 Curriculum: one teacher from SMP Negeri 2 Tondano and one teacher from SMP Negeri 4 Tondano. The interviews were conducted based on the established indicators, and the results are presented as follows:

1. Assessment as an Integral Part of the Learning Process. The teacher from SMP Negeri 2 Tondano integrates assessment by observing students' knowledge and skills through diagnostic observations to design more effective instruction. In contrast, the teacher from SMP Negeri 4 Tondano integrates assessment by administering formative tests after each topic and using probing questions to gauge students' understanding before beginning new material.
2. Diversity of Assessment Techniques. The teacher from SMP Negeri 2 Tondano employs diagnostic, formative, and summative assessments using a variety of item formats, including multiple-choice, complex multiple-choice, matching, short-answer, and essay questions, to support comprehensive student understanding. Meanwhile, the teacher from SMP Negeri 4 Tondano utilizes formative and summative assessments with items adjusted in difficulty to measure individual student abilities and to support the instructional process.
3. Student Involvement in Assessment. The teacher from SMP Negeri 2 Tondano engages students in assessment by observing their skills, creativity, and understanding throughout the learning process. In contrast, the teacher from SMP Negeri 4 Tondano involves students in assessment through peer evaluation by exchanging answer sheets to facilitate grading.
4. Provision of Constructive Feedback. The teacher from SMP Negeri 2 Tondano provides direct and constructive feedback to help students understand their mistakes as part of the learning process while also motivating them to improve their abilities. In contrast, the teacher from SMP Negeri 4 Tondano offers informal guidance and motivation, emphasizing that mistakes are a natural part of learning to encourage continuous student development.
5. Assessment Designed in Alignment with Learning Objectives. The teacher from SMP Negeri 2 Tondano ensures that assessments support learning objectives by creating items based on specific competency indicators (IPK) and communicating the purpose of the assessment to students prior to its administration. In contrast, the teacher from SMP Negeri 4 Tondano ensures that assessments align with learning objectives and provides students with information and an overview of the test material to enhance preparedness and motivation.
6. Fairness, Validity, and Reliability of Assessment. The teacher from SMP Negeri 2 Tondano ensures assessment fairness by considering students' responses while completing tasks and evaluates the

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validity and reliability of instruments through item analysis for improvement in collaboration with the curriculum team. In contrast, the teacher from SMP Negeri 4 Tondano ensures fairness by providing equal treatment and follow-up support for students who have not yet achieved mastery, while using instruments aligned with the material that has been taught.

7. Use of Assessment Results for Reflection and Improvement. The teacher from SMP Negeri 2 Tondano uses assessment results to provide remedial instruction for students who have not yet reached the minimum competency standard (KKM) and enrichment for students who have mastered the material. In contrast, the teacher from SMP Negeri 4 Tondano uses assessment results to identify topics that are challenging for students and provides targeted remedial exercises to help them achieve mastery.
8. Challenges in Implementing Assessment Principles. The teacher from SMP Negeri 2 Tondano stated that the greatest challenge is understanding students' individual characteristics and creating an engaging learning environment so that assessments are well-received by students. In contrast, the teacher from SMP Negeri 4 Tondano indicated that the main challenge is ensuring that assessment items are fair and valid due to differences in students' abilities, noting that item validity has so far been judged solely based on student assessment results.

9. Expected Changes or Improvements in Assessment. The teacher from SMP Negeri 2 Tondano felt that the current assessments are adequate and do not require any changes or improvements. In contrast, the teacher from SMP Negeri 4 Tondano hopes for adjustments in lesson planning to align with the available instructional time. This is considered important to ensure that all material is covered before assessment, allowing evaluations to accurately and fairly reflect students' overall understanding.

Analysis of Interview Results with Teachers Implementing the Merdeka Learning Curriculum

The research findings were obtained through interviews with three mathematics teachers currently implementing the Merdeka Learning Curriculum: teachers from SMP Negeri 2 Tondano, SMP Negeri 4 Tondano, and SMP Katolik St. Rosa De Lima. The interview results based on the established indicators are as follows:

1. Assessment as an Integral Part of the Learning Process. The teacher from SMP Negeri 2 Tondano integrates assessment by routinely administering formative tests after each topic and using diagnostic assessments to determine students' initial understanding. The teacher from SMP Negeri 4 Tondano incorporates assessment through diagnostic tests, pre-tests, and post-tests to identify students' characteristics and abilities, which serve as a basis for designing more effective instruction. Meanwhile, the teacher from SMP Katolik St.

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- Rosa De Lima uses initial assessments aligned with learning objectives to determine students' abilities and plan instruction according to their needs.
2. Diversity of Assessment Techniques. The teacher from SMP Negeri 2 Tondano employs formative and summative assessments using written tests and direct observation to evaluate students' attitudes, knowledge, and skills comprehensively. The teacher from SMP Negeri 4 Tondano uses diagnostic, formative, and summative assessments with instruments such as test items and applications like Quizizz to monitor learning achievement and enhance student engagement. Meanwhile, the teacher from SMP Katolik St. Rosa De Lima utilizes oral and written assessments, portfolios, and both formative and summative items to evaluate students' understanding comprehensively according to learning needs.
 3. Student Involvement in Assessment. The teacher from SMP Negeri 2 Tondano involves students in assessment by jointly establishing agreements on evaluation aspects such as attendance, assignments, and participation, which serve as alternatives to summative tests when they are less effective. The teacher from SMP Negeri 4 Tondano involves students in assessment only by having them complete items on formative and summative tests. Meanwhile, the teacher from SMP Katolik St. Rosa De Lima engages students by setting preliminary agreements regarding the aspects to be assessed so that they can adequately prepare before testing.
 4. Provision of Constructive Feedback. The teacher from SMP Negeri 2 Tondano provides immediate feedback after assessments by highlighting students' weaknesses, assigning corrective tasks, and motivating them to continuously improve their understanding. The teacher from SMP Negeri 4 Tondano frequently offers feedback through encouragement and reinforcement, helping students recognize mistakes as a natural part of the learning process. Meanwhile, the teacher from SMP Katolik St. Rosa De Lima delivers classical feedback through exercises targeting unmet indicators and emphasizes the interconnectedness of mathematical concepts to motivate students to keep learning.
 5. Assessments are designed in accordance with the learning objectives. The teacher at SMP Negeri 2 Tondano ensures that assessments support the learning objectives by developing evaluation instruments aligned with the teaching module and informing students of the assessment objectives from the beginning of the lesson. Meanwhile, the teacher at SMP Negeri 4 Tondano ensures that assessments support the learning objectives by creating questions based on indicators and communicating these indicators to students prior to the assessment. Additionally, the teacher at SMP St. Katolik Rosa De Lima also ensures that assessments align with the indicators of the learning objectives and consistently provides

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information to students so that they understand the benefits of the conducted assessments.

6. Fairness, validity, and reliability of assessments. The teacher at SMP Negeri 2 Tondano ensures assessment fairness by standardizing exam materials and adjusting assessment instruments based on the classroom situation, conditions, and student engagement. Meanwhile, the teacher at SMP Negeri 4 Tondano ensures fairness by using questions from the textbook that align with the indicators and measures the validity and reliability of instruments using the Product Moment and Cronbach's Alpha tests. Additionally, the teacher at SMP St. Katolik Rosa De Lima evaluates students fairly based on their abilities, utilizes a question bank as a reference, and adapts assessment instruments according to classroom context and conditions to enhance accuracy.
7. Utilization of assessment results for reflection and improvement. The teacher at SMP Negeri 2 Tondano analyzes assessment results to identify material that requires remediation and to develop simpler questions, while providing enrichment to students with high scores. Meanwhile, the teacher at SMP Negeri 4 Tondano uses assessment results to provide remedial instruction to students who have not met the Minimum Competency Criteria (KKM). Additionally, the teacher at SMP St. Katolik Rosa De Lima utilizes assessment results to evaluate student comprehension and determine which material needs to

be retested through remedial measures.

8. Challenges in implementing assessment principles. The teacher at SMP Negeri 2 Tondano stated that the greatest challenge for teachers is adapting to technological developments due to the IT skills required in assessments. Meanwhile, the teacher at SMP Negeri 4 Tondano considered the initial challenge to be understanding how to use the Product Moment validity test and Cronbach's Alpha reliability test; however, they are now able to use them effectively. Additionally, the teacher at SMP St. Katolik Rosa De Lima stated that the greatest challenge for teachers is ensuring fairness in assessments because student abilities vary.
9. Expected changes or improvements in assessment. The teacher at SMP Negeri 2 Tondano believes that the current assessments are already adequate and do not require changes, as the differences lie only in terminology, not in essence. Meanwhile, the teacher at SMP Negeri 4 Tondano hopes to be granted greater freedom in designing questions and determining their scoring. Additionally, the teacher at SMP St. Katolik Rosa De Lima hopes that the current assessments will, in the future, promote the enhancement of student abilities and the achievement of learning outcomes.

Comparison of Assessment Instruments between the 2013 Curriculum and the Merdeka Belajar Curriculum

Based on interviews with teachers implementing the 2013

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Curriculum and the Merdeka Belajar Curriculum, it can be concluded that the Merdeka Belajar Curriculum places greater emphasis on flexibility, diversity of techniques, and active student engagement, while also being more adaptive to technological developments. In contrast, the 2013 Curriculum continues to demonstrate the application of assessment principles adequately, albeit with a more conventional and structured approach.

In collecting data, the researcher also gathered documents to support the data obtained from interviews. The documents collected consisted of assessment instruments used by teachers in schools, such as end-of-semester summative exam questions, supported by assessment blueprints. The following presents the results of the researcher's document analysis, specifically the end-of-semester summative assessment instruments, based on the teachers' interview responses.

Analysis of Assessment Document Results under the 2013 Curriculum

The analysis of the documents, consisting of summative assessment questions under the 2013 Curriculum, revealed that the question design reflects an effort to implement sound assessment principles, although several aspects still require improvement to ensure that assessments fully support the learning process.

The questions are designed to align with the basic competencies and learning objectives, making the assessment an integrated part of the learning process. Various question formats are employed, such as multiple-choice, complex multiple-

choice, matching, short answer, and essay questions, reflecting a diversity of assessment techniques and enabling a more comprehensive measurement of competencies.

However, these assessments do not fully engage students actively, as they lack a component for self-reflection. Additionally, there is no provision for teacher feedback, preventing students from receiving direct information about their strengths and weaknesses. Assessment results are used solely by teachers to analyze learning, without involving students in reflection and self-improvement. Regarding feedback, teachers provide responses after the assessment, but these are general in nature, consisting of motivation and the provision of remedial exercises. Such feedback is insufficiently constructive, as it does not detail students' strengths and weaknesses or provide specific guidance for improving learning.

In terms of validity and fairness, the questions employ clear and neutral language and correspond to the competencies being assessed. However, teachers implementing the 2013 Curriculum do not use statistical tests to ensure the validity and reliability of the questions; instead, they rely on students' answer results, modifying any questions frequently answered incorrectly during remedial sessions. Thus, the summative assessment meets several key principles, such as alignment with learning objectives, diversity of techniques, and validity. Nevertheless, improvements are needed in student engagement, provision of feedback, and ensuring question validity and reliability through statistical item

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analysis to support more effective learning.

Analysis of Assessment Document Results under the Merdeka Belajar Curriculum

Based on the analysis of summative assessment documents from junior high school teachers in the Tondano Barat District who have implemented the Merdeka Curriculum, it can be concluded that the execution of summative assessments largely reflects assessment principles aligned with learning objectives. This is evident in the questions, which are designed based on basic competencies and intended learning outcomes, as well as in the diversity of assessment techniques employed, including multiple-choice, complex multiple-choice, matching, short-answer, and essay formats.

Nevertheless, several important aspects of assessment principles still require improvement. Student involvement in the assessment process remains limited, as the questions do not include a self-reflection component that allows students to evaluate their own understanding and learning process. Additionally, the provision of constructive feedback has not been optimally implemented; teachers provide responses after the assessment, but these are general in nature, consisting of motivation and the assignment of remedial tasks. Such feedback is insufficiently constructive, as it does not detail students' strengths and weaknesses nor provide specific guidance for learning improvement.

Nevertheless, in terms of fairness, validity, and reliability, the assessments employed meet good criteria. All students have an equal

opportunity to respond to the questions, and some teachers even use statistical tests, such as the Product Moment and Cronbach's Alpha, to ensure the validity and reliability of the instruments used.

The use of assessment results for reflection and learning improvement does not yet fully involve students. Teachers primarily analyze students' answers themselves, using the results as a basis for subsequent instructional improvements. Therefore, although the summative assessments employed reflect some of the assessment principles of the Merdeka Curriculum, improvements are still needed, particularly in terms of student involvement and the provision of constructive feedback.

Comparison of Summative Assessment Questions between the 2013 Curriculum and the Merdeka Belajar Curriculum

Summative assessments in the 2013 Curriculum and the Merdeka Belajar Curriculum at junior high schools in the Tondano Barat District exhibit notable differences in technical aspects of assessment. Teachers implementing the Merdeka Curriculum have begun using statistical tests to determine validity and reliability, whereas teachers under the 2013 Curriculum evaluate question validity based on student performance. The results of this study indicate that the mathematics assessment instruments used by teachers in Tondano Barat junior high schools generally adhere to sound assessment principles, encompassing cognitive, affective, and psychomotor domains, and are conducted continuously through diagnostic, formative, and summative

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assessments. These findings align with previous studies indicating that the implementation of the Merdeka Curriculum promotes more flexible, contextualized, and student-centered assessments compared to the 2013 Curriculum. Similarities are observed in teachers' tendency to formulate more adaptive learning objectives and develop questions based on real-life situations. However, this study contributes contextually by showing that during the curriculum transition period, the quality of assessment instruments is influenced not only by curriculum policy but also by teachers' understanding and readiness in designing and implementing classroom assessments. Thus, this study reinforces prior findings while enriching the literature on mathematics assessment practices at the junior high school level in the local context.

CONCLUSION

Based on interviews with teachers and document analysis, the researcher concludes that the quality of mathematics assessment instruments used by junior high school teachers in the Tondano Barat District generally meets good assessment indicators for both the 2013 Curriculum and the Merdeka Curriculum. The instruments reflect integration of the cognitive, affective, and psychomotor domains, are designed in accordance with learning objectives, and consider aspects of validity, clarity of indicators, and measurability of learning outcomes. In the implementation of the 2013 Curriculum, assessment instruments tend to be more structured and oriented toward achieving basic competencies,

with relatively standardized evaluation formats. In contrast, under the Merdeka Curriculum, the quality of assessment instruments is demonstrated through flexibility in formulating learning objectives, the use of contextual questions based on real-life situations, and the utilization of digital technology that supports continuous assessment.

Comparatively, the main difference between the two curricula does not lie in whether the quality indicators of the instruments are met, but rather in the level of flexibility and contextualization of the assessments developed by teachers. Thus, this study emphasizes that the quality of assessment instruments during curriculum transition is strongly influenced by teachers' ability to translate assessment principles into classroom practice. The findings address the research question, indicating that both curricula allow for the creation of high-quality assessment instruments; however, the Merdeka Curriculum provides greater scope for teachers to develop assessments that are adaptive, authentic, and relevant to students' needs.

The researcher's recommendations following the study conducted in junior high schools in the Tondano Barat District are as follows:

1. For mathematics teachers in junior high schools in the Tondano Barat District, it is recommended to continuously improve their ability to develop valid and reliable assessment instruments and to implement technology-based assessments, especially for

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teachers who are not yet accustomed to using technology in teaching. Teachers are also encouraged to maximize the use of diagnostic assessments to map students' initial abilities, as well as ongoing formative assessments to monitor the learning process, rather than treating them as mere formalities. This approach can enhance the effectiveness of adaptive and targeted learning processes.

2. For the education office or partner educational institutions, it is recommended to organize training sessions or workshops on assessment to enhance teachers' competencies and update their knowledge regarding the latest developments in assessment practices.
3. Future researchers may propose innovations in assessment instruments used across various curricula. They can also examine curriculum quality from other components, such as teaching modules, lesson plans (RPP), or even the learning processes and instructional strategies.

The researcher also observed that most junior high schools in the Tondano Barat District have begun implementing the Merdeka Belajar Curriculum, even though they are technically still required to use the 2013 Curriculum. Teachers in the area have started adapting to the terminology and assessment approaches of the Merdeka Curriculum, such as formative and summative assessments, whereas the

corresponding terms in the 2013 Curriculum are daily tests, midterm exams, and end-of-semester exams. This indicates a shift in assessment practices toward the implementation of the Merdeka Curriculum before its full official enactment. Consistent with the study conducted [13], differences in lesson plan (RPP) components between the 2013 Curriculum and the Merdeka Curriculum exist in several areas, such as terminology; for example, while the 2013 Curriculum still uses the term RPP, the Merdeka Curriculum replaces it with the term teaching module.

Most mathematics teachers in junior high schools in the Tondano Barat District are also senior, which may contribute to a limited understanding of using applications to test the validity and reliability of questions, such as Cronbach's Alpha and the Product Moment, as noted in the study [14]. According to interviews conducted by the researcher with mathematics teachers at SMP Tunas Harapan Burana, one challenge in using social media for teaching is that teachers are not yet accustomed to operating electronic tools, resulting in instructional delivery that is minimal and affecting students' understanding of mathematics content. It is also crucial for teachers to test the validity and reliability of questions before administering them to students, a practice that, in this study, was only observed in one teacher implementing the Merdeka Curriculum at SMP Negeri 4 Tondano. This aligns with the findings of [15], which emphasize that test questions should be analyzed by teachers prior to administration, as teachers often do not realize that the

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questions they create may be imperfect in terms of validity, reliability, difficulty level, discriminatory power, and distractors. Mathematics teachers in the Tondano Barat District need to enhance their skills in using statistical applications, such as the Product Moment validity test and Cronbach's Alpha reliability test, when designing and evaluating assessment instruments, as demonstrated by one teacher at SMP Negeri 4 Tondano. Additionally, to ensure the validity and credibility of the research data, the researcher conducted member checks with the interviewed teachers. The results of the member checks indicated that all teachers confirmed the data presented by the researcher accurately reflected their perspectives on assessment instruments under both the 2013 Curriculum and the Merdeka Curriculum.

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