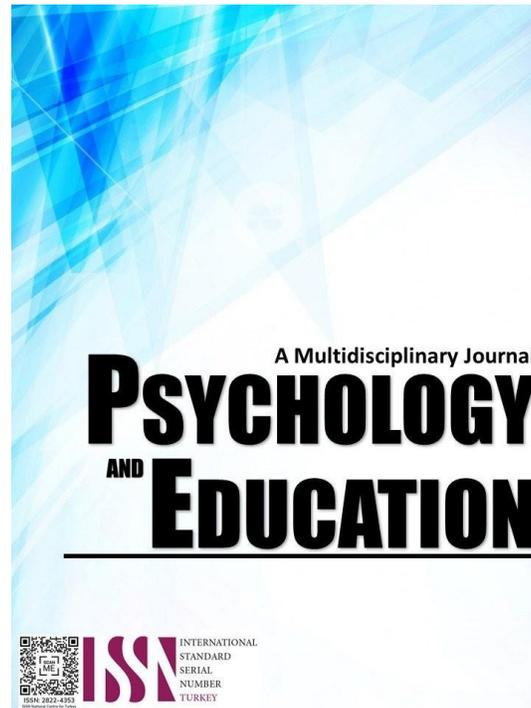


PRACTICES OF ENSURING VALIDITY AND RELIABILITY OF THE ASSESSMENT TOOLS AMONG THE SECONDARY SCHOOLS IN SELECTED DIVISIONS OF REGION X Philippines



PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL

Volume: 25

Issue 8

Pages: 980-991

Document ID: 2024PEMJ2406

DOI: 10.5281/zenodo.13837550

Manuscript Accepted: 08-23-2024

Practices of Ensuring Validity and Reliability of the Assessment Tools among the Secondary Schools in Selected Divisions of Region X Philippines

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Abstract

This research aimed to investigate the practices employed by school teachers in selected divisions of region 10 to ensure the validity and reliability of assessment tools. The study explored the types of assessment tools used for formative and summative evaluations, teachers' practices in ensuring validity and reliability, challenges faced, and proposed interventions. The methodology involved a descriptive-qualitative approach, utilizing a non-probability sampling technique for selecting participants through interview questions conducted via online video conferencing. Thematic analysis was applied to the gathered data for interpretation. The findings indicate a commitment to a multifaceted evaluation approach, encompassing a diverse range of formative and summative assessment tools. For formative assessments, tools such as assignments, quizzes, discussions, and collaborative methods are identified, emphasizing alignment with learning objectives for validity and immediate feedback for reliability. In summative assessments, a blend of traditional and innovative methods is observed, requiring careful consideration of validity, particularly in measuring intended learning outcomes. The study recommended that future researchers delve deeper into the effectiveness of various assessment tools and explore collaborative methods' impact on validity and reliability. School heads are encouraged to foster a dynamic assessment culture, supporting teachers in integrating diverse tools. Teachers are advised to adopt a balanced approach, incorporating a mix of tools for comprehensive evaluation, and emphasizing active student participation, customization, and immediate feedback for validity and reliability. This research provided insights into enhancing assessment practices, contributing to the ongoing dialogue on effective evaluation methods in secondary education.

Keywords: *teachers' practices, validity, reliability, assessment, qualitative*

Introduction

Key indicators of the quality of a measuring instrument are the reliability and validity of the measures. The process of developing and validating an instrument is in large part focused on reducing error in the measurement process. Reliability estimates evaluate the stability of measures, internal consistency of measurement instruments, and interpreter reliability of instrument scores. Validity is the extent to which the interpretations of the results of a test are warranted, which depends on the particular use the test is intended to serve. The responsiveness of the measure to change is of interest in many of the applications in health care where improvement in outcomes as a result of treatment is a primary goal of research. Several issues may affect the accuracy of data collected, such as those related to self-report and secondary data sources. Self-report of patients or subjects is required for many of the measurements conducted in health care, but self-reports of behavior are particularly subject to problems with social desirability biases. Data that were originally gathered for a different purpose are often used to answer a research question, which can affect the applicability to the study at hand (Kimberlin & Winterstein, 2008).

According to Kadir et al. (2019) an authentic assessment can provide a real-life experience to the student and accommodate the need of assessing productive skills, particularly for speaking skill. The authentic assessment instrument has to fulfill the requirements of being valid, practical and effective to make it a good device. Nurdin et al. (2019) stated that authentic assessment which is applied in 2013 curriculum has been used as an assessment method in assessing students' language competence. It engages the students in a meaningful learning experience for the real-world situation. A guidebook to implement authentic assessment for speaking skill for junior high school has been developed by some experts. However, it needs to evaluate this product to see if the assessment already meets the criteria of an authentic assessment, based on the requirement of 2013 curriculum, related to content and authenticity.

This research aimed the general objective to identify the practices of ensuring validity and reliability of the assessment tools among the selected secondary schools in selected divisions of Region 10. It also looked forward on the significance and the reasons of ensuring the validity and reliability of the assessment tools.

This study further explored the challenges and opportunities experienced by the secondary school teachers in ensuring the validity and reliability of the assessment tools and come up valuable solutions to address the challenges. The result of this research is a great value to the secondary schools, department of education, school leaders, teachers, parents, students, stakeholders and future researchers for their reference.

The basis of this research relied on the meaningful experiences of the participants regarding the topic or problem of the study. Thus, the researchers interestingly and unanimously conducted this research in order to gather the practices of ensuring validity and reliability of the assessment tools where the result of this study can help the secondary schools to come up a valid and reliable assessment tools for learning.

Research Questions

The general objective of this research is to identify the practices of ensuring validity and reliability of the assessment tools among the secondary schools in the selected divisions of Region 10. It also sought the following questions:

1. What are the assessment tools used by the secondary School Teachers in terms of:
 - 1.1. Formative assessment; and
 - 1.2. Summative assessment ?
2. What are the teachers' practices of ensuring validity of assessment tools?
3. What are the teachers' practices of ensuring reliability of assessment tools?
4. What are the challenges encountered by secondary teachers in ensuring the validity and reliability of the assessment tools?
5. What are the interventions to be employed on the identified challenges?

Methodology

This research is based on the descriptive - qualitative type of research. It is the appropriate design as it embraces the meaningful experiences of the target participants about the practices of ensuring validity and reliability of the assessment tools among the secondary schools in the selected divisions of Region 10.

The respondents of the study were selected school teachers in the selected schools in selected divisions of Region 10. The researchers applied the non-probability sampling technique employing the purposive or judgmental sampling in the selection of participants that is five (5) of each schools chosen comprising participants of the study.

The researchers formulated interview questions related to the topic or the problems of the study. The content of the questions served as guidelines and validated by experts to assure that the questions will really be relevant to the problems of the study.

The researchers gave a letter of consent to ask approval and permission from selected school teachers before the administration or the conduct the study.

The data gathered using interview questions and recorded and transcribed as to provide the evidence of the conduction of the data gathering procedure. The interview questions were in a form of online video conferencing due to the distance of the said participants and the researchers and face to face interview sessions of the participants.

Thematic analysis and sub-themes used to analyze the gathered data where it were transcribed, translated in order to determine the themes as the result of the study.

Results and Discussion

Table 1. *Assessment tools used by the secondary School Teachers in terms of Formative Assessment and Summative Assessment*

<i>Major Themes</i>	<i>Sub Themes</i>
Formative Assessment tools did you usually apply in your class?	Diversity of Assessment Tools Active Student Participation Immediate Feedback Promoting Critical Thinking Customization of Instruction Collaborative Assessment
Summative Assessment tools did you usually apply in your class?	Traditional written exams Diversity of Assessment Methods Communication and Presentation Skills In-depth Assessment Application of Knowledge

Based on the responses provided by the participants, it's evident that there is a diverse range of assessment tools and methods being used in the classroom. The themes that emerge from these responses include:

Diversity of Assessment Tools

Participants mention a variety of assessment tools, including assignments, short quizzes, board work, think-pair-share, oral questioning, self-assessments, homework, direct questioning, discussions, worksheets, Google Forms, true or false activities, group and individual performance tasks, oral recitation, regular group activities (both written and oral), concept mapping, and peer assessment. I used quizzes, assignment and activity like true or false.

Participant 6: "In my classroom, I believe in using a variety of formative assessment tools to measure my students understanding and

provide timely feedback, one of which is classroom discussions. I encourage open dialogue among students to assess their comprehension of the material and promote critical thinking."

Participant 13: I am using quick quizzes for my students, to assess their understanding of specific concepts taught during the lesson. These quizzes will provide immediate feedback from my students.

Active Student Participation

Several participants mention strategies that involve active student participation, such as classroom discussions, think-pair-share, group activities, and oral recitation.

The emphasis on class discussions and encouraging open dialogue among students suggests a desire to engage students actively in the learning process.

Immediate Feedback

Participants express the importance of immediate feedback in the assessment process. Quick quizzes and oral recitation are specifically mentioned as tools that provide immediate feedback from students.

Customization of Instruction

Participant 10 mentions using various assessment methods to provide a comprehensive understanding of students' learning, allowing for customized instruction to better support individual students.

Participant 10: I regularly apply concept mapping as a hands-on method. Having students develop visual representations of their learning allows me to observe how they connect ideas. These many ways provide a comprehensive assessment, allowing me to customize my instruction to better support my students.

Collaborative Assessment

Collaborative methods, such as think-pair-share and peer assessment, are highlighted by participants, indicating a recognition of the value of collaboration in the assessment process.

Summative Assessment Tools

Based on the responses provided by the participants, the following themes can be identified:

Summative Assessment Tools

Traditional written exams, chapter tests, periodical exams, quarterly exams, end-of-term papers, essay exams, multiple-choice tests, oral exams, and structured problem-solving tasks are mentioned as summative assessment tools. As what the some participants said:

Participant 4: "Chapter quiz, Periodical Exam".

Participant 5: "Quarterly Exam, performance task".

Participant 11: "I use essay exams where my students respond to open-ended questions with written essays. These assess students' ability to articulate their understanding and provide evidence to support their responses".

Diversity of Assessment Methods

Participants mention a variety of assessment methods, including traditional written exams, multiple-choice questions, oral presentations, end-of-term papers, hands-on activities (role playing, speech choir, and experiments), essay exams, portfolios, and structured problem-solving tasks.

Participant 9: "I frequently use end-of-term papers or essays as a summative assessment tool. This allows students to delve deep into a specific topic, demonstrate their research and analytical skills, and articulate their understanding in a written format. It's a method that evaluates both content knowledge and writing proficiency."

Communication and Presentation Skills

Some participants highlight the importance of assessing communication and presentation skills. Oral presentations, oral exams, and hands-on activities like role playing and speech choir are mentioned as methods to enhance these skills.

In-depth Assessment

End-of-term papers, essays, and portfolios are highlighted as tools that allow for in-depth assessment. These methods provide students with the opportunity to delve deep into specific topics, demonstrate research and analytical skills, and articulate their understanding in a detailed manner.

Participant 1: "Chapter tests, portfolio's, presentations".

Application of Knowledge

Hands-on activities, such as role playing, speech choir, and structured problem-solving tasks, are mentioned as methods to assess students' ability to apply theoretical knowledge in real-world contexts.

Participant 10: Hands-on activities. Like role playing and speech choir. This could involve conducting experiments, simulations, or demonstrations depending on the subject. Practical assessments assess not just theoretical knowledge but also students' ability to apply concepts in a real-world context."

Table 2. Teachers' Practices of Ensuring the Validity of Assessment Tools

<i>Major Themes</i>	<i>Sub themes</i>
Do you think that it is important to validate the formative and summative assessment tools? If yes, can you give us the reasons on the importance of validating the formative and summative assessment tools?	Accuracy and Fairness Consistency and Reliability Quality and Effectiveness Feedback
Do you ensure the validity of your formative and summative assessment tools before you implement them to your learners? If yes, can you share to us the methods or processes or practices you used in validating the formative and summative assessment tools?	TOS Preparation Reliability and Validity Feedback

1. Do you think that it is important to validate the formative and summative assessment tools? If yes, can you give us the reasons on the importance of validating the formative and summative assessment tools?

Based on the responses of the participants it is evident that it is very important to validate the formative and summative assessment tools. The reasons on the importance of validating includes;

Accuracy and Fairness

Ensuring that the assessments are fair to all the students regardless their background, ensuring equal opportunity for success. On the other hand, Producing accurate measure what should be measured provides reliable insights into students understanding fostering an inclusive and supportive learning environment.

Participant 1: Yes, because validation provides accurate and reliable results. This also contributes the total effectiveness and fairness of the assessment process.

Participant 4: I believe yes because through validation, it may assist us in providing valid, reliable and fair evaluation and feedback to our students in order to motivate them to engage in the learning process.

Participant 7: "I believe it is important to validate assessment tools to ensure fairness and equity.

Participant 12: Validation helps ensure that formative assessments accurately identify students' misconceptions or misunderstandings.

Consistency and Reliability

Validation ensures that the formative and summative assessment are consistently designed and administered maintaining a standard approach to evaluating student performance. Validation ensures trustworthiness fostering confidence among students as well as educators. These reasons contribute to the meaningful comparison, trustworthy result, and informed decision making in education.

Participant 6: "Yes, validating both formative and summative assessment tools is important for ensuring their reliability and effectiveness. Validation helps the assessments measure what they intend to assess. This is essential for maintaining the integrity and credibility of the evaluation process."

Participant 8: "Validation is important to establish the consistency and reliability of assessment tools. It ensures that the results are dependable and reproducible, allowing for meaningful comparisons of student performance over time."

Quality and Effectiveness

Ensuring the quality in delivering the formative and summative assessment it should be validated at all times. Effectiveness of the assessment will be realized when it will be worked harmoniously. It also lies in the ability to provide educators with valuable data leading to the improvement in curriculum and instruction.

Participant 9: "Validating assessment tools is significant for providing evidence of their educational impact. It allows us teachers to demonstrate that the assessments effectively measure the desired learning outcomes, contributing to the overall improvement of teaching and learning strategies."

Participant 10: "Validation is key to maintaining the trust and confidence of students, parents, and other stakeholders in the education system".

Participant 11: for me, both are important, to ensure the reliability and effectiveness of assessment we used in our class”

Participant 17: of course yes to deliver quality and effective education.

Participant 18: yes, this will really give quality education

Feedback

Providing timely feedback in assessment is crucial for fostering students learning and growth. It highlights particular strengths and areas for improvement. Providing feedback provides a clear guidance, helping students understand what they did well and how they can enhance their performance.

Participants 3: Yes, it is very important. Because formative assessment let students show that they’re learning and summative assessment let students show what they have learned.

Participant 5: Yes, it is very important to validate every assessment tool in order to measure how students are learning or progressing.

Participant 14: Valid formative assessments provide accurate feedback to both teachers and students during the learning process.”

Participant 15: I believed validation enhanced learning outcomes .

Participant 19: yes to give proper feedback to students.

2. Do you ensure the validity of your formative and summative assessment tools before you implement them to your learners? If yes, can you share to us the methods or processes or practices you used in validating the formative and summative assessment tools?

A structured assessment process ensures fairness, reliability, and transparency, providing educators with valuable insights into students' comprehension and mastery of subject matter. Beginning with clear articulation of learning objectives, the method involves designing assessments that align closely with these objectives, creating a purposeful and cohesive evaluation framework. Additionally, incorporating a diverse range of assessment types, such as formative and summative assessments, allows for a comprehensive understanding of student progress. Furthermore, a systematic approach enables educators to offer timely and constructive feedback, promoting a continuous learning cycle and empowering students to address areas of improvement. Below are the statements of the participants regarding on the methods and process they used in implementing the validity of the formative and summative assessment.

TOS Preparation

Participant 1: It is a best practice for teachers to ensure the validity of the assessment tools before using it. In my case, I seldom validate my formative assessment but in summative assessment I have done TOS.

Participant 4: I prepare TOS before formulating my assessment. Then after administering the summative test, I do item analysis.

Participant 5: Yes, but sometimes due to a limited time for the assessment I was not able to ensure its validity. Only during summative assessment because we undergo TOS (table of specification).

Participant 9: "Validation for my assessment tools involves a process of continuous reflection. I also go to some websites that are legit and follow the MELCS and TOS.

Participant 16: yes using TOS.

Reliability and Validity

Participant 6: "Yes, ensuring the validity of my assessment tools is a priority. For my summative test, well, the questionnaires are coming from the Division office so I am sure it is reliable and valid.

Participant 8: "I ensure the validity of my assessments through a process of alignment with learning objectives. Before implementing any formative or summative tool, I meticulously review the content to ensure it aligns with the curriculum goals. This alignment helps establish that the assessments measure what they are intended to assess."

Participant 10: "Validating my assessment tools involves collaboration with fellow educators. I engage in discussions and collaborative assessments with colleagues to ensure consistency and alignment with the broader curriculum. Specially our Master Teacher”.

Participant 12: Confirm that the summative assessment aligns with the curriculum, instructional practices, and learning objectives. It should reflect what students were taught during the designated period.

Feedback and Review

Participant 7: "Absolutely, before implementing formative and summative assessments, I conduct a pilot test with a small group of students. This trial run helps identify any potential issues with the clarity of instructions, difficulty level, or any unintended biases. Feedback from the pilot test is valuable in refining the assessments for broader use."



Participant 13: I establish a mechanism for collecting feedback from students, teachers, and other stakeholders to continuously improve the validity and reliability of the summative assessment.

Participant 14: I let my colleagues or fellow educators review the assessment for clarity, fairness, and alignment with learning objectives. Peer feedback can provide valuable insights.

Participant 17: yes, by letting my senior faculty checking it.

Participant 18: Approval by the senior faculty and head of the program.

Participant 19: Peer feedback and review which can provide valuable insights.

3. What are the teachers’ practices in getting the reliability of the assessment tools?

Table 3.

<i>Major Themes</i>	<i>Sub Themes</i>
Do you think that it is important to get the reliability of the formative and summative assessment tools? If yes, can you give us the reasons on the importance of getting the reliability of the formative and summative assessment tools?	Accuracy and Fairness Consistency and Reliability Quality and Effectiveness Feedback
Do you ensure the reliability of your formative and summative assessment tools before you implement them to your learners? If yes, can you share to us the methods or processes or practices you used in getting the reliability of the formative and summative assessment tools?	TOS Preparation Reliability and Validity Feedback Item Analysis

Ensuring the reliability of student assessments is paramount as it underpins the credibility and accuracy of the evaluation process. Reliability instills confidence in the consistency and dependability of assessment results, enabling educators to make informed decisions about students' academic progress. A reliable assessment system minimizes variability, ensuring that if the same assessment is administered under similar conditions, it would yield consistent outcomes. This reliability is crucial in providing a fair and equitable evaluation for all students, fostering a sense of trust in the educational system.

Moreover, reliable assessments contribute to the establishment of clear standards and benchmarks, facilitating meaningful comparisons of student performance over time. Ultimately, the commitment to reliability in assessments is foundational to the integrity of the education system, aligning assessments with educational objectives and promoting a transparent and equitable learning environment.

Accuracy and Fairness

Participant 1: Yes, because reliability ensures credibility and trustworthiness of the assessment process on students’ knowledge and skills.

Participant 3: Yes, in order to know the consistency and accuracy of measures learning. Because it determines the value of learnings.

Participant 6: "Yes, obtaining the reliability of formative and summative assessment tools is vital for maintaining consistency in the evaluation process. Reliable assessments produce consistent results, ensuring that the outcomes accurately represent students' abilities and achievements over time."

Participant 7: "I believe it is important to ensure the reliability of assessment tools to build trust in the evaluation process because Reliable assessments generate dependable results, instilling confidence among students, parents, and educators that the outcomes accurately reflect students' knowledge and skills."

Participant 12: yes. To ensure that the summative assessment is accessible to all students, including those with diverse learning needs

Participant 13: I do believed that reliability is a prerequisite for validity.. Establishing reliability strengthens the overall validity of the summative assessment.

Consistency and Reliability

Participant 6: "For me yes, creating reliability of assessment tools is essential. Reliable assessments produce consistent allowing me to track and analyse my students' progress accurately and identify trends in their learning journey."

Participant 8: "Reliability is essential for making informed instructional decisions. For me, ensuring that assessment tools consistently measure what they intend to assess, educators can confidently use the results to adapt teaching strategies, provide targeted support, and enhance the overall learning experience for students."

Participant 9: Reliable assessments help demonstrate the effectiveness of educational programs and initiatives. They provide a solid foundation for data-driven decision-making, enabling educators to implement evidence-based practices and continuously improve

teaching and learning outcomes."

Participant 10: for me yes, to determine how well the assessment measures what it claims to measure.

Participant 11: to evaluate the consistency and stability of the assessment results.

Participant 14: Reliable formative assessments provide consistent and dependable information about students' understanding during the learning process.

Participant 15: yes, to determine how well the assessment measures what should measure

Participant 16: to assure the consistency of the assessment.

Quality and Effectiveness

Participant 17: Big yes, to make sure the appropriateness and effectiveness of assessment.

Participant 18: yes, to have an effective and quality learning.

2. Do you ensure the reliability of your formative and summative assessment tools before you implement them to your learners? If yes, can you share to us the methods or processes or practices you used in getting the reliability of the formative and summative assessment tools?

Ensuring the reliability of student assessments involves a thoughtful and systematic approach by educators. Firstly, maintaining clear and well-defined assessment objectives is crucial, as it establishes a foundation for consistent evaluation. Designing assessments with a focus on clarity and unambiguous language contributes to reliability by minimizing interpretation variations. Implementing a standardized grading rubric aids in achieving consistency across different assessors and instances. Regular training and calibration sessions for teachers help align their judgment, reducing subjectivity and enhancing the overall reliability of evaluations. Employing a pilot testing phase allows for identification and rectification of any ambiguities or inconsistencies in assessment items. Additionally, ongoing collaboration among educators to discuss and refine assessment practices fosters a shared understanding of expectations and criteria, contributing to the overall reliability of student assessments. Below are the response of the participants as to the method and processes that the participants used and implemented in their classroom.

TOS Preparation

Participant 2: Through TOS.

Participant 5: Sometimes, only for summative assessment. We undergone item analysis and TOS.

Reliability and Validity

Participant 3: Yes, properly evaluate students' learning at the end of instructional unit of every after discussions.

Participant 6: "Yes, ensuring the reliability of my assessment tools is a critical step in their development. One method I use is that I usually go to books and modules nad find some assessments that aligned to my lesson".

Participant 8: "I prioritize the reliability of my assessments through a careful alignment with established standards and learning objectives. This involves a thorough review process where I cross-reference the assessment content with the curriculum to ensure that it consistently measures the intended skills and knowledge."

Participant 9: "I always check some materials or learning materials that are often used in the DepED so that I can assure the validity and reliability. Sometimes, if I make my assessments then I let it review by my Master Teacher or Head Teacher.

Participant 13: Sometimes I just get some summative assessment from the internet uploaded from different Deped websites so I am really not sure if all of those assessments are reliable."

Participant 14: "I am relying on the learning materials from Deped tambayan through online. So I think it is reliable because it was actually used also by some other teachers.

Participant 18: I based it on my syllabus and specific learning objectives.

Feedback Mechanism

Participant 11: yes. Effective Feedback is one of the methods I usually do, to offer effective and targeted feedback also to support student growth.

Participant 15: yes. I let my colleagues or fellow educators review the assessment for clarity, fairness, and alignment with learning objectives. Peer feedback can provide valuable insight

Participant 16: yes. By having reliable Feedback.

Item Analysis

Participant 1: In our institution or school we are using item analysis.

Participant 4: Yes, I do item analysis.

Pilot Testing

Participant 10: "Before implementing assessments, I conduct a pilot test with a diverse group of students. This helps me identify any potential issues with clarity, wording, or question format. Analyzing the pilot test results allows me to refine the assessment for improved reliability before administering it to the larger student population."

4. What are the challenges encountered by secondary teachers in ensuring the validity and reliability of the assessment tools?

Table 4.

<i>Major Themes</i>	<i>Sub themes</i>
1. Do you find any challenges in ensuring the validity and reliability of the formative and summative assessment tools? If yes, can you enumerate to us what are those challenges you experienced in ensuring the validity and reliability of the formative and summative assessment tools?	Subjectivity/ Scoring Procedure Technology Integration Diversity of Students Time Constraints
2. Do the challenges you encountered in ensuring the validity and reliability of the formative and summative assessment tools affect the performance of learners? If yes, can you cite some examples of how these challenges affect the performance of your learners?	Subjectivity/ Scoring Procedure Technology Integration Diversity of Students Time Constraints

Based on the responses of the participants they have encountered diverse challenges in ensuring the reliability and validity of the formative and summative assessment tools. This includes;

Subjectivity/ Scoring Procedure

The participants said that, teachers may interpret rubric criteria differently, leading to inconsistencies in scoring and potential in biases. Participants also highlighted that the scoring can be influenced by subjective judgement especially when the rubric criteria lack of clarity.

Participant 2: Yes, kay lisod man dayon identify ang mga scores.

Participant 9: "Ensuring the reliability of subjective assessments, such as essays or project evaluations, is challenging due to potential variations in grading interpretations.

Participant 11: I actually have some challenges, the maintaining of the reliability and validity in doing my assessments and the fairness to my students regarding with the test provided to them.

Technology integration

The participants highlighted that the technical glitches or issues in online assessment in the online platform can disrupt the testing process. Disparities in students access to technology can create inequalities in assessment potentially impacting the validity and reliability result.

Participant 10: "An ongoing challenge is adapting assessments is the integration of technology. Like online assessments are secure, accessible, and still maintain their validity and reliability presents a continuous challenge that requires careful consideration and adaptation."

Participant 15: One of the challenges is the integration of the technology, and you have to be more updated on the different strategies on using it in giving your assessment depending on the subject taught.

Participant 8: "One challenge is keeping assessments up-to-date and relevant. As educational standards evolve, like technology. It's crucial to update assessment content accordingly. Balancing the need for modern, pertinent material with the established validity and reliability of assessments requires continuous attention and adjustment."

Diversity of Students

The participants said that, the diverse learning styles may not be adequately accommodated in traditional assessment methods. Students with varying levels of proficiency in language may struggle in the assessment, students could potentially have gaps in knowledge or skills. The participants also highlighted about not intention favor certain cultural background, leading to a lack of fairness and validity for students from diverse cultures.

Participant 12: The challenge I have encountered is that when creating different versions of formative assessments that measure the

same construct and administer them alternately to the same group.

Participant 7: "Two challenges, first is certifying that the tools are fair and accessible to all students can be tricky. Also, striking a balance to address the diversity of learners while maintaining assessment validity and reliability."

Participant 6: It is maintaining clarity in the wording of questions to ensure they are easily understood by students.

Participant 3: Yes. Logical errors, stereotyping.

Participant 6: It is maintaining clarity in the wording of questions to ensure they are easily understood by students.

Time constraints

Participant 5: Yes, one of these challenges is the limited time to draft or make our questions. There are competencies that is too broad that cannot be achieved by the learners.

2. Do the challenges you encountered in ensuring the validity and reliability of the formative and summative assessment tools affect the performance of learners? If yes, can you cite some examples of how these challenges affect the performance of your learners?

The participants said that's the challenges encountered negatively affected the performance on the learners.

Subjectivity

Participant 7: Yes, it really affect the students performance. Certain challenges, such as variations in grading interpretations for subjective assessments, can introduce inconsistencies in learner evaluations. This affect confidence in the grading process and impact their motivation to engage in subsequent assessments, potentially influencing overall performance.

Participant 12: yes, some of the challenges, is when giving uneven item difficulty some students may encounter items that are too challenging or too easy, leading to inaccurate assessments of their overall abilities and potential frustration.

Participant 17: the performance of the student itself, I have hard time in following the rubric in checking.

Participant 6: "Yes, challenges in ensuring the validity and reliability of assessment tools can impact learner performance. For instance, if a formative assessment question is unclear, it might lead to misinterpretation by students, affecting the accuracy of their self-assessment and potentially hindering their ability to grasp key concepts."

Technology Integration

Participant 19: Most of the students cannot submit activities in the gclassroom so there are activities I have hard time checking using hand writing so their grades will be affected.

Participant 1: This may affect students' future academic endeavors, they might not develop competencies necessary for educational or professional growth.

Diversity of Students

Participant 11: "Yes, it really affects it to them like when they have this anxiety the students may underperform, and the assessment may not accurately reflect their true understanding. This can contribute to stress and a lack of confidence in their academic abilities.

Time constraints

Participants 9: It affects students ability to learn effective because time limited.

Participants 12: has negative effect because students feels like they do not have enough time to learn and apply the skills they learn.

Participant 13: ." In my experience, If an assessment tools are not aligned with the intended learning objectives, students may feel unfairly assessed, leading to frustration and confusion. It can also result in an inaccurate representation of their actual understanding.

Participants 14: Since I have different kind of students regardless of their tribe and religion, I have to make sure that I have cultural references to avoid assessments with cultural bias.

5. What intervention can be employed to address the challenges?

Based on the responses provided by the participants, there are number of intervention being mentioned being used in the classroom. The themes that emerge from these responses include:

Communication

The participants foster open communication in addressing the concern and ensured a shared understanding of assessment goals. Basing on the response of the participants this are the common answers.



Table 5.

<i>Major Themes</i>	<i>Sub themes</i>
Based on the challenges you encountered in ensuring the validity and reliability of the formative and summative assessment tools, can you share to us on how you overcome those challenges? What have you done to overcome these challenges? What did you do?	Communication Clear Assessment Objectives Technology Integration Ongoing Professional Development
Are those interventions effective? Are those interventions helpful? Were the challenges in ensuring the validity and reliability of the formative and summative assessment tools resolved? In what way that the challenges you encountered were resolved?	Yes, effective

Participant 16: through collaborative thinking, we were able to come up with best solution.

Participant 17: yes, proper channeling and communication.

Participant 18: Expressing one’s concern and proper communication is really effective.

Participant 11: yes. Clear communication is very important to the learners as well as to their parents.

Participant 1: Yes. Every LAC session and meeting with the principal is really a big help and effective to overcome challenges encountered in class.

Participant 12: “ Our school disciplinarian and guidance counselor in school are very active. They talked to the students who needs more advice, especially those who have failing grades, family problems and etc.

Participant 13: We are hoping to attend more seminars related to this cultural sensitivity training to be more knowledgeable about it for our learners also.

Clear Assessment Objectives

The participants clearly define the objectives and outcomes that the assessment aims to measure, and ensuring the alignment with curriculum goals.

Participant 6: "Yes, the interventions have proven effective. The thorough review process involving colleagues and students has significantly improved the clarity of assessment questions.

Participant 10: "The interventions to keep assessments aligned with standards have been helpful. I always update myself in and staying informed about curriculum updates to ensure that assessment content remains relevant.

Participant 15: yes. Through proper emphasis of the purpose it would really enlighten the students.

Participant 16: make sure to emphasized the purpose of the assessment so that students would understand why activity should be done.

Technology Integration

The participants explore technology tools for assessment to enhance reliability and reduce human error.

Participant 8: “ I think somewhat yes. Offering alternative formats and seeking student input has created a more inclusive assessment environment. Using technology and even different Learning Distance Modalities as well our students appreciate the flexibility.

Participant 9: "I think we still have problems on the interventions for online assessments specially those schools who don’t have enough facilities, technologies or gadgets like laptop or cell phones and even internet connection. I think the school must invest in user-friendly platforms and conducting trial runs has minimized technical issues.

Participant 14: I am more on self learning, so I challenged my self learning more about technology by searching online. I also let my students to explore more on it and encourage them in learning by doing using the internet.

Participant 15: Ensure that students have equitable access to technology. Provide technical support and training for both educators and students to address potential issues during technology-based assessment. With the help also of their parents."

Ongoing Professional Development

The participants wish to have regular training and professional development and to be keep informed about the best practices and emerging trends in the assessment.

Participant 7: "The interventions, including rigorous training and standardization for subjective assessments, have been helpful which I love attending or participating. Grading consistency has notably improved, leading to fairer evaluations. Teachers now share a common understanding of grading criteria, reducing variations and enhancing the reliability of assessments."

Are those interventions effective? Are those interventions helpful? Were the challenges in ensuring the validity and reliability of the

formative and summative assessment tools resolved? In what way that the challenges you encountered were resolved?

Majority of the participants response that their interventions were effective to address the concern and challenges being encountered. However, only one responded that it's not affected at all and that the participants need to explore more intervention.

Conclusions

The research findings of this study reveal in the context of ensuring the validity and reliability of assessment tools, the comprehensive array of formative and summative assessment tools identified in this study reflects a commitment to a multifaceted evaluation approach.

For formative assessment, the richness of tools such as assignments, short quizzes, discussions, and collaborative methods implies a varied and continuous evaluation of student understanding. To ensure validity, these formative tools must align closely with the learning objectives, providing timely insights into students' progress. The emphasis on immediate feedback through tools like quick quizzes and oral recitation enhances the reliability of the assessment, enabling educators to make informed instructional adjustments.

In summative assessment, the coexistence of traditional tools like written exams with innovative methods such as oral presentations and hands-on activities requires careful consideration of validity. It is crucial that these summative tools effectively measure the intended learning outcomes. The recognition of the importance of assessing communication and presentation skills in oral exams aligns with the broader educational goals, contributing to the validity of the assessment.

Moreover, the commitment to engaging students actively, providing timely feedback, and customizing instruction aligns with best practices for ensuring both validity and reliability. The balanced integration of diverse tools reflects a holistic approach to education, contributing to the overall trustworthiness of the assessment process. As educators tailor assessments to different aspects of student understanding, they enhance the overall validity and reliability of the evaluation methods employed in both formative and summative contexts.

For Teachers. Teachers are recommended to adopt a balanced approach to assessment by incorporating a mix of tools, including online quizzes, interactive discussions, standardized tests, project presentations, and hands-on activities. This variety ensures a comprehensive evaluation of students' understanding and skills. Emphasizing active student participation, customization of instruction, and immediate feedback mechanisms contributes to a more effective and student-centered formative assessment approach, enhancing the validity and reliability of ongoing evaluations.

Additionally, teachers should explore diverse summative assessment tools such as traditional exams, oral presentations, hands-on activities, and essays, providing students with varied opportunities to showcase their knowledge and skills. Prioritizing the assessment of communication and presentation skills aligns with the evolving demands of academic and professional settings, further contributing to the validity and reliability of assessment practices.

For School Heads. School heads should consider fostering a culture of dynamic assessment practices within their institutions. Supporting teachers in the integration of collaborative assessment methods, such as peer assessment and think-pair-share, aligns with best practices for enhancing student engagement and promoting a collaborative learning environment.

Encouraging a mix of diverse formative and summative assessment tools ensures a comprehensive and well-rounded approach that contributes to the overall validity and reliability of the assessment.

For Future Researchers. Future researchers are encouraged to conduct in-depth investigations into the effectiveness and impact of a diverse range of assessment tools, both for formative and summative assessments.

Further exploration of the integration and outcomes of collaborative assessment methods, such as peer assessment and think-pair-share, would contribute valuable insights into enhancing the validity and reliability of assessment. Examining the long-term implications and success of utilizing a combination of these tools will provide a foundation for refining assessment methodologies in future educational research.

References

- Kadir, J. S., Zaim, M. & Refnaldi, R. (2019). Developing Instruments for Evaluating Validity, Practicality, and Effectiveness of The Authentic Assessment for Speaking Skill at Junior High School
- Kimberlin, C. L. & Winterstein A. G. (2008). Validity and Reliability of Measurement Instruments Used in Research. *American Journal of Health-System Pharmacy*, Published: 01 December 2008. Volume 65, Issue 23, 1 December 2008, Pages 2276–2284, <https://doi.org/10.2146/ajhp070364>
- Nurdin, H. R., Zaim, M. & Refnaldi, R. (2019). Developing Instruments for Evaluating the Authentic Assessment for Speaking Skill at Junior High School



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