

The Experiences of Elementary School Teachers in Using Multimodal Assessment

Ms. Gina Valladolid Fualo

Master Teacher I, Department of Education

ABSTRACT

This study investigated the experiences of elementary teachers in Castilla East District in implementing multimodal assessment as an alternative to traditional pen-and-paper testing. Recognizing assessment as a crucial element in improving student learning, the research aimed to explore teachers' insights regarding the effectiveness of multimodal assessment, the strategies they integrate into daily instruction, the challenges they encounter, and their perceptions of its impact on learners' engagement and academic performance. Guided by the Constructivist Learning Theory, Multiple Intelligences Theory, and other relevant frameworks, the study employed a qualitative phenomenological design. Nineteen elementary teachers from nineteen schools participated through interviews and focus group discussion.

Findings revealed that teachers acknowledged multimodal assessment as a meaningful tool to capture diverse learners' abilities, foster engagement, and support creativity and critical thinking. However, challenges emerged, particularly in relation to time constraints, limited resources, lack of training, and the absence of standardized models. Teachers expressed the need for clearer guidelines and professional development opportunities to fully utilize multimodal assessment in evaluating students' learning progress. Despite these challenges, most participants perceived positive effects on learner motivation, participation, and overall learning outcomes.

The study highlights the importance of providing systemic support and capacity-building initiatives to help teachers effectively implement multimodal assessment. As an output, a multimodal exemplar model was developed to guide teachers in designing innovative and inclusive assessments. The findings contribute to ongoing discussions on transforming classroom assessment into a more learner-centered, equitable, and meaningful practice.

CHAPTER I: INTRODUCTION

Education plays a vital role in shaping the future of every community and nation. The progress and success of society largely depend on how effectively it nurtures and educates its young citizens. While curriculum developers and educational planners design what should be taught at each grade level, teachers serve as the key implementers who bring learning to life in the classroom. They are responsible for creating meaningful learning experiences and for choosing the most appropriate assessment methods that truly reflect students' understanding and potential.

The awareness about the learners' readiness and potential can be fairly possible only after resorting to the process of proper assessment and evaluation of the learners' potential, abilities, interests and attitudes regarding the learning task. Assessment serves as a primary pathway for facilitating and evidencing the achievement of learning outcomes and the provision of feedback throughout a learning event. As such,

teachers should “consider how every assessment practice and associated activity is arranged, and the purposes behind them” (Broadbent et al., 2018, p. 308).

Within the three types of assessments, there are a variety of task types that can authentically enable and capture what a learner is able to do in relation to associated learning outcomes. Truly, the type of assessment practices the teacher chooses to apply to the learning event will have a major impact on learners, teaching teams and academic achievement/progression (Broadbent et al., 2018).

Assessment is the process of gathering information that accurately reflects how well a student is achieving the curriculum expectations in a grade or course. The primary purpose of assessment is to improve student learning. Assessment for the purpose of improving student learning is seen as both “assessment for learning” and “assessment as learning”. As part of assessment for learning, teachers provide students with descriptive feedback and coaching for improvement. Teachers engage in assessment as learning by helping all students develop their capacity to be independent, autonomous learners who are able to set individual goals, monitor their own progress, determine next steps, and reflect on their thinking and learning.

Assessment for learning and as learning requires that students and teachers share a common understanding of what is being learned. Learning goals clearly identify what students are expected to know and be able to do, in language that students can readily understand. Teachers develop learning goals based on the curriculum expectations and share them with students at or near the beginning of a cycle of learning. Teachers and students come to a common understanding of the learning goals through discussion and clarification during instruction. Success criteria describe in specific terms what successful attainment of the learning goals looks like. When planning assessment and instruction, teachers, guided by the achievement chart for the particular subject, identify the criteria they will use to assess students’ learning, as well as what evidence of learning students will provide to demonstrate their knowledge and skills. The success criteria are used to develop an assessment tool, such as a checklist, a rubric, or an exit card (i.e., a student’s self-assessment of learning).

Assessments are fundamental part of learner’s academic life. They allow learners and teachers to evaluate the learning progress. They serve as a guideline for decisions regarding grades, curriculum, and educational needs. The relationship between assessment and effective student learning continues to evolve due to changes in the requisite skills and knowledge base. This implies that teachers should actively participate in the decision-making regarding assessment modes and methods. By doing so, teachers can collect data from various sources to evaluate the degree of students’ understanding of the fundamental concepts. The data can then be reviewed and put in context to predict student achievement, which would help teachers clear any obstacles that prevent students from achieving their potential. Furthermore, it can aid in identifying the causes of distress to students to help bridge the gap between teaching and learning. Fatima Almoemen said that the teacher who assesses his/her students and providing feedback is like the optician who gives people the suitable glasses to see better and clear. Like an optician who assesses a person’s vision and prescribes corrective lenses to help him/her see more clearly, a teacher evaluates a students’ understanding and offers constructive feedback to improve their learning outcomes.

Jonathan Paul White stated that learning environments should also include different options for students to demonstrate their understanding and competence. This is a key shortcoming in current institutions’ provisions particularly with assessment. He outlines several drawbacks of traditional learning and assessment: limiting teaching methods and variety of content; hindering learners’ ability to demonstrate understanding; failing to prepare learners for their future; and most importantly, restricting the types of learners who can achieve success. White, 2022 research into multimodal assessment with

university students revealed, unexpectedly, that students who were less successful in conventional assessments, such as essays and reports, performed better in a multimodal assessment. They also commented positively on the opportunity to demonstrate their knowledge and understanding through various media. This indicates that multimodal learning and assessment enhance the overall quality and effectiveness of education for all students, not just those with specific learning differences.

The study of Kustini et al., , showed that students' perceptions of a multimodal programme revealed motivation, enjoyment and engagement as key theme. In fact according to them, even when the use of multimodal methods has not shown a discernible improvement in learning performance, students commented positively on multimodal methods and perceived benefits in comprehension and retention.

Canale stated that when students have the opportunity to create multimodal texts, they are both negotiating and democratising the curriculum, enabling a focus on personalised meaning-making through designing and shaping their communication into distinctive forms. He added that teachers can also experience greater agency, through the creation, synthesis and curation of multimodal teaching materials. Diamantopoulou and Orevik have pointed out that it is not sufficient to implement multimodal methods of instruction and text creation; institutions also need to recognize multimodal learning through formal assessment structures. Cope and Kalantzis, argued that subjects tend to be compartmentalized, relying on ready-made formats such as published textbooks and exams based on memorization.

In Philippine education, DepEd Order no. 8 s.2015, stated that assessment is a process used to keep track of learner's progress in relation to learning standards and in the development of 21st century skills; to promote self-reflection and personal accountability among students about their own learning; to provide bases for the profiling of student performance on the learning competencies and standards of the curriculum. Various kinds of assessment shall be used appropriately for different learners who come from diverse contexts, such as cultural background and life experiences.

Additionally, the teachers should employ classroom assessment methods that are consistent with the curriculum standards. It is important for teachers to always inform learners about the objectives of the lesson so that the latter will aim to meet or even exceed the standards. The teacher provides immediate feedback to students about their learning progress.

Measures should be taken to ensure task, marking and feedback are equitable between groups of learners and different cohorts. The development of marking rubrics can help with this. Workload also needs to be considered when designing and selecting assessment inclusions and when thinking about the provision of feedback and associated turnaround times. Feedback is one of the most powerful influences on learning and achievement, but this impact can be either positive or negative. Formative feedback has been shown to be the single most important factor in learning according to Hattie and Timperley.

However, a large-scale study by Jessop, et al., conversely 'found that most students did not value, complete or even notice the presence of ungraded formative tasks'. Therefore, when designing assessment tasks, it is important to explicitly reiterate the value of formative tasks. It is also important to revisit the learning outcomes to consider what the task needs to evidence. Reflecting on the measurable verb in relation to Bloom's Taxonomy can provide insight into the associated complexity of the task.

Teachers use a variety of strategies to measure learning and progress in their classrooms. Teachers will obtain assessment information through a variety of means, which may include formal and informal observations, discussions, learning conversations, questioning, conferences, homework, tasks done in groups, demonstrations, projects, portfolios, developmental continua, performances, peer and self-

assessments, self-reflections, essays, and tests. Assessment strategies can help teachers ensure the curriculum is effective and determine whether students are ready to move to the next level of study. Learning more about the different types of strategies may help the teachers determine which are most effective to use in their classroom. Traditionally, teachers have relied on tests and quizzes to assess progress. Many alternative assessment strategies exist, however, that are often more effective, subjective and engaging for students. The key is to use a variety of fair and consistent assessments.

Student learning in many disciplines has traditionally been assessed through written compositions and oral presentations, often in high-stakes exam environments. For students, this can lead to disengagement or difficulty in their ability to share, critique and generate knowledge in school settings. For teachers, this presents challenges to their pedagogy, including how they formatively and summatively assess student learning. Multimodal texts are often collaborative in nature and can challenge students to critically consider places and mobilities in terms of their content, representation and audience. Moving beyond an audience of one, such texts offer authentic opportunities for students to engage with disciplinary knowledge in ways that are innovative, creative and imaginative. Burn and Parker (2023) highlight the importance of process as well as product.

Black & Wiliam stated that assessment has long been recognized as a key lever for improving teaching and learning in the classroom. Heritage & Wylie supported the idea of Black & Wiliam. According to him, classroom-based assessment enables teachers to gather information about students' content learning and ways of expressing that learning and then use that information to engage in responsive instruction. In this way, classroom-based assessment has the potential to strengthen the relationship between teaching and learning.

Sutton posits that it is worth noting, right from the start, that assessment is a human process, conducted by and with human beings, and subject inevitably to the frailties of human judgement. However crisp and objective we might try to make it, and however neatly quantifiable may be our "results", assessment is closer to an art than a science. It is, after all, an exercise in human communication.

Students' interest in learning and their belief that they can learn are critical to their success. After reviewing the impact of testing on students' motivation to learn, Harlen and Deakin Crick recommended the use of assessment for learning and as learning – including strategies such as sharing learning goals and success criteria, providing feedback in relation to goals, and developing students' ability to self-assess – as a way of increasing students' engagement in and commitment to learning. Assessment plays a critical role in teaching and learning and should have as its goal the development of students as independent and autonomous learners. As an integral part of teaching and learning, assessment should be planned concurrently with instruction and integrated seamlessly into the learning cycle to inform instruction, guide next steps, and help teachers and students monitor students' progress towards achieving learning goals.

The use of assessment to improve student learning and to help students become independent learners requires teachers and students to acknowledge and enact a fundamental shift in how they perceive their roles in the learning process. In a traditional assessment paradigm, the teacher is perceived as the active agent in the process, determining goals and criteria for successful achievement, delivering instruction, and evaluating student achievement at the end of a period of learning. The use of assessment for the purpose of improving learning and helping students become independent learners requires a culture in which student and teacher learn together in a collaborative relationship, each playing an active role in setting learning goals, developing success criteria, giving and receiving feedback, monitoring progress, and adjusting learning strategies. The teacher acts as a "lead learner", providing support while gradually

releasing more and more responsibility to the student, as the student develops the knowledge and skills needed to become an independent learners.

The researcher observes that the elementary teachers in Castilla East District are struggling in using multimodal assessment in assessing the learning performance and progress of the learners. Some teachers claimed that they use the traditional way of assessment (pen and paper test) to give “fair” assessment to all. However, some teachers are in doubt if pen and paper test really promotes fairness. Some of them said that some of their learners know the answer but they cannot just put it into words.

In light of the problem and its repercussions, the researcher is motivated to conduct this study to investigate the experiences of elementary school teachers in using multimodal assessment. Likewise, this study explores the insights of elementary school teachers regarding the effectiveness of multimodal assessment in evaluating learners learning, the multimodal assessment strategies integrated by the teachers into their daily practices, the challenges that the elementary school teachers in Castilla East District face when implementing multimodal assessment in their classrooms as well as their perceptions regarding the impact of multimodal assessment on learners’ engagement and learning outcomes.

SETTING OF THE STUDY

The seat of the municipal government when it became an independent town in 1827 under the province of Caceres was located in barangay Poblacion. The municipal building was built during the Spanish regime where the name Castilla was recommended by the very wealthy and influential Spaniard in the name of Don Eugenio Santos Martinez to honor his hometown, Castilla, Spain which is also the royal birth place of Queen Isabela.

Castilla is a 3rd class municipality in the province of Sorsogon, Philippines. According to the 2015 census, it has a population of 57,827 people.

The cradle of Castilla could be traced back in antiquity. Bikol historians believed that Castilla had its humble beginnings at Bulabog (now a Barangay of Sorsogon City), which eventually evolved into a small town composed of nearby settlements of Inarihan, Capuy (former site of what is now Sorsogon City), Macalaya and Cumadcad. It was formalized as an independent town under the then “Provincia de Albay” (which at that time includes Sorsogon, Masbate and Catanduanes) in 1827. A wealthy Spaniard, Eugenio Santos Martinez, who became an influential figure of Bulabog at that time and a native of Castilla in Spain, recommended the transfer of the town’s seat of government to where it is now located, as well as, the naming of the place in honor of his hometown and the birthplace of Queen Isabella I, who reigned in Spain from 1451 – 1504. When Sorsogon became an independent province in 1894, Castilla was annexed as one of its towns.

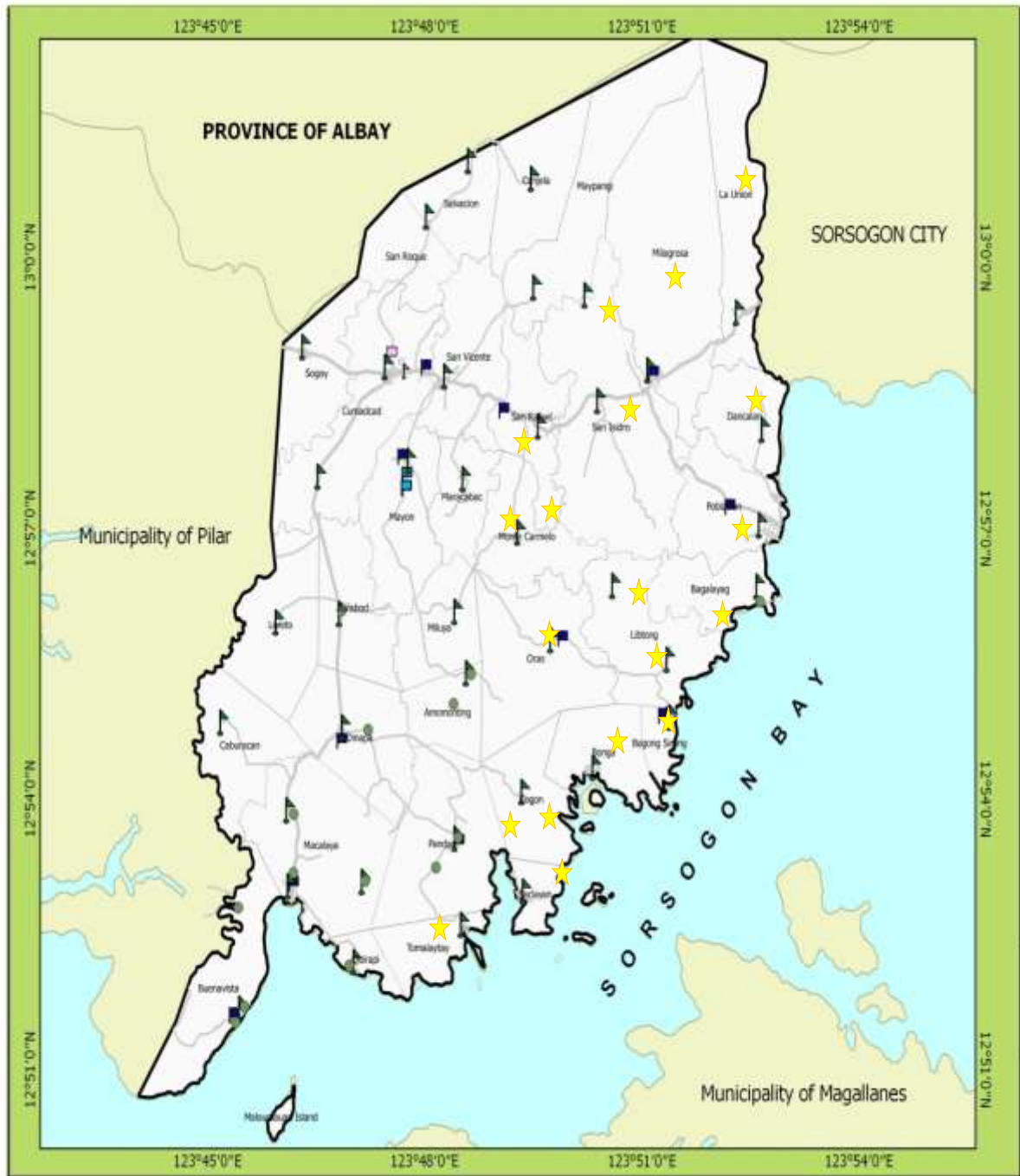
Castilla is one of the coastal municipalities of the Province of Sorsogon, which is situated in the southernmost tip of Luzon. Castilla is flanked on the North by the Municipality of Manito, Albay, on its Western tip by the Municipality of Pilar, Sorsogon, on its Southern point by the Sorsogon Bay, and adjacent to its Eastern side is the City of Sorsogon. The seat of government is formerly at the Poblacion, some 4.5 kilometers from the National Highway, however, in 1968, under the auspices of the then Mayor Alejandro Lladones, for reasons of facility and ease of access to government official business, it’s gubernatorial seat was transferred at Cumadcad, an urbanizing barangay, which is traversed by the high voltage transmission lines coming from PNOC – EDC, Bacon – Manito and Leyte Geothermal Plants forming the Luzon Grid. Castilla is strategically situated midway between Legazpi City and Sorsogon

City. It is 38 kilometers away from the Regional Center in Legazpi City and 22 kilometers from the City of Sorsogon.

Farming and fishing are the main employment opportunities but are characteristically seasoned in nature. Castilla has 13 coastal barangays, which depend on fishing as the main economic activity. Castilla has a total land area of 18,620 hectares comprising 8.71% of the total land area of the province of Sorsogon. The municipality is politically subdivided into thirty-four (34) barangays, three (3) of which are urbanizing: Poblacion, Cumadcad and Macalaya; thirteen (13) are located on its vast coastline; eleven (11) are lowland; and ten (10) are upland barangays. The following are the barangays of Castilla, in alphabetical order: Amomonting, Bagalayag, Bagong Sirang, Bonga, Buenavista, Burabod, Caburacan, Canjela, Cogon, Cumadcad, Dancalan, Dinapa, La Union, Libtong, Loreto, Macalaya, Maracabac, Mayon, Maypangi, Milagrosa, Miluya, Monte Carmelo, Oras, Pandan, Poblacion, Quirapi, Saclayan, Salvacion, San Isidro, San Rafael, San Roque, San Vicente, Sogoy, and Tomalaytay.

The politico-administrative records of the municipality list Ignacio Lascano as its first recorded Capitan or Gobernadorcillo and succeeded by Vicente Lasala in 1857. As to who succeeded Lasala, documents do not show.

At present, the municipality of Castilla is divided into two districts--Castilla East District & Castilla West District. Castilla East District has nineteen (19) elementary schools and Castilla West District has twenty (20) elementary schools bringing a total of thirty-nine (39) elementary schools in the municipality of Castilla.



Legend:

-Participant Schools

FIGURE 1. MAP OF CASTILLA SHOWING THE PARTICIPANT SCHOOLS

STATEMENT OF THE PROBLEM

This study aimed to find out the experiences of selected elementary teachers of Castilla East District in using multimodal assessment.

Specifically, it sought answers to the following questions:

1. What are the insights of elementary school teachers regarding the effectiveness of multimodal assessment in evaluating learners learning?
2. How do elementary school teachers use multimodal assessment strategies in their daily teaching practices?
3. What challenges do elementary school teachers face when implementing multimodal assessment in their classrooms?
4. How do elementary school teachers perceive the impact of multimodal assessment on learners' engagement and learning outcomes?
5. What multimodal assessment exemplar should be prepared to serve as model for teachers?

RESEARCH OBJECTIVES

Although multimodal assessment has many benefits, it can be difficult for teachers to use it regularly. Some common challenges include not having enough time, resources, or training, as well as not having examples to follow. Teachers' understanding and opinions of this assessment approach also affect how well it is used in classrooms. The objectives listed below correspond to the stated problem statements.

1. To explore the insights of elementary school teachers regarding the effectiveness of multimodal assessment in evaluating learners' learning.
2. To examine how elementary school teachers use multimodal assessment strategies into their daily teaching practices.
3. To identify the challenges elementary school teachers face when implementing multimodal assessment in their classrooms.
4. To investigate how elementary school teachers perceive the impact of multimodal assessment on learners' engagement and learning outcomes.
5. To develop a multimodal assessment exemplar that can serve as a model for teachers.

RESEARCH ASSUMPTIONS

The researcher formulated the following assumptions:

1. The researcher assumes that the teachers have a positive judgement with regards to the effectiveness of multimodal assessment in evaluating learners learning.
2. Elementary school teachers have integrated multimodal assessment strategies like roleplaying, oral presentations, learning station assessment into their daily teaching practices.
3. Challenges/difficulties/problems like insufficient teacher training, difficulty in creating fair and consistent rubrics , time constraints encountered with regards to the implementation of multimodal assessment in their classrooms.
4. Elementary school teachers perceive the impact of multimodal assessment on learners' engagement and learning outcomes positively, believing that the use of varied modes of assessment enhances students' participation, motivation, and overall academic performance.
5. Identified professional development needs of elementary school teachers will improve the use multimodal assessment in their teaching.

SCOPE AND DELIMITATION

This study involved the elementary teachers of nineteen (19) elementary schools in Castilla East District. This study focused on the multimodal assessment used by the elementary teachers. Specifically, this study

focused on the the experiences of selected elementary school teachers of Castilla East District in using multimodal assessment and the professional development needs that the elementary school teachers need to identify to effectively use multimodal assessment in their teaching practices. The participants of this study are nineteen (19) selected teachers of Castilla East District. This study did not include the other teachers of Castilla East District. Other teachers in the district were not included as participants because they either do not currently implement multimodal assessment or do not have sufficient experience with its strategies.

Conceptual Framework

Department of Education emphasizes the importance of raising academic standards and measuring student achievement as essential strategies for promoting educational excellence and equity across the nation's schools. This commitment is encapsulated in the Policy Guidelines on Classroom Assessment for the K to 12 Basic Education Program , which supports the country in establishing challenging academic standards, developing aligned assessments, and creating accountability systems for districts and schools. This study determined the Experiences of Elementary Teachers of Castilla East District in Using Multimodal Assessment which could be a basis for enhancement measures in the said school/district. Hence, Figure 2 is its conceptual paradigm. This mainly consists of three components: Input, Process and Output. These three components have their own underlying steps which will guide the researcher in the completion of the academic work.

For this study, the input involves the experiences of elementary teachers of Castilla East District in using multimodal assessment. For the process component, it will involve a survey questionnaire on the assessment of teachers regarding the use of multimodal assessment. Unstructured interview is also deemed beneficial to enrich the study. The output component is a multimodal lesson exemplar for elementary school teachers to effectively use multimodal assessment in their teaching practices, thereby enhance the learning performance of the pupils.

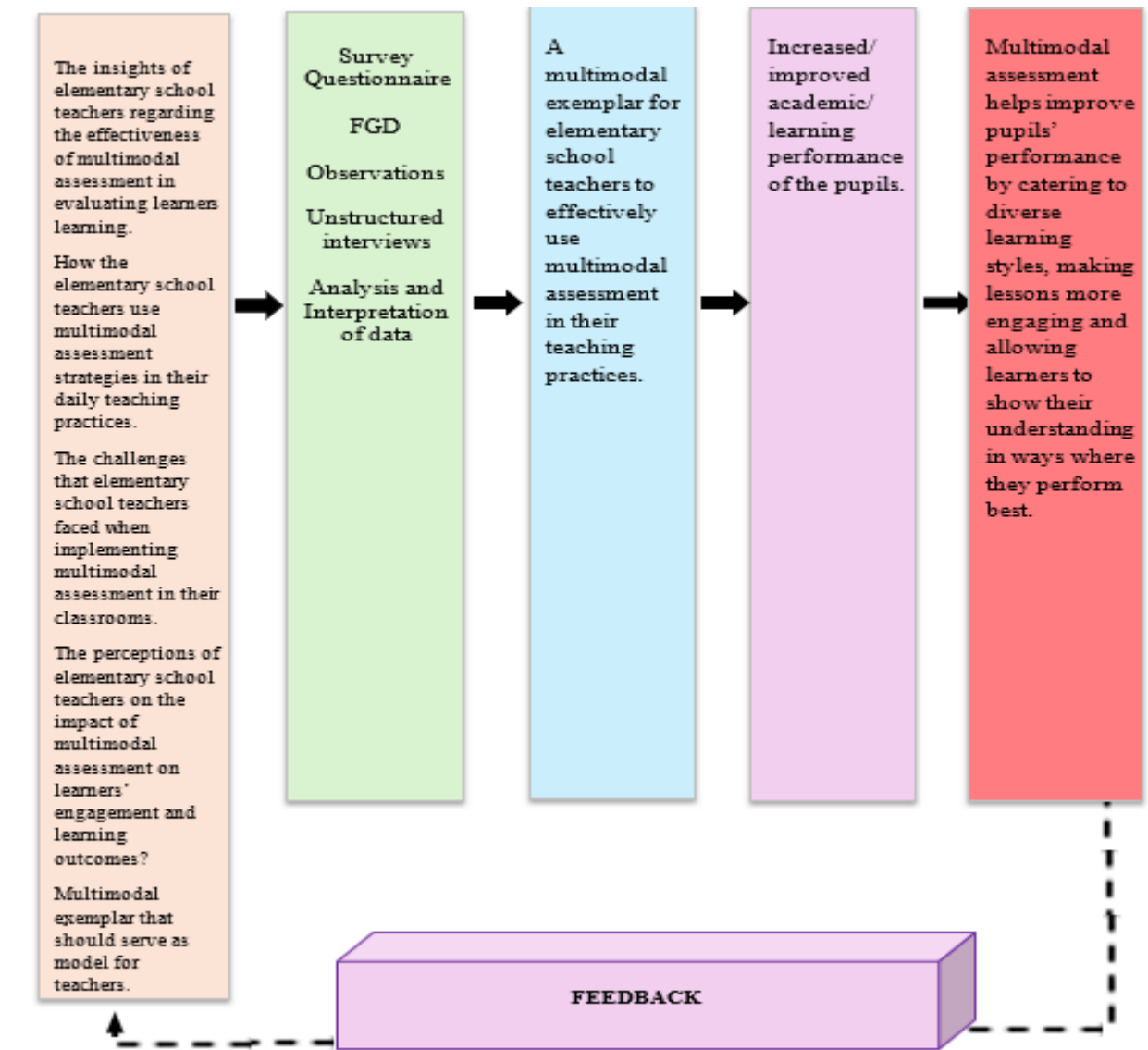


FIGURE 2. CONCEPTUAL PARADIGM

SIGNIFICANCE OF THE STUDY

The findings of this study will be beneficial to the following:

Policy Makers: The findings of this study may serve as a basis for policy makers in creating learning assessments that promote quality education for all learners. The policy makers could also use the results to review and improve existing assessment policies.

Curriculum Writers: The findings of this study can guide curriculum writers in developing clear guidelines and exemplar tools for teachers, helping them confidently and consistently implement multimodal assessments in the classroom.

Assessment Writers: The insights gained from this study can assist assessment writers in designing more innovative, flexible, and practical assessment frameworks that cater to diverse learners. It may also guide the creation of exemplar assessments that lead to more accurate and meaningful evaluations of student learning.

Public Schools District Supervisor (PSDS): The results of the study could help the PSDS provide technical assistance to schools, particularly in effective school management and curriculum implementa-

tion.

School Heads: The findings may help school heads identify and adopt various effective assessment modalities that can enhance teaching and learning in their schools.

Teachers: The findings of this study may generate new knowledge and insights for teachers, enabling them to address challenges related to learners' academic performance and apply more effective multimodal assessment strategies.

Pupils: As a result of improved assessment practices, pupils will develop greater trust in their teachers and parents as guides and role models, motivating them to enhance their academic performance.

Community: This study may inspire community members to actively participate in school activities and initiatives that promote children's academic growth and overall development.

Parents: The findings may increase parents' awareness of their roles in supporting their children's education and encourage stronger cooperation with teachers in school programs and projects.

Future Researchers: The findings of this study may serve as reference material for future researchers who wish to conduct similar studies or explore related topics on multimodal assessment.

DEFINITION OF TERMS

To make this study more comprehensive, the researcher offers the reader a list of definitions of terms that are not widely known.

Academic Performance. The measurement of student achievement across various academic subjects. Teachers and education officials typically measure achievement using classroom performance, graduation rates and results from standardized tests. It is the end result of the efforts exerted by the students. It represents outcomes that indicate the extent to which a person has accomplished specific goals.

Assessment. The systematic process of collecting, analyzing, and interpreting information about students' learning and performance. It aims to determine how well learners have achieved the intended learning objectives or competencies. Assessment provides feedback to both teachers and students to guide instruction, improve learning outcomes, and inform educational decisions. It can take various forms—such as tests, projects, observations, and performance tasks—and may be used for learning (to support improvement), as learning (to promote self-reflection), or of learning (to measure achievement). Overall, assessment serves as a vital tool for enhancing teaching effectiveness and student success.

Direct Assessment. The evaluation of student learning through observable and measurable evidence of what learners know and can do. It involves the actual demonstration of skills, knowledge, or competencies rather than relying on perceptions or indirect indicators.

Elementary School Teachers. Are professional educators responsible for teaching young learners in the early years of formal education, typically from kindergarten to grade six. They play a crucial role in helping children develop foundational skills in reading, writing, mathematics, science, and other subjects. As curriculum implementers, they adapt teaching methods and assessments to meet the diverse needs and abilities of their pupils.

Evaluation. the process of making judgments about the value, quality, or effectiveness of a program, process, or learning outcome based on collected information. In education, evaluation involves interpreting assessment data to determine the extent to which learning objectives have been achieved and to guide decisions about teaching strategies, curriculum, and student progress.

Experiences. The knowledge, skills, and understanding that individuals gain through direct involvement in activities, events, or situations. In education, experiences encompass the practical encounters and

interactions that teachers and learners go through in the teaching–learning process.

Learner. An individual who is actively engaged in the process of acquiring knowledge, skills, attitudes, and values through study, experience, or instruction. In the educational context, a learner is a student who participates in various learning activities designed to promote understanding and personal growth.

Learning assessment. A means for understanding, measuring and improving the quality and equity of education. It deals with the large-scale collection, research, analysis, dissemination and use of information from multiple sources on what learners know and what they can do with what they have learned, which and how different factors affect their learning, and how these competencies are distributed among different groups of learners. It forms part of the monitoring and evaluation process to assess how well the education system is performing to deliver expected learning outcomes.

Learning Performance. The level of achievement a learner demonstrates in relation to the learning objectives or competencies set within a curriculum. It reflects how effectively a student has understood, applied, and retained the knowledge and skills taught.

Multimodal. The use or combination of multiple modes or forms of communication and expression to convey meaning or demonstrate understanding.

Multimodal assessment. An approach to evaluating student learning that uses multiple modes or forms of expression, such as visual, auditory, written, spoken, and digital methods. Instead of relying solely on traditional tests, multimodal assessment allows students to demonstrate their understanding and skills through a variety of channels like presentations, drawings, videos, performances, and interactive projects. This approach recognizes diverse learning styles and encourages creativity, engagement, and a more comprehensive evaluation of student learning.

Multimodal Exemplar. A model or sample work that demonstrates how different modes of communication—such as text, images, audio, video, gestures, and digital media—can be effectively combined to convey meaning or achieve a learning objective. In education, a multimodal exemplar serves as a reference or guide for both teachers and students to understand what high-quality multimodal work looks like. It illustrates the standards, criteria, and creative possibilities of using multiple modes in learning or assessment tasks, helping learners produce well-integrated and meaningful multimodal outputs.

Traditional assessment. A conventional methods of evaluating student learning, typically through standardized tests, quizzes, and written exams. These assessments usually focus on measuring students' knowledge and skills through selected-response (multiple-choice) or constructed-response (essay or short answer) questions. Traditional assessments often emphasize recall of information and correct answers, and are usually administered in a controlled, timed environment.

CHAPTER II: REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents the review of related literature and studies that will provide relevant information about the theoretical, conceptual and operational frameworks of the study. It also includes synthesis of the state-of –the art. The theories reflected in the different literature and studies will provide significant insights in the conduct of the study.

Theoretical Framework

The hereunder presented theories are intently chosen due to their deep relevance to the present study. The theories cited will also provide ample information to the would-be readers of this masterpiece. One of which is the Constructivist Learning Theory, it posits that learners construct knowledge through experiences and interactions with their environment. In terms of multimodal assessment, this theory

supports the idea that assessments should reflect real-world contexts where learners apply their knowledge across various modalities. Next is Connectivism Theory which emphasizes collaboration, continuous feedback, the use of digital tools for authentic evaluation methods, and encourages self-directed learning through networked interactions among learners.

Another is Theory of Autonomy and Independence, it reflects the essential component of independence of the learners. According to this theory the learner must realize that their academic success is a result of their own personal accomplishment. Hence, the present study considers the view of the foregoing theory that assessment should offer chances for learners to individualize, personalize and contextualize the knowledge to adapt to different learner's needs. The teacher should facilitate learning rather than act as the authority of knowledge. Item Response Theory (IRT) examines the relationship between individuals' abilities and their item responses on assessments, allowing for more nuanced interpretations of test data.

Multiple Intelligences Theory developed by Howard Gardner, the Multiple Intelligences Theory suggests that intelligence is not a single entity but rather a combination of various types of intelligences (e.g., linguistic, logical-mathematical, spatial, musical). This theory supports the idea behind multimodal assessment by advocating for assessments that cater to different intelligences.

With the abovementioned theories clearly elucidated, the researcher therefore theorizes that theories related to multimodal assessment emphasize the importance of recognizing diverse communicative modes and learner preferences when designing evaluations. By integrating insights from Constructivist Learning Theory, Connectivism Theory, Theory of Autonomy And Independence, Item Response Theory and Multiple Intelligences Theory into assessment practices, teachers can develop more inclusive and effective assessment methods.

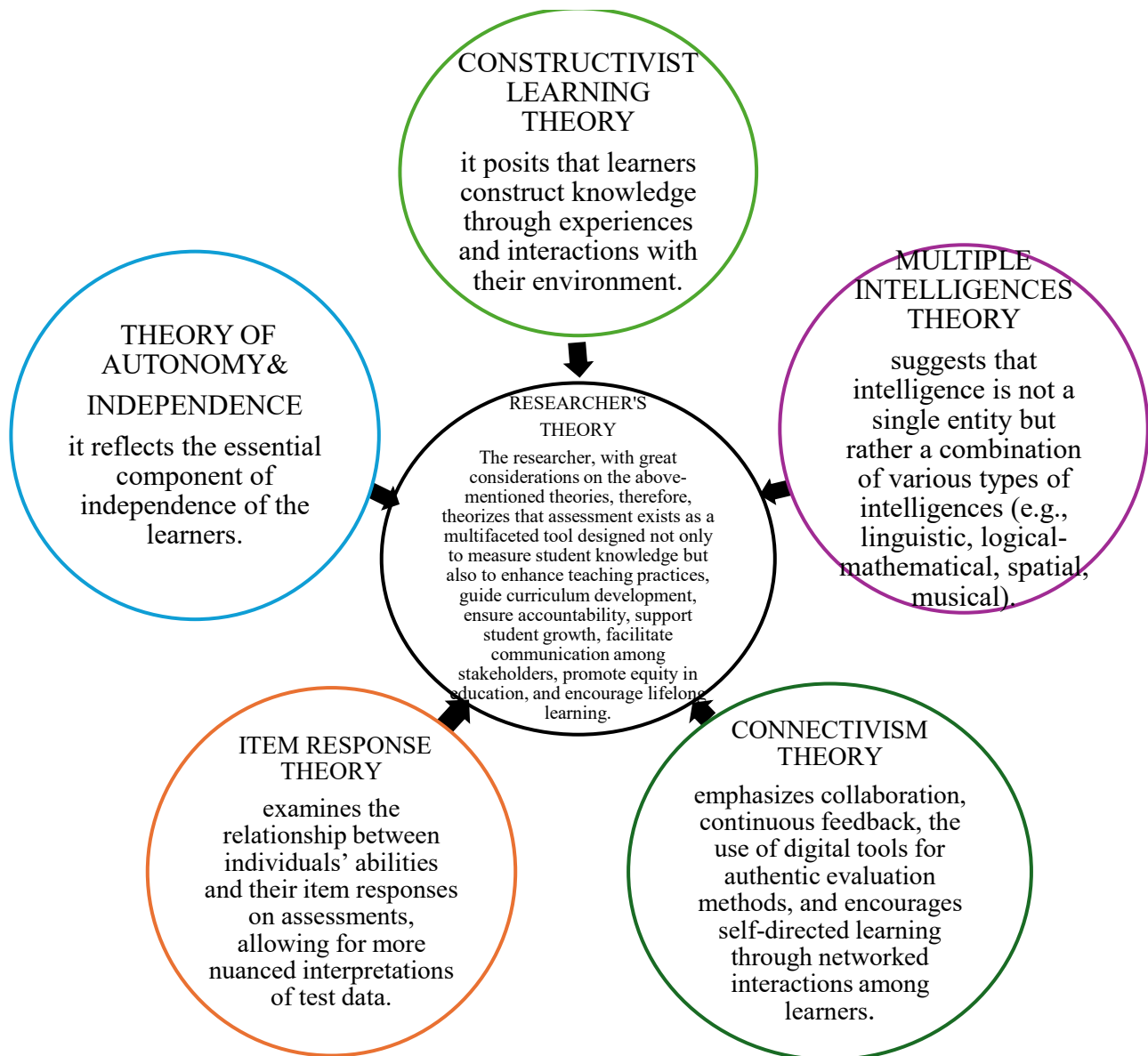


FIGURE 3. THEORETICAL PARADIGM

Foreign and Local Literature

For this study, the researcher opts to consider the published materials taken on line as the main source of related literature in order to include the most recent relevant literature. Several references such as books and other reading materials are also considered invaluable to this study. However, the most related ones are just included. Furthermore, the researcher presents the review of related literature with great considerations primarily on international related literatures and the local level.

In Singapore, the classroom assessment is an integral part of the interactive teaching and learning process. It is an ongoing process through which teachers collect information about their student's learning to inform and support teaching. An important resource of assessment is feedback, which should be timely and exhaustive. Students should be informed about where they have gaps in their learning and what they should be doing to address these gaps. They use quantitative classroom assessments, like traditional pen and paper quizzes and exams, in order to assess what their students have learned and report the result of the assessment as a grade or qualification. Yet they are aware that the classroom assessment should center on

helping the students improve their learning while exploring a wide variety of assessment strategies. However, assessments that allow teachers to collect information are not readily available through traditional methods, but they are essential for supporting the learning process.

Japan's education system is renowned worldwide for its high standards and rigorous assessment methods. In Japan, the primary focus during the elementary years is not on formal examinations, but rather on the holistic development of the child. Teachers assess students based on their daily behaviour, participation in class, and overall attitude towards learning. This is somewhat akin to the continuous assessment method employed in the United Kingdom, albeit with a stronger emphasis on character development. However, this doesn't mean that academic achievement is overlooked. Students are regularly given assignments and tests, but these are primarily used as tools for understanding each child's learning progress rather than as a means of ranking them. The aim is to foster a love for learning from an early age, rather than instilling a fear of exams.

New Zealand schools design assessment in their classrooms so that teaching and learning is meaningful and meets the needs of their students. The practice of assessment for learning works best when ākongā and their 15mphas take an active part in conversations about each learner's strengths and their progress, talking about what is being learned, how the learning connects to the learner's life, the next steps in their learning, how learners, 15mphas, and teachers can together construct meaningful learning pathways and support their use. The assessment information is used to celebrate learners' progress and their strengths, to plan their next learning opportunities, to adjust strategies according to their needs, and to identify any needs for additional support sooner rather than later.

Enhancing the way assessment is used in the classroom promotes learning and wellbeing, raising learners' levels of progress and achievement, and also informs local curriculum design.

Dylan Wiliam stated that assessment is, indeed, the bridge between teaching and learning. If the purpose of robust curriculum planning is to ensure that pupils are taught the demanding aspects of a topic, then checking whether they have got it needs to be done through assessment. There are formal and informal ways of doing this. Not all results of assessment instruments need to be captured on spreadsheets or other documents. But whether documented formally or not, the information should be fine-tuning the next stages in learning. A further benefit of assessment is that it is possible to see the distance travelled. It is deeply rewarding to see the difference in knowledge and proficiency at the start of a course or unit of work, as we make progress through it and at the end. When we consider examples like Austin's Butterfly, we can see that through careful critique and feedback, those basic attempts, refined and practiced over time, become solid pieces of work. It was in the assessing, discussion and reworking that the impressive piece of work was produced. This would not have been possible without thoughtful, sensitive and robust assessment.

In the Philippines, teachers employ various assessment strategies and tools to accommodate their learners. The trial-and-error assessment practices of the teachers during the pandemic are composed of both standardized exams and performance-based assessments through utilizing online platforms, self-paced modules, and social media. Considering this abrupt transition to remote learning, institutions meticulously strategize and enhance their evaluation methods (Ancheta & Ancheta, 2020). Joaquin et al., 2020 said that a comprehensive and genuine assessment of the country's preparedness to provide educational programs that exceed the conventional prerequisites is imperative (since assessment is the central aspect of the student experience and is likely the most significant factor in how students approach their learning). Amiri et al., 2021, pointed out that thoughtfully crafted evaluation procedures have the potential to greatly

improve learning outcomes by inspiring students' enthusiasm and fostering self-assurance in their capabilities.

Data collected from learning assessments provide critical information, insights and evidence for decision-making regarding certifying and validating learning, improving curricula and pedagogy and allocating resources among a range of stakeholders including learners and their families, teachers, school administrators, service providers and local communities. Together with other education data that is analyzed and contextualized, they also provide valuable insights and evidence for setting the directions and designing interventions to tackle systemic issues and challenges. Many countries, in particular those of low- and middle-income, are still struggling with a lack of student learning data, and the capacity to generate knowledge and make sound decisions on education and learning. In sub-Saharan Africa, in particular, there is lack of data for over half of school-age children that precludes the assessment of the scale students reaching a minimum proficiency level. Without regularly collected learning data, it is impossible to know whether countries are on track to achieve the learning goals as defined in the SDG goals, or to respond effectively to learning crises such as those caused by the COVID-19 pandemic.

In Estonia, the primary purpose of assessment is to support learning', so states the Estonian Lifelong Learning Strategy 2020 and its successor strategic plan Education 2035. These overall strategic plans, which have been created through broad-based stakeholder engagement, have driven and continue to drive leadership and management of the entire education system. In reference to assessment, the plans take an ecosystemic view in that assessment is not only seen as a tool for students to learn, but also a means for the system and its people to learn. Indeed, the Ministry of Education and Research is using formative assessment vehicles including surveys to nudge stakeholders in education to take more personal and collective responsibility for their own long-term development and school improvement, whilst investing less of its time and attention into external controls.

In Finland, there are no national examinations in comprehensive school education. Only national examination in Finnish education system is matriculation examination in general upper secondary education. Consequently, all pupil assessment in basic education is done by teachers. According to the Basic Education Decree the assessment is carried out by the relevant class or subject teacher. Behaviour is assessed by the class teacher or, where a pupil has several teachers, jointly by these teachers. The assessment focuses on the pupil's learning, working skills and behaviour. These are assessed in relation to the objectives and assessment criteria of the curriculum. Assessment must be done in as versatile a manner as possible, taking into consideration the age and capabilities of the pupils. It is not based only on exams. The pupils are not compared to other pupils, and assessment does not focus on the pupil's personality, temperament or other personal characteristics. This is particularly important when assessing the pupil's behaviour. Behaviour is assessed as a separate entity in a report, and it does not affect the assessment given in different subjects.

The impact of formative assessment arises from the strength of the feedback provided to students about their learning and to teachers about their teaching (Andrade, et al 2015). Teachers are not the only source of feedback. Self and peer assessments can be taught carefully, guiding learners in how to provide constructive and learning-oriented feedback on their own (Andrade et al., 2015). Formative assessment increases achievement in diagnostic exams supporting the students' development of self-regulation and metacognitive skills and their development through educational standards (DeLuca et.al 2015). Woods (2015) evaluated the relationship between formative assessment and self-regulation in a study and emphasized that the teachers who apply formative assessment strategies should understand the students'

self-regulatory learning processes in order to make correct decisions. In addition, Woods (2015) advised that teachers should frequently use formative assessment in order to develop the students' self-regulation skills and increase their motivation.

Assessment feedback is heralded as an integral facilitator of teaching and learning. Despite the acknowledgement of its crucial role in education, there are inconsistencies in its powerful impact in teaching and learning: the role of the categories of feedback, the role of providers of feedback, constituents of effective feedback, and barriers to effective feedback. Assessment feedback is a valuable factor for educators and students seeking to ensure continuous school improvement. It was found that a blended form of formative and summative feedback can improve teaching and learning.

According to Brown 2020, those classroom assessment practices focused much more on what could be seen as classroom teaching practices. Instead of testing, teachers interacted with students on-the-fly, in-the-moment of the classroom through questions and feedback that aimed to help students move towards the intended learning outcomes established at the beginning of lessons or courses.

Key Stage tests were put in place, not only to evaluate student learning, but also to assure the public that teachers and schools were achieving important goals of education. This use of assessment put focus on accountability, not for the student, but for the school and teacher (Nichols and Harris, 2016). The decision to use tests of student learning to evaluate schools and teachers was mimicked, especially in the United States, in various state accountability tests, the No Child Left Behind legislation, and even such innovative programs of assessment as Race to the Top and PARCC. It should be noted that the use of standardised tests to evaluate teachers and schools is truly a global phenomenon, not restricted to the UK and the USA (Lingard and Lewis, 2016). In this context, testing became a summative evaluation of teachers and school leaders to demonstrate school effectiveness and meet accountability requirements.

Buckendahl, 2016; Harris and Brown, 2016, stated that the current situation is that assessment is perceived quite differently by experts in different disciplines. Psychometricians tend to define assessment in terms of statistical modelling of test scores. Psychologists use assessments for diagnostic description of client strengths or needs. Within schooling, leaders tend to perceive assessment as jurisdiction or state-mandated school accountability testing, while teachers focus on assessment as interactive, on-the-fly experiences with their students, and parents understand assessment as test scores and grades.

Furthermore, Dawson 2021 the Covid-19 pandemic has rapidly inserted online and distance testing as a commonplace practice with concerns raised about how technology is used to assure the integrity of student performance. Wise and Smith 2016 stated that the ecology of the classroom is not the same as that of a computerised test. This is especially notable when the consequence of a test (regardless of medium) has little relevance to a student. Teltemann and Klieme, 2016 added that performance on international large-scale assessments (e.g., PISA, TIMSS) may matter to government officials but these tests have little value for individual learners.

Bennett 2018 stated that teachers need to develop for education's sake, assessments that have strong alignment with curricular ambitions and values and which have applicability to classroom contexts and processes. Meissel et al., 2017 added that the teachers have the capability of integrating curriculum, testing, psychology, and data at a superficial level but with some considerable margin of error. To overcome their own error, teachers need technologies that support them in making useful and accurate interpretations of what students need to be taught next that work with them in the classroom. As Bennett (2018) pointed out more technology will happen, but perhaps not more tests on computers. This is the assessment that will help teachers rather than replace them and give us hope for a better future.

Learning Oriented Assessment is one of several which have been used in recent years with a similar purpose in mind: to carve out a place for a form of assessment with different priorities and values from those of traditional assessment, with its focus on reliability and validity. Like the classroom-based assessment movement in the US, or the Assessment Reform Group's promotion of formative assessment or Assessment for Learning in the UK, LOA proposes a form of assessment whose primary purpose is to promote learning. Our conception of LOA reflects an intention to change the traditional relationship of assessment to learning. LOA thus foresees a central role for teachers in creating an environment productive of learning, wholly complementary to the role of formal assessment.

While increasing numbers of educational systems around the globe are introducing policies to promote assessment-for-learning principles, the teachers' capacity to implement these reforms is very often frustrated by a combination of local as well as macro-level forces. Hence it is important for teachers to develop an understanding of the situated nature of classroom-based assessment and how political, social, cultural-historical and institutional factors might combine to shape their practice. At the same time, teachers need to reflect on their own capacity to effect change as well as of how their assessment practices might impact 'on society, institutions, and individuals. Assessment is often seen as the part of the curriculum that is the least amenable to change and as the area that often lags behind in responding to changing learning theories. This is notwithstanding the increasing move towards formative assessment, assessment for learning, and learning-oriented assessment which permit an opening up of the assessment system. Evidence shows that teachers' beliefs about the purpose of assessment are relevant with regard to how assessment is planned and implemented in classroom settings. Although the majority of the teachers used a wide range of sources to construct their subjective theories of assessment, most of their assessment practices are still based on old-fashioned routines and in contradiction of previous research findings.

The role of assessment has experienced a major shift, assessment of learning to assessment for learning. In other words, evaluation of learning needs to allow for the development of 21st century skills and prepare students for the real world, while still ensuring inclusivity and accessibility. Rethinking assessment doesn't mean neglecting the traditional methods. In fact, instructors can definitely tailor the pen-and-paper tests to online examinations with a change in approach and the help of available teaching tools. In this article, we'd like to share 5 strategies to facilitate better assessment and feedback, by harnessing pedagogical technology. Each of these will be exemplified through use cases where teachers took advantage of different teaching tools to elevate their online assessment methods.

Assessment and feedback are vital elements to drive student skills development, engagement, and success. Well-facilitated assessment and feedback provide faculties with ample learning analytics to make data driven decisions, at the same time allowing students to reflect on their own learning and improve their performance.

David Boud stated that assessment is a central feature of teaching and the curriculum. It powerfully frames how students learn and what students achieve. Due to its importance, assessment and feedback comprise a significant portion of course design and the learning process. Faculty have the great responsibility to facilitate effective assessment that evaluates students in a holistic manner, ensures frequent feedback, while nurturing lifelong skills. However, this is quite a daunting task, given the learner diversity, the workload required to design the assignments, and the need to scale up to larger student cohorts across modalities. Most importantly, it is the challenges of meeting new expectations and changes regarding academic standards now and beyond that require institutions to rethink assessment and feedback.

According to the 2022 National Student Survey (NSS) that gathers students' opinions on the quality of their courses in the UK, students showed much lower satisfaction towards assessment and feedback, as compared to other aspects of the learning experience. Quality assessment and feedback should ideally be competency-centred, rather than credential-centred. In other words, evaluation of learning needs to allow for the development of 21st century skills and prepare students for the real world, while still ensuring inclusivity and accessibility. However, rethinking assessment doesn't mean neglecting the traditional methods. In fact, instructors can definitely tailor the pen-and-paper tests to online examinations with a change in approach and the help of available teaching tools.

Foreign and Local Studies

Standardized tests are becoming increasingly influential across OECD countries, including Canada and the United States. While large-scale tests provide important information on system performance, many studies have revealed their potential negative impact on teachers' practice (e. g., Koretz, 2017). Indeed, when teachers are confronted with recurrent external assessments, they can question their own skills and priorities in assessing students' learning (Malet, 2015). Concerningly, an overemphasis on large-scale, standardized tests can result in assessment being understood as a purely technical process rather than one in which teachers have professional autonomy and capacity to leverage their assessment literacy to effectively support and assess student learning. It is necessary to highlight and promote the essential role of teachers' classroom assessment practices, in order to provide assessment information that is responsive to local classroom learning and student diversity. One approach to supporting teachers' classroom assessment practices is to invite teachers to reconsider fundamental questions about their assessment practice.

Gauthier et al published a review of research on effective schools and the academic achievement of at-risk students in North America. They showed that curriculum alignment has great potential to improve the quality of teaching and school effectiveness. In short, increasing alignment between the intended, enacted, and assessed curriculum leads to greater gains in teaching quality and school outcomes.

Substantial research confirms that considering curricular and assessment alignment is often neglected in practice and that a lack of alignment creates assessment biases that disrupt students' learning. Yet, through a training-based study, it became evident that purposefully considering alignment led to profound reflections and changes to teacher practice. In particular, teachers reconsidered the role of assessment in their teaching, and importantly, challenged habits of assessment practice to reposition assessment in response to student learning. Moreover, their professional judgements were grounded in evidence of learning that explicitly connected to curriculum expectations (Pasquini, 2019).

Assessment is a particularly challenging issue for the implementation of maker learning in classroom settings, due to the unique characteristics of the constructionist approach compared to traditional classroom instructions (Hickey et al; Murai, Kim, Stephanie, et al., 2020). In addition, maker learning activities are often conducted in a socially distributed manner (Blikstein et al., 2017), where learners ideate, share, and problem-solve to complete the project as a group. Due to these differences, many authors agree that traditional assessments are not designed to capture the full scope of learning and development taking place in maker learning environments.

Furthermore, according to Blikstein, classroom setting comes with unique challenges compared to informal and non-formal settings, because many classroom teachers often face a curriculum standard and have to meet the expectations of various stakeholders, while managing activities with limited resources (e.g., the number of teachers per students) and time. Some even argue against the application of assessment

into maker learning contexts in the first place because it disrupts the flow of activity. Blikstein also expressed concerns that assessment tends to place too much emphasis on the final product rather than its process, where important learning manifests. Despite all these application challenges, assessment has the potential to support and elevate constructionist learning as learners in constructionist learning produce various representations of their understanding. Assessment of maker learning would help learners better understand the state of their work (e.g., strengths, challenges, next steps) and identify necessary resources to achieve them which is particularly important for school-based making where expectations for learning are higher. Kaspersen et al., 2021 said that figuring out how to assess learning also helps educators identify steps they need to take to support learners. More work is needed to better understand the relationship between assessment and school-based making in order to unlock the potential of constructionist learning in school contexts.

Dunn & Mulvenon, 2019 stated that although assessment may be designed as formative or summative, it is an important component in teaching and learning. According to McMillan 2015, assessment influences student learning, engagement, and motivation and provides information for the enhancement of instruction. Since students may not be able to fully understand the practical application of established standards, objectives, and stated learning goals, assessment helps them appreciate what is operationally expected from them. Rowntree 2020 echoed this idea when he wrote that “the spirit and style of assessment defines the de facto curriculum”. Gibbs, 2016; Stödborg, 2020 students allocate their efforts and attention on learning what they believe will be. This indicated that assessment can be used to influence student learning. To improve student learning, it is pivotal for instructors to understand students’ attitude toward the use of assessment and their perceptions of how assessment should be used in the classroom (Furnham et al., 2021). Student perceptions of assessment are influenced by the social Student Perceptions of Assessments and cultural contexts in which the assessment is used (Huang & Asghar, 2016).

Ghaicha, 2016 stated that assessment is operationally defined as a part of the educational process where [faculty] instructors appraise students achievements by collecting, measuring, analyzing, synthesizing and interpreting relevant information about a particular object of interest in their performance under controlled conditions in relation to curricula objectives set for their levels, and according to the procedures that are systematic and substantively grounded. Assessment plays a pivotal role in education and is often set in a top-down model: international, national, regional, institutional, and classroom-level to hold governments, educational agencies (i.e., schools), programs, teachers, and students accountable to the public.

Interviews of Chinese teachers by Tan and Chua (2015) revealed that the exam-driven culture inhibits their ability to adopt student-centered learning and formative assessment practices. Even though curriculum reform efforts have promoted the use of alternative assessment strategies, students and parents still perceive success on the high-stakes summative assessments as the most Student Perceptions of Assessments important product of schooling. Huang & Asghar, mentioned that culture at the school level has not changed much and a high-stakes test-oriented culture dominates teaching and learning in Taiwan. Therefore, teachers in Taiwan are attempting reconcile the idea that assessment facilitates learning and personal development with their responsibilities to exam-oriented preparation. It seems as if formative assessment will take a higher position in Taiwan only if it can be shown to raise test scores at a higher rate than drill and rote practice.

Brown & Gao, 2015 stated that there are also large scale cultural obstacles to employing formative assessment in Confucian Heritage Societies. The hierarchy of power and the values of collectivism create unique conditions for formative assessment in classrooms. In these classrooms, the teacher is seen as the

content expert, knowledge transmitter, and moral judge and the primary educational goal is academic achievement and knowledge reproduction. Children raised in a Confucian Heritage society are taught to be modest and to keep one's head down. This mentality can make some forms of formative assessment (e.g., self and peer assessment) difficult because students often find it culturally inappropriate to evaluate their own work or that of others (Pham & Renshaw, 2015). Furthermore, teachers often avoid formative assessment and opportunities for constructive feedback to ensure students are not singled out (Yin & Buck, 2015).

Stiggins 2015 said that assessing students' learning is integral in instruction. It takes up more than 30% to 50% of total instructional time compared to other professional teacher practices such as classroom management, instructional planning, and delivery. Amakiri & Inko-Tariah; Herppich 2021 et al., posited that after identifying learning content, classroom assessment as an ongoing activity, facilitates the collection of information on students. This information helps to monitor students' progress and design instruction to meet their needs.

According to Adamson, 2020; Deneen & Brown, 2016, adopting appropriate assessment practices is an important predictor of students' academic achievement, which is of interest to all educational stakeholders. Teachers must adapt to effective assessment approaches to make valid and reliable decisions for the attention of educational stakeholders. Given this emphasis, experts in educational measurement and assessment have 21 emphasized that teachers should be literate in classroom assessment. They have advocated strongly that classroom assessment literacy should be integral in professional development irrespective of educational systems.

Darling-Hammond, 2020 stated that given that teachers are one of the important agents who drive classroom assessment, their competency in ensuring valid and reliable assessment is part of their accountability, which puts pressure on them to obtain and use assessment information for decision making.. Therefore, it is crucial to constantly ascertain the weaknesses of teachers in their classroom assessment approaches to identify and address assessment areas of concern.

DeLuca et al.2016, defined assessment approaches as teacher's practical knowledge and conceptual understanding in assessment within the context of their classroom teaching and learning. It involves the ways teachers deal with or handle classroom assessment issues as and when they occur. Baidoo-Anu et al.,2023 supported DeLuca that teachers' approaches to assessment should cut across formative and summative assessment, integrating them into instructional strategies. The approaches include the steps teachers undertake to share learning intentions and success criteria with students, question, provide feedback, implement students' self and peer assessment, use summative assessment for formative purposes, and integrate formative assessment data into instruction.

Cano, 2020; DeLuca et al.,2019 and Latif & Wasim, 022; Tóth & Csapó,2022, agreed that approaches to assessment involve the processes teachers undergo when implementing classroom assessment. This includes how they design and develop reliable and valid assessment content that aligns with the learning targets. Teachers must be aware of the purpose of assessment, what to assess, and the nature of the assessment tool to use to achieve the intended objectives. They should demonstrate awareness of the expected knowledge, understanding, capabilities, change in attitudes and disposition, and skills that students need to acquire. They should be mindful of the stage of learning they have to assess whether at the beginning, middle, or end of instruction to determine how much knowledge students have acquired.

Asamoah et al.,2022; Black & Wiliam and Coombs et al.,2018 cited that the process on how teachers directly use assessment results for formative, diagnostic, or summative purposes is important in their

assessment approaches. For formative purposes, the information obtained should be used to monitor students' learning, identify learning gaps, as feedback to address learning gaps, and modify teaching approaches. For diagnostic purposes, assessment feedback should be used to identify the strengths and weaknesses of students, while for summative purposes, decisions should be taken by teachers to assign grades and judge students' mastery of skills.

Gray et al., 2019 and Young & Chen, 2021 added another assessment approach which involves scoring assessment tasks using a rubric prepared by the teachers. The rubric refers to a tool that lists the criteria on which students' work is evaluated. It normally emphasizes three essential factors: a) factors that determine the quality of students' work (evaluative criteria), b) the level of students' knowledge and mastery that distinguishes between acceptable and unacceptable responses (quality definitions), and c) the rating scale that determines the assignment of grades. Román-González et al., 2019 and Mohammadi, 2020 seemed to be in one with the idea of Gray. According to them teachers should develop and use an instructional rubric, which is used to clarify and communicate learning goals, as well as provide feedback on students' progress and judge how well students have achieved learning targets. Teacher-centred rubric (summative rubric) helps assign accurate grades, while a student-centred rubric encourages students' learning and achievement. Thus, teachers should possess the competence to develop the appropriate rubric usable for formative or summative purposes.

Jankowski, 2020 said that 75% of teachers believed the modifications made to assignments and assessments, flexibility in assignment deadlines, adoption of pass or fail grading, and changes in assessment reporting deadlines would not have a detrimental effect on their institution's assessment culture. However, assessing students' learning outcomes through digital platforms poses various challenges to teachers due to insufficiency of essential resources, training, and lack of expertise (Nars, 2020). Bozkurt and Sharma (2020) also pointed out that comprehensive solutions are imperative that not only focus on delivering content but also prioritize the care and support of learners. In addition, alternative assessment tools can allow for teachers and students to have comparable experiences as they engage in collaborative efforts, devise innovative resolutions, and exhibit a willingness to acquire knowledge from others and utilize conventional tools (Doucet et al., 2020).

Synthesis of the State-of-the-Art

In this section, all related literature and studies were analyzed and synthesized in the light of the problem and the research framework by briefly discussing their similarities and differences, making intelligent comments and reactions, and identifying all the gaps between and among those literature and studies and the present research study.

On classroom assessment practices during primary education, several similarities emerge across the United Kingdom, Japan, Singapore, the Philippines, and New Zealand. These similarities reflect a shared commitment to improving educational outcomes through effective assessment strategies. All five countries prioritize formative assessment as a key component of their educational systems. Formative assessments are used to monitor student learning and provide ongoing feedback that can be used by instructors to improve their teaching and by students to enhance their learning. This approach helps identify areas where students may need additional support before they reach summative assessments. While each country has its unique educational context and policies, the similarities in classroom assessment practices highlight a collective effort towards fostering effective learning environments that prioritize student growth through diverse assessment methods.

Koretz and Malet agreed that standardized tests fail to capture the full spectrum of student learning and abilities. They often focus on rote memorization and basic skills rather than critical thinking, creativity, and problem-solving abilities. This narrow focus can lead to an incomplete understanding of a student's capabilities and potential. They added that many standardized tests are associated with high-stakes outcomes, such as grade promotion or graduation eligibility. This creates immense pressure on students and educators alike, which can lead to anxiety and a detrimental learning environment. According to them this punitive approach undermines the primary goal of education: to foster a love for learning and support student growth.

Gauthier et al agreed that curriculum alignment with assessment is a critical aspect of effective education. For them, when assessments are aligned with the curriculum, they accurately reflect what students are expected to learn and demonstrate. They added that this alignment ensures that both teaching and evaluation processes work towards the same educational goals, which enhances student learning outcomes. Misalignment can lead to confusion among educators regarding what content to prioritize, ultimately affecting student performance.

There is a consensus among researchers namely McMillan et al that assessments significantly influence student motivation for learning in both positive and negative ways. The design of these assessments should prioritize fostering autonomous motivation through engaging methods that connect with students' interests and professional aspirations.

The researcher believed that although traditional assessments are effective for measuring specific knowledge under uniform conditions, it cannot fully encapsulate a student's comprehensive abilities or potential.

Gap Bridged by the Study

Researchers conducted specifically those which are included in this study exclusively focused on the multimodal assessment. Others dealt on assessment activities, programs and projects that will improve the learning performance of the pupils.

Most of the studies, however, focused solely on the importance of assessment. As pointed by the previous researchers, assessment is important in bridging the gap between teaching and learning especially nowadays that it is almost impossible for the learners to have different learning styles and needs.

According to the research conducted by Adamson, adopting appropriate assessment practices is an important predictor of students' academic achievement. The findings indicated that the teachers adapt to effective assessment approaches to make valid and reliable decisions for the attention of educational stakeholders. Given this emphasis, experts in educational measurement and assessment have emphasized that teachers should be literate in classroom assessment. They have advocated strongly that classroom assessment literacy should be integral in professional development irrespective of educational systems. Many authors agree that traditional assessments are not designed to capture the full scope of learning and development taking place in the learning environments.

The present study also focused on multimodal assessment but with great considerations on experiences of selected elementary teachers of Castilla East District in implementing the multimodal assessment. DepEd programs and projects in support to multimodal assessment will be also looked into by the researcher. The output of this endeavor is a professional development plan of elementary school teachers to effectively use multimodal assessment in their teaching practices, thereby enhance the learning performance of the pupils. This is the gap bridged by this present research.

CHAPTER III: METHODOLOGY

This chapter presents the methods and procedures undertaken by the researcher to gather the needed data to understand phenomena from the perspective of the participants. It includes research design, sample instrument used, data collection procedure and analysis procedure.

Research Design

The use of multimodal assessment, which allowed learners to demonstrate their understanding through various modes such as visual, auditory, kinesthetic, and digital outputs, is gaining momentum globally. In the Philippines, the Department of Education (DepEd) encourages teachers to adopt multimodal assessment to address diverse learning needs and enhance learner engagement. Despite its potential to improve learning outcomes, the practical implementation of multimodal assessment often presents a mix of challenges and successes in the classroom. This is especially evident in the Castilla East District, where the implementation of multimodal assessment significantly influences the teaching and learning process. This article presents a study conducted in Castilla East District, examining the experiences of elementary school teachers in implementing multimodal assessment. Using a phenomenological research design, the study highlighted the essence of their experiences, offering valuable insights into the practices, benefits, and challenges associated with multimodal assessment in the classroom.

This study is grounded on a phenomenological approach. As a qualitative research methodology, phenomenology aims to understand the meaning and significance of a phenomenon by examining the lived experiences of individuals who have encountered it. It goes beyond simple description to explore the essence of these experiences—the feelings, meanings, and impacts they hold for the individuals involved. The purpose was to identify shared understandings and common themes that emerge from their narratives. For this study, the phenomenon of interest is “the implementation of multimodal assessment in elementary classrooms in Castilla East District”. The phenomenological approach enables the researchers to go beyond surface-level observations and explore the deeper, often unspoken, experiences of teachers as they integrate various modes of assessment into their teaching. By focusing on their perspectives, the study sought to construct a rich and complex understanding of what it means to design and implement multimodal assessment in the classroom. This understanding can then guide policy, professional development, and support systems to better equip teachers in effectively applying multimodal assessment strategies.

The methodology employed in this study utilized focus group discussions (FGDs) as the primary means of data collection. While individual interviews are commonly used in phenomenological research, FGDs provide a distinct advantage in exploring teachers’ shared experiences and perspectives on implementing multimodal assessment, allowing for richer and more in-depth insights into their practices, challenges, and strategies.

Shared Experiences and Collective Meaning-Making: FGDs offer a space for teachers to engage with one another, share their experiences, and collaboratively explore the implementation of multimodal assessment. This interactive process allows perspectives and insights to emerge that might not arise in individual interviews. Participants can build on each other’s ideas, question assumptions, and provide alternative interpretations, resulting in a deeper and more comprehensive understanding of the use and impact of multimodal assessment in the classroom.

Stimulating Recall and Reflection: The interaction with peers can enhance teachers’ recall and reflection regarding multimodal assessment. Listening to a colleague describe a specific experience with implementing varied assessment modes can trigger memories and insights in others, helping to uncover

challenges or successes that may not have been previously expressed. The dynamic group discussion encourages participants to critically examine their own practices and consider how their experiences relate to those of others.

Identifying Common Themes and Patterns: FGDs help revealed common themes and patterns in teachers' experiences with multimodal assessment. As participants shared their stories and insights, the researcher identified recurring challenges, effective strategies, and shared perspectives in implementing varied assessment modes. These common themes are essential for understanding the core aspects of the phenomenon and for developing a comprehensive picture of teachers' experiences with multimodal assessment in Castilla East District.

Enhanced Data Richness: The interactive nature of FGDs often results in richer and more detailed data on teachers' experiences with multimodal assessment compared to individual interviews. Participants can probe each other's practices, ask clarifying questions, and provide support and encouragement, fostering a comfortable and open environment for sharing personal insights and experiences with implementing varied assessment strategies.

Structured Exploration with Interview Guide: Although FGDs are dynamic and interactive, using a structured interview guide ensures that key areas related to the implementation of multimodal assessment are thoroughly addressed. The guide provides a framework for discussion, allowing relevant topics to be explored in depth while still permitting flexibility and spontaneous sharing of experiences among participants.

Appropriateness of Design

Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that makes the world visible. According to Denzin & Lincoln, these practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them. This study involved the use of a qualitative research method. Qualitative research interrelates terms, concepts, and assumptions.

In addition, Hayes & Sing argued that qualitative research is more inductive than quantitative research; it involves using and studying language, deals with soft skills, and addresses emotional and spiritual aspects of human actions. Qualitative research is a constructivist postmodernism approach that often involves using interviews as a method for data collection as cited by Elo, et al. Meaning is created by individuals' life experiences. Furthermore, according to Denzin & Lincoln often in qualitative research the study of population size is small, and the study findings are sometimes more difficult to verify.

Denzin also claimed that qualitative research includes research designs such as phenomenology, narrative inquiry, case study, and grounded theory. Qualitative techniques rely on describing people's responses to situations and experiences. Qualitative research analysis consists of discussions of how people feel and experience life's events.

This study used a phenomenological approach to investigate the lived experiences of elementary school teachers of Castilla East District in using multimodal assessment. The phenomenological research approach emerges as a response to the radicalism of what is objectifiable. It is based on the study of life experiences, regarding an event from the subject's perspective. This approach is based on the analysis of the most complex aspects of human life, of what is beyond the quantifiable aspects.

According to Nelson, the phenomenological approach is a form of qualitative inquiry that emphasizes *experiential, lived* aspects of a particular construct – that is, how the phenomenon is experienced *at the time that it occurs*, rather than what is thought about this experience, or the meaning ascribed to it subsequently. For this reason, phenomenology is sometimes described as dealing with pre-reflective experience. It is a research approach well-suited to analyzing the process and experience of creativity, as opposed to the creative product or the creative person.

Many of the ideas within the phenomenological field are embedded within qualitative inquiry in general; much qualitative research is phenomenological in that it attempts to understand individuals' lived experiences and the behavioral, emotive, and social meanings that these experiences have for them. For instance, the notion of open-ended questions and conversational inquiry, so typical in qualitative research, allows research participants to talk about a topic in their own words, free of the constraints imposed by fixed-response questions that are generally seen in quantitative studies. Similarly, market researchers don't test products, they test peoples' experiences of products.

Research Questions

One of the most important things to consider in making research is crafting and finalizing the research questions. This will guide the researcher to develop and make the research substantial and this will explore the aspects of selected phenomena of the study. According to Reiter, Stewart, & Bruce, the research questions also form the foundation for the open-ended interview questions during the data collection phase of the study. The alignment of the research questions to the interview questions was a strategy meant to ensure the interview data provided answers to the research questions. The alignment of the qualitative study was important, necessitating the proper state of adjustment of the paradigm with the requirements of the selected research method.

Using both the research questions and the interview questions for the study, the core objective was to explore the participants' lived experiences and perceptions, including the multimodal assessment strategies being utilized by the teachers in their daily teaching practices, insights of the participants on the effectiveness of multimodal assessment in evaluating learners' learning, how elementary school teachers perceive the impact of multimodal assessment on learners' engagement and learning outcomes and the gaps and issues faced when implementing multimodal assessment in their classrooms

The specific research questions are:

1. What are the insights of elementary school teachers regarding the effectiveness of multimodal assessment in evaluating learners learning?
2. How do elementary school teachers use multimodal assessment strategies in their daily teaching practices?
3. What challenges do elementary school teachers face when implementing multimodal assessment in their classrooms?
4. How do elementary school teachers perceive the impact of multimodal assessment on learners' engagement and learning outcomes?
5. What multimodal assessment exemplar should be prepared to serve as a model for teachers?

Population, Geographical Location, and Sampling Method

The purposive sampling method was used in selecting the participants of this study. Cresswell and Clark stated that purposeful sampling is a technique widely used in qualitative research for the identification and selection of information-rich cases for the most effective use of limited resources. This involved

identifying and selecting individuals or groups of individuals who are especially knowledgeable about or experienced with a phenomenon of interest.

Hayes & Singh stated that purposeful sampling in inductive styles of research studies, such as qualitative phenomenology, is appropriate for studies with small sample sizes. This sampling method is ideal when the goal is to obtain rich, detailed responses from participants. As stated by Englander, participant selection was based on the question, “Do you have the experience I am looking for?”. Selecting the most qualified participants helped ensure the purpose of the study was achieved.

As Morse and Niehaus observed whether the methodology employed is quantitative or qualitative, sampling methods are intended to maximize efficiency and validity. Nevertheless, sampling must be consistent with the aims and assumptions inherent in the use of either method. Qualitative methods place primary emphasis on saturation or obtaining a comprehensive understanding by continuing to sample until no new substantive information is acquired.

Data Gathering Procedures

Rigorous researches relied not only on a robust methodology but also on strict adherence to ethical principles. This study reflected such an approach by prioritizing thorough data collection while safeguarding the rights and well-being of participants. The research design emphasized transparency, informed consent, and confidentiality, ensuring that the study is both insightful and conducted with respect for all involved.

The researcher sought permission to conduct a study from the Schools Division Superintendent (SDS) in the Division of Sorsogon. Upon approval by the SDS on August 15, 2025, the researcher reproduced sample open-ended questionnaire intended for in-depth interviews and focus group discussion with the participants. The questionnaire served only as their guide but still conducted the focus group discussion and in-depth interview as the main instruments in gathering data.

The participants in this study were selected elementary teachers from Castilla East District. Letter of invitations was given to all the participants before the conduct of the interview. A total of 19 participants willingly participated in this study. This step highlighted the study’s commitment to following institutional protocols and ensuring transparency. Each request for authorization included a detailed overview of the research, explaining its objectives, methodology, and the rationale for conducting the study. This careful approach ensures that all parties are fully informed and understand the purpose and scope of the research. Once the necessary permissions were obtained, the researcher proceeded with conducting in-depth interviews with teachers. These interviews, which form the core of the data collection was scheduled to suit the participants’ availability and held in private, secured settings to ensure confidentiality and encourage honest, open responses. Guided by a set of predetermined questions, the interviews was audio-recorded only with the participants’ explicit consent. The recordings were carefully transcribed for thorough analysis.

Beyond a careful methodology, the study was grounded in strong ethical principles. Prior to participating in any interview, all potential participants were provided with detailed information about the study’s purpose, their rights, and the voluntary nature of their involvement. Participants were asked to give informed consent, ensuring that they fully understood what participation entails and its implications.

Additionally, the study emphasized the anonymity and confidentiality of all participants. Codes were used instead of actual names to protect participants’ identities throughout the research process. All collected data were securely stored and accessible only to the core research team, with measures in place to prevent unauthorized access or disclosure. Moreover, the study was designed to minimize any potential risks to

participants, ensuring their well-being. The entire research process was conducted with the highest respect for participants' time, perspectives, and privacy.

This study reflected a strong commitment to ethical research practices. By emphasizing transparency, informed consent, confidentiality, and the well-being of participants, it created a solid foundation for generating meaningful and credible results. This ethical and thorough approach to data collection not only enhanced the validity of the research but also fostered trust and collaboration between the researcher and the participants.

The Participants

This study explored the experiences of elementary school teachers in implementing multimodal assessment within the Department of Education, specifically focusing on those in Castilla East District. The core of this research lies in the rich insights gathered from 19 elementary school teachers who served as the primary sources of data.

These teachers were carefully selected due to their direct involvement in using multimodal assessment strategies with their students. They were the frontline educators, responsible for designing and facilitating assessments that allowed learners to demonstrate understanding through varied modes—such as visual, auditory, kinesthetic, and digital outputs. Their firsthand experiences, including both the challenges they faced and the successes they achieved, are invaluable for understanding the practical realities of implementing multimodal assessment in the classroom.

By focusing on these teachers, the study highlighted the perspectives of those most intimately connected with the use of multimodal assessment. Their insights were essential for informing future policy, enhancing teacher training, and improving classroom practices to support the engagement and learning outcomes of all students. Their dedication and experiences provided a critical lens through which to examine and strengthen the implementation of multimodal assessment in elementary education.

Table A: The Participants

Name of School	Number of Participants
Bagalayag ES	1
Bogna ES	1
Bagong Sirang ES	1
Castilla East Central School	1
Cogon ES	1
Dulangan ES	1
Dancalan ES	1
La Union ES	1
Libtong ES	1
Maracabac ES	1
Milagrosa ES	1
Minanticaan ES	1
Monte Carmelo ES	1
Oras ES	1
Pandan ES	1
Saclayan ES	1

San Isidro ES	1
San Rafael ES	1
Tomalaytay ES	1
TOTAL	19

Informed Consent

Hayes & Singh claimed that informed consent includes disclosing the nature of the study, the intended methods proposed, and the rights of the participants. According to Seiber and Tolich' informed consent of participants must include three ethical considerations: voluntary consent, adequate information, and participants' decision-making capacity. Informed consent is intended to communicate the choices participants have in a study. For this study, informed consent included the details of protecting the participants' privacy, a description of the time requirements for participating, the voluntary nature of participation, and the ability to terminate participation for any reason and at any time without repercussion. The Informed Consent form used in this study was stipulated in the letter request that was sent for approval by the Schools Division Superintendent. The information in the form is clear that once the participants accepted the invitation it means that they agreed and they need to supply information according to their knowledge and understanding. It was mentioned in the form that the participants' responses were treated with the utmost confidentiality. Each participant candidate was required to sign an informed consent form before being interviewed. Informed consent forms were personally delivered to each target participant who expressed an interest to be interviewed for the study. All interested prospects were required to review the consent form content and acknowledge their permission to participate by writing their names and affixing their signatures in the said consent form. By doing so, participants expressed their awareness of the aim and particulars of the study, as well as their role in the study, and the researcher's expectations of participants.

Before the interview, the researcher asked each participant if he or she has any questions or need to discuss any component of the informed consent and request permission to make an audio recording of the interview. At the end of each interview, participants were asked again if they have given permission to record the interview and that they are aware, according to the content of the informed consent form they signed, that they could withdraw from the study at any time or for any reason.

Each participant verbally confirmed his or her understanding of the informed consent form before the interview, thus helping to establish a personal rapport. Each participant was also asked his or her preference of a pseudonym used to protect the participants' identity for the study. The informed consent form includes information about the purpose of the study, participant expectations, and contact information for the researcher. The consent form also included information on expectations regarding participation and the voluntary nature of participation. Also is included information that indicated the interviews would be audio-recorded and that the participants' identities would remain anonymous.

If the participants request to withdraw from this study, the participant could have withdrawn from the study for any reason and at any time by communicating to the researcher verbally, or by letter. Any participant requesting to withdraw from the study would have received instructions and acknowledgment of the withdrawal requiring them to write their names and let them affix their signature for formality sake, and the returned written acknowledgment of withdrawal from the study. Any collected data from any withdrawing participant would not have been used in the final report of the research findings. Any changes

in the population group would have been noted in the report of findings of the study. There were no known withdrawal penalties to any informants who might have requested severance from the study.

Confidentiality

Privacy, a basic human right, is required in research involving human participants. Confidentiality was observed and gave importance to the present study. Confidentiality meant not disclosing participants' identities. The focus was on ensuring participants' worth, dignity, and self-determination. Following Denzin and Lincoln and Hayes and Singh for ensuring participants' privacy in this study, identities and privileged communication remained confidential beyond the study period.

Confidentiality means neither the participants' names nor can identifying characteristics be disclosed. According to Republic Act No. 10173, also known as the Data Privacy Act of 2012, and its implementing rules and regulations. The participants understood their rights and obligations and retain that they have the right to be informed, access, correct, and object to the processing of personal information, as well as the right to complain with the National Privacy Commission.

Likewise, to protect participants' identities, the participants have an option to choose whether they are going to write or not going to write their names to keep their supplied ideas and information secret and confidential, or the participants are advised and helped them create their pseudonyms intended to maintain their confidentiality. The pseudonyms, rather than the participants' names, were used throughout the when presenting the results of the study.

The steps used to ensure participant confidentiality included safeguarding all research records. All study materials, documents used in the data gathering were stored. Such materials included participants' contact information, signed informed consent, demographic sheets, interview recordings and transcripts, field notes, and memos. These documents and important materials were kept in such a way that the information shared by the participants in this study will remain confidential.

Pilot Study

According to Chenail: a research instrument is a tool for facilitating the flow of communication with participants in qualitative research applications. As an interviewing device, the research instrument encouraged participants to be comfortable to talk about their lived experiences central to the research question of the study. Often, research instruments are not readily available for a specific study, requiring the construction of a set of study-specific questions for interviewing participants. The unavailability of an existing suitable set of questions necessitates constructing a study-specific set of questions that are open-ended so that informants freely contribute an insider's perspective with little or no limitation imposed by the structure of the questions.

In the case of a qualitative research study, circumstances necessitated conducting a field study to avoid jeopardizing the quality of the study. The field study served as a mechanism to test preparation of the field, reflexivity, and for ensuring rigor and bias management using the intended interview questions in the field study. The field study is a small-scale version of the intended study and will be used as an opportunity for pre-testing the interview instrument.

Instrumentality

Qualitative research is concerned with the nature, explanation, and understanding of phenomena. Unlike quantitative data, qualitative data are not measured in terms of frequency or quantity but rather are examined for in-depth meaning and processes. According to Lambert & Loisele, interviews are widely used as a data collection tool in qualitative research. They are typically used as a research strategy to gather information about participants' experiences, views, and beliefs concerning a specific research

question or phenomenon of interest. Similarly, Tod suggests that the flexibility of the interview structure is one of its greatest strengths. The interview facilitates the collection of large amounts of in-depth data. Hayes & Singh argued that phenomenologists prefer interviewing as a method to investigate underexplored and unexplored social phenomena. According to Englander, the phenomenological interview process involves asking broad questions that encourage rich and detailed descriptions of the participant's recollections. Obtaining extensive descriptions allowed adequate exploration of the participants' lived experiences.

This study used in-depth interviews and focus group discussion as the selected instruments in investigating the participants' experiences. Data collection by interviewing consisted of sharing experiences rich in detail through a facilitative interaction of the researcher and participant.

According to Roller & Lavrakas, the potential advantages or strengths of the in-depth interview method developed the interviewer-interviewee relationship that potentially increases the credibility of the data by reducing response bias and distortion in the outcomes due to responses that are considered socially acceptable, interview relationship and the analytical component. The flexibility of an interview format is also attained which allows the interviewer to tailor the order in which questions are asked, modify the question wording as appropriate, ask follow-up questions to clarify the interviewee's responses, and use indirect questions.

A focus group discussion (FGD) is a method for collecting qualitative data that gather community individuals together to discuss a specific topic. According to UNICEF, questions are open-ended, to stimulate an informal discussion with participants to understand perceptions, beliefs, fears, questions, and information needs with regards to a specific topic. An FGD usually takes around one hour and should include a minimum of 8 and a maximum of 12 participants.

Data Analysis

For organizing the study, the researchers established three types of research files: interview files, personal files, and analytical files. Interview transcript files contained the participants' responses to the interview questions. Participant interviews were audio-recorded through the use of the cellular phone Oppo Reno 8Z 5G Model, and detailed notes were taken during each interview to facilitate the data analysis process. The audio of each interview was transcribed verbatim. The transcript of each interview was stored in the participant's interview file. Additional information than interview transcriptions was also stored in personal files including records such as interview notes, interview settings, and interview timelines.

Field notes were kept in the third type of file. Historically, Emerson, Fretz, & Shaw asserted that field notes have been a central component of qualitative research since the early 1900s, originating in the field of ethnographic anthropology. It is currently understood that qualitative field notes are an essential component of rigorous qualitative research. According to Creswell, the majority of qualitative research methods encourage researchers to take field notes to enhance data and provide a rich context for analysis as an asserter. Similarly, Watt argues that critical reflection after each interview or focus group encourages the researcher to assess their performance, biases, and feelings. The process of reflection through field note creation encourages interview technique improvement and refinement of study approach and questions.

Analysis of themes is a simplification process of nimble conceptions, invention, exposure, or disclosure that is intransitive for capturing or understanding the phenomenon central to the study. Manen stated that a theme becomes a tool to make sense of something and is the process of thoughtful invention, discovery, and disclosure. Themes relate to notions, give shape, describe the content, and are the intended basis used

for reduction to unlock deep meaning for this study.

Hayes & Singh claimed that hermeneutical phenomenologists conscientiously explore in the life world for lived experience material where reflective examination might yield something of its fundamental nature in text and other documents. Discovering deeper meaning occurred through using language, intending to discover the core of being despite finding memories that may or may not have been thought or experienced before.

The process of conducting the interview and the focus group discussion was observed on the following procedures as suggested by the researcher's adviser. The first, was the drafting and finalizing of the interview guide questions that would encourage the participants to share their lived experiences regarding home and school academic collaboration in the delivery of modular instruction. Second, the identified participants based on their confirmation were encouraged to set the date and time of the interview via messenger, text, and phone call. Third, the researcher prepared the necessary tools in the conduct of an in-depth interview and focus group discussion such as the mobile phone to be used in the recording of the participant's responses, the individual consent form, interview file, and other forms that are necessary that should be given before the start of an interview. Lastly, the researcher explained clearly to the participants that the data gathered from an interview will be treated with the utmost confidentiality and will be used only for research purposes.

In sum, classifying the data followed several steps whereby data were collected from every interview and the subsequent transcription of all recordings. Classifying data meant the content of transcripts was clustered, segmented, and coded into themes. The process started by reading the transcripts multiple times to identify words and phrases that were essential expressions in the transcripts becoming the data in the study. The essential expressions were coded or categorized by topic. The coding process was conducted manually by multiple readings instead of by using computer software. Once coding was completed, additional writing continued with the aim of identifying themes in each interview and between the collections of interviews so potential conclusions to the central problem could be drawn.

Rigor

The accuracy of data collected from an interview vary according to how structured the interview is. Tod argued that even with semi-structured or unstructured interviews, a consistent approach and well-designed questions were achieved. Koch stated that rigor or trustworthiness refers to the concepts of credibility, transferability, and dependability. Interviews have the potential for bias to occur about how the interview is conducted, how the interviewees are selected, and if and how the interviewer has influenced the interview process. The interviewer must be aware of and reflect on these issues to minimize the risk of bias and enhance the rigor of the data. Clear and accurate interview schedules and documentation helped to address these issues. Similarly, the use of a reflective diary of the interviewer's experience and observations during the interview process helped to enhance rigor.

Validity

The essence and test of validity and rigor in phenomenological research are the continuous questionings of humans throughout the study and the alignment of all aspects of the study particularly the purpose and problem statements. According to van Manen hermeneutic phenomenology is a function of suspending preconceptions, personal or systematic bias, or taking for granted assumptions and the originality of their insights.

The validity of this study was achieved in three ways. First, care was taken to avoid mixing concepts that belong to the different methods. Second, there was a careful selection of participants. Third, validity was

further established by building trust with the participants and by establishing a rapport relationship with them.

Reliability

Manen stated that reliability in most research is established if a study is repeatable. However, in phenomenology, studying the same phenomenon or event might result in different results. Reliability in phenomenology is a function of intuitive evidence established through reduction.

Reduction involved active engagement with the text, leading to an epiphany of sorts that produces a profound sense of wonder and amazement at the profundity of the belief of the world. Setting aside subjective or private feelings, preferences, inclinations, or expectations and stripping away of theories and scientific conceptions that may prevent seeing past or through the lived experience that led to potential universal truths. In other words, construction cannot be considered either ambiguous or ever completed.

Reliability in this study was established in three ways. First, reliability was established by checking interview transcripts for the accuracy of participants' experiences and generated themes. Second, reliability was established by providing detailed descriptions of both the research design and implementation steps. Finally, reliability was established through operational details planned for data collection that included descriptions keeping an ongoing reflective appraisal throughout the project in memos and journals.

CHAPTER IV: RESULTS

This chapter presents the results of this study based on the insights collected by the researcher from the participants. These data were comprehensively interpreted to provide accurate conclusions and recommendations.

The data presented in this chapter were chronologically arranged based on their scope and how the participants shared their experiences related to the use of multimodal assessment. Essentially, the researcher identified the insights of the elementary school teachers with regards to the effectiveness of multimodal assessment in evaluating learners' learning as well as the ways on how elementary school teachers integrate multimodal assessment strategies into their daily teaching practices. Also, the researcher identified the challenges that elementary school teachers face when implementing multimodal assessment in their classrooms. In the same manner, the researcher also interpreted the impact of multimodal assessment on learners' engagement and learning outcomes. Lastly, this chapter presented the researcher-made multimodal assessment exemplar that will serve as model for teachers.

1. Multimodal Assessment as a Non-Traditional, Inclusive Approach

Many teachers described multimodal assessment as the opposite of traditional pen-and-paper tests. They emphasized that it involves evaluating student learning through various communication modes such as videos, audio recordings, presentations, and portfolios. Participant 3 stated, *Multimodal assessment, in my own perspective, is assessing student learning sa pamamagitan ng iba't-ibang communication channels like interactive presentations, audio recordings, films, and infographics etc. kabaliktaran ng pen & paper tests*". (Multimodal assessment, in my own perspective, is assessing student learning through various communication channels like interactive presentations, audio recordings, films, and infographics etc. as opposed to pen & paper tests.). Similarly, Participant 4 said, *"In my opinion ang multimodal assessment ay kabaliktaran ng traditional assessment. Kasi it entails assessing student learning through a variety of communication modalities kagaya ng pag record ng videos, paggawa/pagperform ng mga presentations at iba pa"*. (In my opinion, multimodal assessment is the opposite of traditional assessment. Because it

entails assessing student learning through a variety of communication modalities such as recording videos, making/performing presentations, and so on). Participant 7 echoed this by saying, “*Ang multimodal assessment ay ang kabaliktaran ng traditional assessment. Kung ang traditional assessment nagfofocus sa paggamit ng pen and paper test ito naman na multimodal assessment ay gumagamit ng iba ibang modalities para i assess ang natutunan ng mga bata gaya ng pagpapagawa ng portfolio, presentation at iba pa.*” (Multimodal assessment is the opposite of traditional assessment. While traditional assessment focuses on using pen and paper tests, multimodal assessment uses different modalities to assess what children have learned, such as creating portfolios, presentations, and more.)

Participant 5 added, “*Ang multimodal assessment ay hindi nakadepende sa pen and paper test o sa traditional way ng pag assess ng mga studyante. Ina-assess nito ang student learning sa pamamagitan ng various communication modes like videos, audio recordings, infographics, and interactive presentations.*” (Multimodal assessment does not rely on pen and paper tests or the traditional way of assessing students. It assesses student learning through various communication modes like videos, audio recordings, infographics, and interactive presentations.) Participant 17 reinforced this by saying, “*For me, ang multimodal assessment ay isang alternative way ng pag assess ng mga pupils. Kung ang traditional way of assessing learning is pen and paper test, ito naman ay nakafocus sa iba ibang way of assessing learning gaya ng pagcompose ng kanta, paggawa ng portfolio atbp.*” (For me, multimodal assessment is an alternative way of assessing pupils. While the traditional way of assessing learning is pen and paper tests, this one focuses on different ways of assessing learning such as composing a song, creating a portfolio, etc.) These narratives reflect a shared understanding that multimodal assessment breaks away from rigid formats and embraces more inclusive and expressive ways of evaluating learning.

Recognition of Diverse Learning Styles and Preferences

Teachers highlighted the importance of recognizing students’ unique learning styles and preferences. Participant 6 explained, “*For me ang multimodal assessment ay tungkol sa pagrerecognize at pagpapahalaga sa iba-ibang paraan ng pagkatuto ng mga bata at ang kanilang kanya kanyang paraan ng pagpapakita ng kanilang mga kaalaman. Kumbaga ineembrace ng multimodal assessment ang pagkakaiba-iba at pagamit ng iba-ibang pamamaraan at teknolohiya to assess learning.*” (For me, multimodal assessment is about recognizing and appreciating the different ways children learn and their unique ways of expressing their knowledge. In other words, multimodal assessment embraces the diversity and use of different methods and technologies to assess learning.) Participant 13 added, “*Ang multimodal assessment ay isang uri ng assessment strategy na I think makakapag-address sa iba ibang learning styles and needs ng mga bata.*” (Multimodal assessment is a type of assessment strategy that I think can address the different learning styles and needs of children.) Participant 15 emphasized “*Alam naman nating lahat na ang bawat bata ay unique kaya mayroong multimodal assessment ay para i-cater ang iba ibang learning styles at needs ng mga bata.*” (We all know that every child is unique, so there is a multimodal assessment to cater to the different learning styles and needs of children.) Participant 14 shared, “*For me ang multimodal assessment ay ang pagbibigay sa mga students ng different types of modalities that could assess their learning. Pwedeng sa mga visually inclined halimbawa –gagawa sila ng drawing/collage tungkol sa natutunan nila.*” (For me, multimodal assessment is about providing students with different types of modalities that could assess their learning. For example, for those who are visually inclined, they could make a drawing/collage about what they have learned.) Participant 16 stated, “*Multimodal assessment ay tungkol sa paggamit ng different modalities like portfolio making sa pag-assess sa natutunan ng mga bata at hindi nakafocus lang sa one-size-fits-all na uri ng assessment.*” (Multimodal

assessment is about using different modalities like portfolio making to assess what children have learned and not focusing on a one-size-fits-all type of assessment.) These responses show that teachers value multimodal assessment for its ability to accommodate diverse learners and provide equitable opportunities for all students to succeed.

Authentic and Creative Demonstration of Learning

Teachers viewed multimodal assessment as a more authentic and creative way to evaluate student learning. Participant 2 said, “*Multimodal assessment is a technique that presents information in several formats gaya halimbawa ng paggamit ng videos, interactive presentations/games para ang ating mga students makapag-exhibit ng kanilang abilities and knowledge in novel ways.*” (Multimodal assessment is a technique that presents information in several formats, such as using videos, interactive presentations/games so that our students can exhibit their abilities and knowledge in novel ways.) Participant 8 noted, “*In my own perspective, ang multimodal assessment ay isa sa authentic way na pag assess and pag examine ng mga natutunan ng bata sa pamamagitan ng paggamit ng ibat-ibang paraan gaya ng pagbibigay ng performance task sa mga bata, pagpapagawa ng portfolio etc.*” (In my own perspective, multimodal assessment is one of the authentic ways to assess and examine what children have learned by using various methods such as giving children performance tasks, having them create portfolios, etc.) Participant 9 added, “*Ang multimodal assessment ay ang makabagong paraan ng pag aassess ng learnings ng mga bata. Ang multimodal assessment ay hinihikayat ang mga bata na magparticipate at huwag mahiyang i manifest ang kanilang natutunan sa paraan na kumportable sila, pwedeng ito ay sa pamamagitan ng paggawa ng blog, pag role play etc.*” (Multimodal assessment is a modern way of assessing children's learning. Multimodal assessment encourages children to participate and not be shy about manifesting what they have learned in a way they are comfortable with, this could be through blogging, role playing etc.) Participant 18 emphasized, “*Ang multimodal assessment ay pagbibigay ng chance sa lahat ng uri ng learners para mai-manifest ang kanilang learning sa sarili nilang pammamaraan, pwedeng sa pamamagitan ng portfolio, paggawa ng video presentation, pagcompose ng poems or songs and many others. Ang mga bata ay may choice kung aling modality ang gusto nila at kumportable sila.*” (Multimodal assessment is about giving all types of learners a chance to manifest their learning in their own way, whether through a portfolio, making a video presentation, composing poems or songs and many others. Children have a choice of which modality they prefer and are comfortable with.) These narratives reflect how multimodal assessment encourages creativity and authentic expression of learning.

How does your background (prior knowledge, teaching style) influence your perception of multimodal assessment?

Belief in Individualized Learning

Teachers who believe in individualized learning were more inclined to embrace multimodal assessment. Participant 1 stated, “*Since hindi ako naniniwala sa one-size-fits-all, I believe na great help ito both sa teachers and learners to assess and support learning.*” (Since I don't believe in one-size-fits-all, I believe this is a great help for both teachers and learners to assess and support learning.) Participant 5 shared, “*I remember an idiom ‘there are many ways to kill a cat.’ Iba iba talaga ang learning needs and styles ng mga bata so as a teacher dapat creative ako on sa pagdeliver at pag assess the lessons.*” (I remember an idiom ‘there are many ways to kill a cat.’ Children have very different learning needs and styles, so as a teacher I have to be creative in delivering and assessing the lessons.) Participant 8 added, “*Naniniwala ako na every child is unique. May kanya kanya silang learning needs as well as learning styles. Because*

of this, I have a positive idea about multimodal assessment.” (I believe that every child is unique. They have their own learning needs as well as learning styles. Because of this, I have a positive idea about multimodal assessment.) Participant 12 emphasized, *”It helped me to be open-minded na dapat bigyan ng equal opportunities ang mga bata na ipakita ang kaalaman nila. They should feel safe and comfortable to show their learning.”* (It helped me to be open-minded that children should be given equal opportunities to show their knowledge. They should feel safe and comfortable to show their learning.) Participant 19 concluded, *”Ang background ang nagpa-realized saakin ng importance ng multimodal assessment in improving performance and motivation among students.”* (This background made me realize the importance of multimodal assessment in improving performance and motivation among students.) These responses show that teachers’ belief in student uniqueness and equity strongly influences their support for multimodal assessment.

Teaching Style and Flexibility

Teachers who use varied teaching strategies naturally aligned with multimodal assessment. Participant 7 said, *”As a teacher I use different teaching strategies in teaching different concepts and because of this I believe that I should use also different modalities in assessing learning.”* Participant 15 shared, *”Ang background ko sa teaching style ang tumulong saakin na i-recognize ang ability ng multimodal assessment to accommodate different learning preferences and enhance overall educational experiences of the pupils.”*(My background in teaching style helped me recognize the ability of multimodal assessment to accommodate different learning preferences and enhance the overall educational experiences of the pupils.)

Participant 16 noted, *”Ang background ko sa teaching style made me value the benefits of multimodal assessment in assessing and supporting learning.”* (My background in teaching style made me value the benefits of multimodal assessment in assessing and supporting learning.) Participant 10 added, *”Naniniwala ako na ang multimodal assessment ay malaking tulong saakin as a teacher lalo na sa pag-create ng more inclusive learning environment.”* (I believe that multimodal assessment is a great help to me as a teacher, especially in creating a more inclusive learning environment.) These narratives reflect how teaching style and openness to diverse strategies influence teachers’ positive perceptions of multimodal assessment.

Awareness of Learning Styles and Evolving Perspectives

Teachers with prior knowledge of learning styles viewed multimodal assessment as learner-friendly. Participant 11 said, *”Ang knowledge ko in different learning styles ang nakatulong saakin para i-view ang multimodal assessment as a ‘learner-friendly’ kind of assessment kasi magiging comfortable ang mga bata na magparticipate and ipakita kung ano ang natutunan nila.”* (My knowledge of different learning styles helped me view multimodal assessment as a 'learner-friendly' kind of assessment because it would make children feel comfortable participating and showing what they have learned.) Participant 13 added, *”Ang background knowledge ko ang nakatulong saakin upang isipin na ang multimodal assessment could address the different learning needs of the pupils.”* (My background knowledge helped me to think that multimodal assessment could address the different learning needs of the pupils.) Participant 14 shared, *”Ang background knowledge ko ang nagbukas ng isip ko na maging in favor sa multimodal assessment because I believe that it allows creativity and critical thinking.”* (My background knowledge opened my mind to be in favor of multimodal assessment because I believe that it allows creativity and critical thinking.) Participant 18 stated, *”My knowledge in multimodal assessment made me embrace that using diverse approaches/multimodal assessment can cater the different learning styles and preferences*

of the learners.” Participant 2 reflected, “*At first medyo hesitant ako to use multimodal assessment in assessing the learners, but because of the good benefits of using it, naencourage ako na gamitin ito.*” (At first, I was a bit hesitant to use multimodal assessment in assessing the learners, but because of the good benefits of using it, I was encouraged to use it.) These responses show how awareness and experience can shift perceptions and foster acceptance of multimodal assessment.

Multimodal Assessment Uses Diverse Communication Channels

Teachers consistently highlighted that traditional assessments rely on a single mode of communication—typically written exams or essays—while multimodal assessments encourage students to express their understanding through various formats. Participant 1 explained, “*Ang traditional assessments typically rely on a single mode of communication, gaya ng written exams or essays, while multimodal assessments naman ay nag-eencourage ng mga bata para e-express ang kanilang understanding through multiple modes, like visuals, audio, and text, often in digital formats.*” (Traditional assessments typically rely on a single mode of communication, like written exams or essays, while multimodal assessments encourage children to express their understanding through multiple modes, like visuals, audio, and text, often in digital formats.)

Participant 9 echoed this by saying, “*Kabaliktaran ng traditional assessments, na usually gumagamit ng iisang form of communication, gaya ng written tests or essays, ang multimodal assessments ay nag-e-enable ng mga bata na makapag convey ng kanilang natutunan sa pamamagitan ng variety of media.*” (In contrast to traditional assessments, which usually use a single form of communication, like written tests or essays, multimodal assessments enable children to convey what they have learned through a variety of media.) Participant 4 reinforced this contrast: “*Ang multimodal assessment ay sumusuporta sa idea na ang mga bata ay kayang mag demonstrate ng kanilang learning sa pamamagitan ng many channels of communication habang ang traditional assessment ay nakadepende sa one mode of communication like pen and paper test.*” (Multimodal assessment supports the idea that children can demonstrate their learning through many channels of communication, while traditional assessment relies on one mode of communication like a pen and paper test.) Participant 15 added, “*Ang traditional assessment ay isang usual way of testing, kadalasan ay gumagamit ng written tests, multiple-choice questions, or essays while multimodal assessment ay makabagong pamamaraan para i-test ang kaalaman ng mga bata at ina-allow nito ang mga bata na gumamit ng different forms of expression, like making a video, a presentation, a podcast, or a website, instead of just writing.*” (Traditional assessment is a usual way of testing, often using written tests, multiple-choice questions, or essays, while multimodal assessment is a modern method to test children's knowledge and allows children to use different forms of expression, like making a video, a presentation, a podcast, or a website, instead of just writing.) These responses reflect a shared understanding that multimodal assessment expands the ways students can communicate their learning.

Multimodal Assessment Supports Individual Needs and Learning Styles

A strong theme among participants was the adaptability of multimodal assessment to individual learning styles and preferences. Participant 5 noted, “*Para saakin ang traditional assessment ay less adaptable to individual needs compared sa multimodal assessment na kinoconsider ang various learning styles and abilities ng mga bata.*” (For me, traditional assessment is less adaptable to individual needs compared to multimodal assessment, which considers the various learning styles and abilities of children.) Participant 10 emphasized, “*Ang traditional assessments ay hindi kasing flexible ng multimodal assessment in terms of meeting the needs of each learner, samantalang ang multimodal assessments ay tini-take into account ang different learning styles and the abilities ng mga pupils.*” (Traditional assessments are not as flexible

as multimodal assessment in terms of meeting the needs of each learner, whereas multimodal assessments take into account the different learning styles and abilities of the pupils.) Participant 16 added, "*Ang traditional assessment ay hindi suitable sa lahat ng learners while multimodal assessment ay nagki-cater the diverse learning styles and preferences.*" (Traditional assessment is not suitable for all learners, while multimodal assessment caters to diverse learning styles and preferences.) Participant 13 explained, "*Traditional assessments, like exams and quizzes ay ine-evaluate ang knowledge recall and application through written means while multimodal assessments, which incorporate various modes of communication like visual, auditory, and kinesthetic elements, offer a more holistic and authentic demonstration of skills and understanding.*" (Traditional assessments, like exams and quizzes, evaluate knowledge recall and application through written means, while multimodal assessments, which incorporate various modes of communication like visual, auditory, and kinesthetic elements, offer a more holistic and authentic demonstration of skills and understanding.) These insights show that teachers value multimodal assessment for its inclusivity and responsiveness to learner diversity

Multimodal Assessment Promotes Authentic and Holistic Learning

Teachers described multimodal assessment as a more authentic and comprehensive way to evaluate student learning. Participant 3 stated, "*Ang pinagkaiba ng multimodal assessment sa traditional assessment ay nag-ooffer ito ng more flexible, engaging, and authentic approach sa pag-assess ng student learning, ina-allow nito ang mga bata na i-showcase ang kanilang kaalaman sa pamamagitan ng diverse modes of expression.*" (The difference between multimodal assessment and traditional assessment is that it offers a more flexible, engaging, and authentic approach to assessing student learning, allowing children to showcase their knowledge through diverse modes of expression.) Participant 7 added, "*Para saakin ang traditional assessment may not fully capture the learner's capabilities while multimodal assessment ay nagpoprovide ng more holistic view of a student's understanding.*" (For me, traditional assessment may not fully capture the learner's capabilities while multimodal assessment provides a more holistic view of a student's understanding.) Participant 17 emphasized, (Traditional assessments use written methods to assess knowledge recall and application such as exams and quizzes while multimodal assessments provide a more comprehensive and genuine display of abilities and comprehension.) "*Ang traditional assessments ay gumagamit ng written methods to assess knowledge recall and application gaya ng exams and quizzes while multimodal assessments ay nagpoprovide ng more comprehensive and genuine display of abilities and comprehension.*" Participant 12 illustrated this difference vividly: (Traditional assessment is like a regular written test. The pupils will answer questions on paper, and that's the basis if they know the information while multimodal assessment is like showing what they know in lots of different ways instead of just writing it.) "*Ang traditional assessment ay kagaya ng regular written test. Ang mga pupils ay sasagot ng tanong sa papel, and at yun na nag basehan if they know the information while multimodal assessment is like showing what they know in lots of different ways instead of just writing it.*" These reflections highlight how multimodal assessment allows students to demonstrate deeper understanding and real-world application of knowledge.

Multimodal Assessment Encourages Skill Application Over Memorization

Several participants pointed out that traditional assessments often emphasize memorization, while multimodal assessments focus on applying knowledge and demonstrating skills. Participant 2 explained, "*Ang traditional assessment focuses on memorization and recalling of information while multimodal assessment focuses on application of knowledge and demonstration of skills.*" (Traditional assessment focuses on memorization and recalling of information while multimodal assessment focuses on application

of knowledge and demonstration of skills.) Participant 6 added, “*Ang traditional assessment ay nakadepende sa standardized tests while multimodal assessment ay nageevaluate ng learning through diverse methods.*” (Traditional assessment depends on standardized tests while multimodal assessment evaluates learning through diverse methods.) Participant 11 states, “*Ang multimodal assessment ay gumagamit ng variety of techniques to measure learning, samantalang ang traditional assessment ay nakadepende usually sa standardized tests.*” (Multimodal assessment uses a variety of techniques to measure learning, while traditional assessment usually depends on standardized tests.) This perspective is echoed by Participant 19, who concludes, “*Ang traditional assessment relies on standardized examinations gaya ng periodic test while multimodal assessment employs a range of methods to assess learning.*” (Traditional assessment relies on standardized examinations like periodic tests while multimodal assessment employs a range of methods to assess learning.) These insights collectively suggest a philosophical shift in educational assessment, moving away from solely testing memory towards a more comprehensive evaluation of meaningful learning and the development of skills.

Time and Practical Considerations

While most participants favored multimodal assessment, a few acknowledged its challenges, particularly in terms of time and effort. Participant 14 shared, “*Para saakin ang multimodal assessment ay time consuming particularly for complicated projects, compared to traditional assessment, which often takes less.*” (For me, multimodal assessment is time-consuming, particularly for complicated projects, compared to traditional assessment, which often takes less.) Participant 18 agreed, “*Traditional assessment is generally less time-consuming kasi madali siya iadminister saka i-measure while multimodal assessment is more time-consuming, especially for complex projects.*” (Traditional assessment is generally less time-consuming because it's easy to administer and measure, while multimodal assessment is more time-consuming, especially for complex projects.) Despite these concerns, Participant 19 emphasized the core value of multimodal assessment: “*Pinakamahalaga dapat binibigyan nito ang mga students ng chance to show their understanding in real, meaningful ways—not just through tests.*” (Most importantly, it should give students a chance to show their understanding in real, meaningful ways—not just through tests.) This sentiment underscores the belief that the benefits of multimodal assessment—authenticity, inclusivity, and learner empowerment—outweigh its logistical demands.

Here’s a thematic analysis of responses to the question:

“What do you consider to be the key characteristics of an effective multimodal assessment?”

Alignment with Learning Goals and Clear Evaluation Criteria

Teachers emphasized that effective multimodal assessments must be clearly aligned with learning objectives and supported by transparent grading criteria. Participant 1 stated, “*Ang effective multimodal assessment for me ay yung match sa learning goals... and has clear instructions and grading criteria.*” (An effective multimodal assessment for me is one that matches the learning goals and has clear instructions and grading criteria.) Participant 2 added, “*Para sa akin ang effective multimodal assessment ay mayroong clear learning outcomes na aligned sa chosen modes... and a robust rubric that assesses both the content and the way different modes interact to create meaning.*” (For me, an effective multimodal assessment has clear learning outcomes aligned with the chosen modes and a robust rubric that assesses both the content and how the different modes interact to create meaning.) Participant 5 reinforced this by saying, “*Kailangan meron itong clear learning objectives and detailed rubrics to ensure fair and transparent evaluation of complex skills.*” (It must have clear learning objectives and detailed

rubrics to ensure fair and transparent evaluation of complex skills.) Participant 11 echoed, *“It should be clearly connected to the learning goals and include easy-to-understand instructions and grading criteria.”* Participant 7 described a good multimodal assessment as “characterized by clear alignment with learning objectives, transparent rubrics, and sufficient resources and support for all types of learners.” Participant 9 emphasized, *“Dapat meron din itong clear grading criteria para alam ng mga learners kung ano ang expected.”* (There should also be clear grading criteria so that learners know what is expected.) Participant 15 concluded, “What matters most is that the assessment is clear, aligned with the learning goals, and supports students throughout the process with guidance and feedback.” These responses highlight that clarity, fairness, and instructional alignment are foundational to effective multimodal assessment.

Use of Diverse Formats and Real-World Application

A recurring insight was the importance of using varied formats that mirror real-world communication. Participant 3 explained, *“An effective multimodal assessment ay yung nag-i-integrate ng diverse communication forms like visuals, audio, and text... ina-allow nito ang mga students to demonstrate skills authentically in real-world contexts.”* (An effective multimodal assessment is one that integrates diverse communication forms like visuals, audio, and text, allowing students to demonstrate their skills authentically in real-world contexts.) Participant 4 added, “Uses various formats like videos, presentations, and written work to let students show their skills in real-world ways.” Participant 6 shared, “An effective multimodal assessment is all about letting students show what they know in many different ways, like through videos, presentations, or hands-on projects.”

Participant 10 emphasized, *“Hinahayaang mag-shine ang mga bata sa pamamagitan ng pagpahintulot sakanila na i-demonstrate ang kanilang kaalaman through diverse formats... which mirrors real-world communication and application.”* (Learners are allowed to shine by giving them the opportunity to demonstrate their knowledge through diverse formats, which mirrors real-world communication and application.) Participant 19 echoed this by saying, *“Binibigyang opportunity ang mga students to show what they’ve learned in different ways—like through writing, speaking, visuals, or digital tools... dapat binibigyan nito ang mga students ng chance to show their understanding in real, meaningful ways—not just through tests.”* (Students are given the opportunity to show what they’ve learned in different ways—like through writing, speaking, visuals, or digital tools—and they should be given the chance to show their understanding in real and meaningful ways, not just through tests.) These narratives reflect the belief that multimodal assessment should simulate authentic tasks and allow students to express learning through multiple media.

Support for Student Strengths, Interests, and Learning Styles

Teachers consistently highlighted the importance of allowing students to express their learning in ways that suit their strengths and preferences. Participant 8 said, *“Dapat ina-allow nito na e-express ng mga bata ang kanilang knowledge through a blend of visual, auditory, and textual elements.”* (It should allow children to express their knowledge through a blend of visual, auditory, and textual elements.) Participant 12 added, *“Yung binibigyan ng kalayaan ang mga bata na e-express ang kanilang kaalaman sa ibat ibang pamamaraan—lalo na sa paraang gusto nila at meaningful sakanila.”* (Students should be given the freedom to express their knowledge in different ways—especially in ways that they prefer and find meaningful.) Participant 13 emphasized, *“Yung binibigyan ng chance ang mga bata to show their learning in ways that suit their strengths.”* (Children should be given the chance to show their learning in ways that suit their strengths.) Participant 14 shared, *“Yung binibigyan sila ng different ways to show what they’ve learned—whether through writing, visual etc.... kapag ang multimodal assessment ay clear, fair, and*

encourages choice, nagiging more confident ang mga studyante.” (They should be given different ways to show what they’ve learned—whether through writing, visuals, etc. When multimodal assessment is clear, fair, and encourages choice, students become more confident.) Participant 15 noted, “Not every student shines through traditional tests or essays, so offering options—like creating a video, podcast, or infographic—can make learning more meaningful and inclusive.” Participant 19 reinforced this by saying, “Give students choices so they can use their strengths.” These responses show that multimodal assessment is most effective when it honors student individuality and promotes inclusive learning.

Engagement, Creativity, and Motivation

Many participants emphasized that multimodal assessment boosts student engagement and creativity. Participant 16 explained, “*Kapag na-boost natin ang confidence ng mga bata we can see more creativity and effort kasi mas nafefeel ng mga bata ang ownership of their work.*” (When we boost children’s confidence, we can see more creativity and effort because they feel more ownership of their work.) Participant 17 added, “When given choice and creativity, they’re more engaged, more confident, and often produce higher-quality work.” Participant 18 shared, “*Mas nagiging meaningful ang learning experience dahil sa multimodal assessment... it encourages creativity and keeps students motivated because they can connect the work to their own interests and strengths.*” (The learning experience becomes more meaningful because of multimodal assessment; it encourages creativity and keeps students motivated as they can connect the work to their own interests and strengths.) Participant 5 noted that multimodal assessment “boosts student engagement and accommodates various learning styles.” Participant 13 said, “It should be creative, clear, and gives the students real choice while still being fair and supportive.” Participant 14 concluded, “*Naniniwala ako na kapag ang multimodal assessment ay clear, fair, and encourages choice, nagiging more confident ang mga studyante and connected to their work.*” (I believe that when multimodal assessment is clear, fair, and encourages choice, students become more confident and connected to their work.) These reflections underscore that effective multimodal assessment fosters deeper engagement and empowers students to take ownership of their learning.

II. “What are the key components/modes that you believe should be included in multimodal assessment?”

Inclusion of Multiple Modalities to Reflect Student Strengths

Elementary school teachers consistently emphasized the importance of integrating various modes—written, oral, visual, and digital—to accommodate diverse student strengths. Participant 1 shared, “*Multimodal assessment should include different ways for students to show their learning—not just writing. Dapat gumagamit ng presentations, drawings, group projects, videos, and reflections.*” (It should use presentations, drawings, group projects, videos, and reflections.) Participant 2 echoed this, saying, “Multimodal assessment should include writing, speaking, visuals, and hands-on tasks... giving them different options helps everyone show what they’ve learned.” Participant 3 added, “A solid multimodal assessment should include written work, visual elements, oral presentations, hands-on tasks, and digital projects... give everyone a fair chance to succeed.”

Participant 5 emphasized, “*Every student is different. Some write well, others speak better, and some are great with art or tech... dapat included sa multimodal assessment ang written work, visuals, presentations, and hands-on tasks.*” (Every student is different. Some write well, others speak better, and some are great with art or technology; therefore, written work, visuals, presentations, and hands-on tasks should be included in multimodal assessment.) Participant 10 reinforced this by stating, “*Students have different strengths—some are strong writers, others express themselves better through speaking or visuals... I*

believe in including a variety of modes: written work, oral presentations, creative visuals like posters, and digital tools such as multimedia projects.” (Students have different strengths—some are strong writers, others express themselves better through speaking or visuals. I believe in including a variety of modes: written work, oral presentations, creative visuals like posters, and digital tools such as multimedia projects.) These responses reflect a shared belief that multimodal assessment must be flexible and inclusive to support all learners.

Real-World Relevance and Engagement Through Creative Outputs

Teachers highlighted that multimodal assessment should mirror real-world communication and foster student engagement. Participant 6 noted, “For multimodal to be effective it should include options like making videos, designing posters, or doing skits. It helps the learners stay engaged and shows their strengths in different areas.” Participant 12 added, “In the real world, people communicate in many ways—not just in writing... multimodal assessment should include writing, speaking, visuals, and tech-based outputs. It better prepares students for real-life tasks and challenges.”

Participant 18 emphasized, “Multimodal assessment should include written work for critical thinking, oral presentations for communication skills, visual projects for creativity, and digital tools to prepare students for modern learning environments.” Participant 19 shared, “I include different modes like essays, group discussions, infographics, and video presentations. This helps meet diverse learning styles and makes assessment more engaging and authentic.” These insights show that teachers value multimodal assessment not only for its inclusivity but also for its ability to connect learning to real-world contexts and motivate students.

Development of 21st-Century Skills Through Varied Tasks

Several participants stressed that multimodal assessment supports the development of essential 21st-century skills such as communication, collaboration, creativity, and critical thinking. Participant 13 explained, “Multimodal assessment should include written responses to assess content knowledge, oral tasks for communication skills, visual or creative work for critical thinking, and collaborative tasks for teamwork.” Participant 14 added, “It should include academic writing, verbal communication, visual design, and interactive or tech-based tasks to fully support all learners.”

Participant 16 stated, “It’s important to include modes that assess communication, creativity, and collaboration... written work, group projects, presentations, and visual elements like posters or videos.” Participant 17 reinforced this by saying, “A good multimodal assessment plan should cover text-based responses, verbal expression, visual thinking, and digital outputs... supports differentiated instruction and deeper engagement.” These responses reflect a shared understanding that multimodal assessment is a powerful tool for cultivating holistic student development.

Balancing Traditional and Creative Assessment Approaches

Some teachers emphasized the importance of combining traditional assessments with creative formats to ensure comprehensive evaluation. Participant 7 said, “*It’s important to combine traditional assessments with more creative ones. Written tests, yes—pero dapat may kasamang present ations, group work, and visual projects.*” (It’s important to combine traditional assessments with more creative ones. Written tests are good, but there should also be presentations, group work, and visual projects.) Participant 8 added, “*Assessing in different ways helps me support different types of learners... kaya dapat included sa multimodal assessment ang written, oral, visual tasks.*” (Assessing in different ways helps me support different types of learners; that’s why written, oral, and visual tasks should be included in multimodal assessment.)

Participant 11 shared, “As a teacher I include not just the traditional written tasks, but also oral responses, group projects, and digital content creation like podcasts or videos.” Participant 15 concluded, “*It’s important to include a mix of reading, writing, speaking, and creative tasks... nabibigyan ang every student ng fair chance to succeed based on their strengths.*” (It’s important to include a mix of reading, writing, speaking, and creative tasks so that every student is given a fair chance to succeed based on their strengths.) These reflections show that teachers value a balanced approach that honors both academic rigor and creative expression.

(b): “**Can you describe a specific instance where you participated in/implemented a multimodal assessment? What was the context?**”

Multimodal Assessment in Science and Environmental Lessons

Science topics provided rich opportunities for teachers to implement multimodal assessment strategies. Participant 1 shared, “*Isa sa mga lesson ko sa Science ay tungkol sa plants, pinasulat ko ang mga bata ng short paragraph tungkol sa plant life cycles, draw and label a diagram, and explain their diagram to a partner.*” (One of my Science lessons was about plants; I asked the children to write a short paragraph about plant life cycles, draw and label a diagram, and explain their diagram to a partner.) This allowed assessment of writing, visual understanding, and oral communication. Similarly, Participant 12 described, “*Nung tinuro ko ang tungkol sa life cycles, my pupils created flipbooks showing each stage of a butterfly’s life. They drew each stage, wrote a short sentence, and explained it to a partner.*” (When I taught about life cycles, my pupils created flipbooks showing each stage of a butterfly’s life. They drew each stage, wrote a short sentence, and explained it to a partner.) These activities combined drawing, writing, and verbal explanation to assess science comprehension.

Participant 3 implemented a multimodal approach in a lesson on animals and their habitats: “*Pinagsulat ko sila ng short paragraph... pinagawa ko sila ng diorama... then presented their project to the class.*” (I asked them to write a short paragraph, create a diorama, and then present their project to the class.) Participant 5 also used sorting and verbal explanation: “*I let my pupils sort the pictures of the animals by habitat, write one sentence about each group, and explain their sorting verbally.*” (I let my pupils sort pictures of animals by habitat, write one sentence about each group, and explain their sorting verbally.) These examples show how science lessons naturally lend themselves to multimodal strategies that integrate writing, visuals, and oral tasks.

Math Concepts Assessed Through Real-World and Creative Tasks

Teachers frequently used multimodal assessment in math to make abstract concepts more tangible. Participant 6 shared, “*Sa lesson ko about money, my pupils role-played a class store... wrote price tags, used play money... explained their transactions.*” Participant 10 described a hands-on activity: “*My pupils brought small items from home... created their own addition problems... wrote number sentences and explained their thinking.*” These approaches connected math to real-life scenarios and assessed computation, reasoning, and communication.

Participant 13 used multimodal tools to assess problem-solving: “*They could explain their thinking using drawings, physical manipulatives, or record themselves... One pupil used blocks and then made a video explaining her strategy.*” Participant 14 added, “*My pupils built a structure using recycled materials... labeled the shapes... wrote a paragraph... recorded videos explaining their designs.*” Participant 15 described a ‘Classroom Shop’ project: “*Created products... designed price tags... acted as buyers and sellers... wrote reflections.*” These examples show how multimodal assessment in math supports creativity, collaboration, and deeper understanding.

Language and Grammar Skills Assessed Through Movement and Expression

Language lessons were enriched by multimodal strategies that included drawing, acting, and speaking. Participant 7 shared, “*Sa lesson ko on action words, my pupils drew pictures... wrote the matching verbs... acted out their verbs.*” (In my lesson on action words, my pupils drew pictures, wrote the matching verbs, and acted out their verbs.) Participant 9 described a grammar activity: “*I created ‘adverb action cards’... They picked a card, acted it out, and classmates guessed the adverb.*” (I created “adverb action cards.” They picked a card, acted it out, and their classmates guessed the adverb.) These kinesthetic and oral activities made grammar engaging and interactive. Participant 11 used multimodal assessment in a lesson about community helpers: “*Pupils chose a community role, drew a picture... wrote one or two facts... gave a short presentation.*” (Pupils chose a community role, drew a picture, wrote one or two facts, and gave a short presentation.) Participant 16 assessed phonemic awareness through a scavenger hunt: “*Pupils found objects... took photos, drew pictures, or recorded short videos naming the objects.*” (Pupils found objects, took photos, drew pictures, or recorded short videos naming the objects.) These examples demonstrate how multimodal assessment supports language development through varied, expressive formats.

Visual and Kinesthetic Learning in Math and Literacy

Teachers incorporated visual and kinesthetic elements to support understanding in both math and literacy. Participant 8 described an ordinal numbers activity: “*Asked 10 pupils to line up... created a drawing showing a race... labeled with ordinal numbers.*” Participant 17 shared, “*Created physical patterns with their bodies... drew their patterns... explained them in a sentence or video.*” Participant 18 used blocks: “*Built addition problems... drew the blocks... wrote the matching number sentence... explained to the class.*”

Participant 19 used a game-based approach: “*Pupils rolled dice, added the numbers, and then drew or told a story... Some also wrote the addition sentence.*” These activities combined movement, drawing, storytelling, and computation, showing how multimodal assessment can be playful, inclusive, and effective across subjects.

Technology Integration and Digital Outputs

Some teachers incorporated digital tools to enhance multimodal assessment. Participant 4 shared, “*I asked my pupils to identify shapes around the school, take photos, label them, and then create a slideshow.*” Participant 14 noted that “*Some pupils recorded videos explaining their designs.*” Participant 13 mentioned a pupil who “*made a video explaining her strategy.*” These examples show how technology can support student expression and provide alternative ways to demonstrate learning. Participant 16 also used tech-based outputs: “*Recorded short videos naming the objects and saying the beginning sound.*” These instances reflect how digital tools can enrich multimodal assessment by capturing student voice, creativity, and understanding in dynamic ways.

(c): “**Do you believe there are any limitations to multimodal assessments? If so, please elaborate.**”

Time, Planning, and Teacher Workload

Many teachers acknowledged that multimodal assessments demand more time and effort to plan, implement, and evaluate. Participant 1 noted, “*Isa sa mga limitations ng multimodal assessments ay ang fact na it can take more time to plan and grade... harder to compare results or keep it consistent.*” (One of the limitations of multimodal assessments is the fact that they can take more time to plan and grade, making it harder to compare results or keep them consistent.) Participant 5 added, “*Kung minsan ang pag-manage ng lahat ng iba't ibang format—mga video, drawing, recording—ay maaaring maging*

napakahirap... maglaan ka talaga ng karagdagang oras upang ayusin at magbigay ng feedback.” (Sometimes managing all the different formats—videos, drawings, recordings—can be very challenging; you really need to spend extra time organizing and giving feedback.) Participant 11 echoed this concern: *“Reviewing and giving feedback on multimodal work can be time-consuming, especially kapag madami ang studyante and iba ibang format ang ginamit.”* (Reviewing and giving feedback on multimodal work can be time-consuming, especially when there are many students and different formats are used.) Participant 10 emphasized the need for teacher preparation: *“Ang mga guro ay nangangailangan ng maraming pagsasanay at karanasan upang magdisenyo ng mga epektibong multimodal assessment na tunay na sumusukat sa pagkatuto.”* (Teachers need extensive training and experience to design effective multimodal assessments that truly measure learning.) These responses reflect a shared concern that while multimodal assessments are valuable, they require significant teacher investment in terms of time, training, and organization.

Student Confusion and Distraction from Learning Goals

Several teachers observed that students may become distracted by the creative process or overwhelmed by choices, which can hinder learning. Participant 2 shared, *“Minsan ang mga pupils feel overwhelmed kapag mayroong madaming options or modes to choose from.”* (Sometimes pupils feel overwhelmed when there are too many options or modes to choose from.) Participant 6 explained, “Multimodal assessments can sometimes distract the pupils from focusing on the actual learning goal because they get caught up in making the product look nice.” Participant 7 added, *“Mas concern sila sa paggawa ng produkto na maganda sa halip na ipakita ang kanilang pang-unawa.”* (They are more concerned with making a product that looks nice instead of showing their understanding.)

Participant 14 echoed this issue: *“Kung minsan ang mga mag-aaral ay mas nakatuon sa mode (tulad ng paggawa ng isang video) at mas kaunti sa nilalaman.”* (Sometimes students focus more on the mode—such as making a video—and less on the content.) These insights suggest that while multimodal assessments promote creativity, they must be carefully guided to ensure that learning remains the central focus.

Equity and Resource Limitations

Teachers expressed concern about unequal access to resources and the impact on student performance. Participant 3 stated, *“Some pupils walang resources para sa multimodal assessments, which can make it difficult for them to fully express their learning.”* (Some pupils do not have the resources for multimodal assessments, which can make it difficult for them to fully express their learning.) Participant 16 added, *“Ang mga multimodal na gawain ay maaaring mangailangan ng mga resources na hindi palaging available sa bawat silid-aralan, tulad ng mga tablet o art supplies.”* (Multimodal tasks may require resources that are not always available in every classroom, such as tablets or art supplies.) Participant 17 warned, *“May risk na ang mga mag-aaral na may mas malakas na artistikong o teknolohikal na kasanayan ay makakuha ng mas mataas na marka, kahit na ang kanilang pang-unawa ay hindi mas malalim kaysa sa iba.”* (There is a risk that students with stronger artistic or technological skills may receive higher grades, even if their understanding is not deeper than others.)

Participant 8 also noted, *“Maaaring mas gusto ng ilang mag-aaral ang mga tradisyonal na pagtatasa at hindi komportable... sa paggamit ng iba't ibang mga mode tulad ng pagsasalita o video.”* (Some students may prefer traditional assessments and feel uncomfortable using different modes such as speaking or video.) These responses highlight the need for equitable access and sensitivity to student comfort and capability when designing multimodal assessments.

Consistency, Objectivity, and Assessment Validity

A common concern was the difficulty in maintaining consistency and objectivity across varied outputs. Participant 4 explained, “*Minsan ay nakakalito na makakuha ng patas dahil hindi laging madaling sukatin ang pagkamalikhain o oral na mga paliwanag sa parehong paraan tulad ng nakasulat na gawain.*” (Sometimes it is confusing to ensure fairness because it is not always easy to measure creativity or oral explanations in the same way as written work.) Participant 9 added, “*Maaaring mahirap tiyakin na ang lahat ng mga mode ay nag-aassess ng parehong kasanayan o kaalaman.*” (It may be difficult to ensure that all modes assess the same skills or knowledge.) Participant 13 shared, “*Maaaring maging mahirap na mapanatili ang pagkakatipon-pareho at pagiging patas sa buong klase.*” (It can be difficult to maintain consistency and fairness across the entire class.)

Participant 18 emphasized, “*Minsan mahirap magtakda ng malinaw na standard/criteria para sa pagbibigay ng marka... maaaring maging subjective ang pagsusuri.*” (Sometimes it is hard to set clear standards or criteria for grading... the evaluation can become subjective.) Participant 12 noted, “*Pinahihirapan minsan ng mga multimodal assessment na subaybayan ang pag-unlad ng mga mag-aaral... hindi direktang maihahambing ang mga resulta.*” (Multimodal assessments sometimes make it difficult to track students’ progress... the results are not directly comparable.) These reflections underscore the challenge of designing fair and reliable multimodal assessments that align with learning goals and allow for meaningful comparison.

Classroom Management and Stakeholder Understanding

Some teachers pointed out the classroom management demands and the need for broader understanding among stakeholders. Participant 19 said, “*Ang mga multimodal assessment ay maaaring mangailangan ng maraming classroom management upang mapanatili ang mga mag-aaral sa gawain.*” (Multimodal assessments may require extensive classroom management to keep students on task.) Participant 15 added, “*Maaaring mahirap tiyakin na nauunawaan ng mga magulang at iba pang guro kung paano bigyang-kahulugan ang mga resulta... hindi sila kasing diretso ng mga tradisyonal na pagsusulit.*” (It can be difficult to ensure that parents and other teachers understand how to interpret the results... they are not as straightforward as traditional tests.) These insights suggest that successful implementation of multimodal assessment requires not only teacher skill and planning but also clear communication with students, parents, and fellow educators to ensure shared understanding and support.

III. (a): “What assessment strategies have you found effective in improving classroom instruction?”

Performance Tasks and Real-World Application

Many teachers emphasized the effectiveness of performance tasks in improving instruction and assessing deeper learning. Participant 3 shared, “*Para sa akin ang pagbibigay ng Performance Task ay napaka-epektibo... nagbibigay ito sa akin ng mas malalim na pananaw sa kritikal na pag-iisip, paglutas ng problema, at pagkamalikhain ng aking mga mag-aaral.*” (For me, giving Performance Tasks is very effective... it provides me with deeper insights into my students’ critical thinking, problem-solving, and creativity.) Participant 4 added, “*Ang performance tasks ay isang epektibong diskarte... hinihikayat nito ang mga mag-aaral sa mga tunay na hamon sa mundo.*” (Performance tasks are an effective strategy... they encourage students to engage with real-world challenges.) Participant 17 echoed this by saying, “*Gumagamit ako ng mga performance tasks tulad ng paglutas ng problema... nagbibigay ito sa akin ng pananaw sa kanilang kritikal na pag-iisip at mga kasanayan sa aplikasyon.*” (I use performance tasks such as problem-solving... it gives me insight into their critical thinking and application skills.)

Participant 18 also highlighted the value of varied tasks: “*Gumagamit ako ng iba't ibang uri ng pagtatasa—tulad ng mga poster, pangkatang gawain, at mga digital na aktibidad—upang gawing mas patas at masaya ang pag-aaral.*” (I use different types of assessments—such as posters, group work, and digital activities—to make learning fairer and more enjoyable.) These responses show that performance-based assessments foster authentic learning and provide teachers with meaningful insights into student understanding.

Games, Hands-On Activities, and Interactive Assessments

Teachers frequently cited games and hands-on activities as effective strategies for engaging students and reducing assessment anxiety. Participant 2 explained, “*Gumagamit ako ng formative assessment games... tulad ng math bingo o story-building card... ipinapakita sa akin kung saan sila nahihirapan nang walang pressure.*” (I use formative assessment games... such as math bingo or story-building cards... it shows me where they struggle without pressure.) Participant 9 added, “*Ang mga games at hands-on activities ay lubos na epektibo... ginagawang masaya at interaktibo ang assessment.*” (Games and hands-on activities are highly effective... they make assessment fun and interactive.) Participant 10 noted, “*Isinasama ko ang mga games at hands-on activities bilang mga alternatibong assessment... nagpapababa ng stress sa part ng mga bata.*” (I incorporate games and hands-on activities as alternative assessments... it reduces stress on the part of the children.)

Participant 13 shared, “*Gumagamit ako ng mga laro at interactive activities... bilang mga impormal na assessment... nagbibigay sa akin ng mahahalagang insights.*” (I use games and interactive activities as informal assessments... they provide me with valuable insights.) These strategies not only make learning enjoyable but also help teachers identify learning gaps in a low-pressure environment.

Visual Tools and Graphic Organizers

Visual aids such as graphic organizers were praised for helping students structure their thoughts and deepen understanding. Participant 8 stated, “*Ang paggamit ng graphic organizer ay napaka-epektibo... pinahuhusay din nito ang pag-unawa at kritikal na pag-iisip.*” (The use of graphic organizers is very effective... it also enhances understanding and critical thinking.) Participant 14 added, “*Gumagamit ako ng mga graphic organizer... nakakatulong sa akin na matukoy ang mga lugar kung saan kailangan nila ng higit pang suporta.*” (I use graphic organizers... it helps me identify the areas where students need more support.) Participant 12 described a multimodal approach: “*Pagsamahin ang visual, verbal, at hands-on na mga assessment... gumuhit ng isang larawan upang ipaliwanag ito.*” (Combine visual, verbal, and hands-on assessments... draw a picture to explain it.) Participant 15 also emphasized visual expression: “*Ipakita ang kanilang gawa gamit ang mga manipulative o drawing... nagbibigay ito sa akin ng mas malinaw na larawan ng kanilang pag-unawa.*” (Show their work using manipulatives or drawings... it gives me a clearer picture of their understanding.) These responses show that visual tools support comprehension and allow teachers to assess learning in creative, accessible ways.

Quick Checks and Self-Assessment Tools

Teachers found quick checks and self-assessment tools useful for immediate feedback and instructional adjustment. Participant 1 shared, “*Ang paggamit ng mga exit ticket... nagbibigay-daan sa akin na makita kung ano ang naunawaan kaagad.*” (The use of exit tickets allows me to see what students have understood immediately.) Participant 5 added, “*Gumagamit ako ng quick checks like thumbs up/thumbs down... para mapalitan ko kaagad ang aking pagtuturo.*” (I use quick checks like thumbs up/thumbs down so I can immediately adjust my teaching.) Participant 11 noted, “*Ang mga tool sa self-assessment... tulad ng smiley face chart o thumbs up/down... hinihikayat silang pag-isipan ang kanilang pag-aaral.*”

(Self-assessment tools such as a smiley face chart or thumbs up/down encourage them to reflect on their learning.)

These strategies help teachers monitor student progress in real time and adjust instruction to meet learners' needs more effectively.

Differentiated and Multimodal Assessment Approaches

Several teachers emphasized the importance of using varied assessment formats to reach all learners. Participant 16 said, "*Sinisikap kong panatilihin iba-iba ang mga assessment—minsan ay pasalita, minsan nakasulat, minsan hands-on.*" (I strive to keep assessments varied—sometimes oral, sometimes written, sometimes hands-on.) Participant 19 added, "*Gumagamit ako ng iba't ibang uri ng mga assessment—tulad ng mga drawing, presentasyon, pagsusulat, at mga video.*" (I use different types of assessments—such as drawings, presentations, writing, and videos.) Participant 7 described using learning stations: "*Learning Stations o Centers... nagtataguyod ng aktibong pakikipag-ugnayan... nakakatugon sa magkakaibang mga pangangailangan at istilo sa pag-aaral.*" (Learning stations or centers promote active engagement and address different needs and learning styles.) These responses reflect a commitment to inclusive assessment practices that honor student diversity and promote deeper engagement.

(b): "**What were the strengths and weaknesses of this multimodal assessment experience?**"

Strengths – Engagement, Creativity, and Learner Confidence

Teachers widely recognized that multimodal assessment enhances student engagement, fosters creativity, and builds learner confidence. Participant 1 noted, "*Ang multimodal assessment ay tumutulong sa mga mag-aaral na ipakita kung ano ang alam nila sa iba't ibang paraan, na ginawang mas nakakaengganyo at patas ang pag-aaral para sa lahat.*" (Multimodal assessment helps students show what they know in different ways, making learning more engaging and fair for everyone.) Participant 3 emphasized, "*It encourages creativity and critical thinking and the learners feel more confident when they can pick how to demonstrate their knowledge.*" (It encourages creativity and critical thinking, and students feel more confident when they can choose how to demonstrate what they know.) Participant 5 observed, "*Nakikita ko na ang mga bata ay more motivated by creative options.*" (I see that children are more motivated by creative options.)

Participant 8 elaborated, "*Multimodal assessment... dagdagan ang pakikipag-ugnayan; suportahan ang iba't ibang istilo ng pag-aaral; hikayatin ang creativity and critical thinking; at bumuo ng mga kasanayan sa totoong mundo tulad ng komunikasyon.*" (Multimodal assessment increases engagement, supports different learning styles, encourages creativity and critical thinking, and develops real-world skills like communication.) Participant 10 added, "*Multimodal assessments engage diverse learners; improve their confidence; foster collaboration; help build communication skills; and make learning more relevant.*" (Multimodal assessments engage diverse learners, boost their confidence, foster collaboration, help develop communication skills, and make learning more relevant.) These reflections show that multimodal assessment empowers students to express themselves meaningfully and supports holistic development.

Strengths – Differentiation, Real-World Skills, and Authentic Learning

Teachers also highlighted how multimodal assessment supports differentiated instruction and real-world skill development. Participant 13 shared, "*Multimodal assessment supports differentiated instruction; help teachers identify individual learning gaps; build student motivation; develop communication and presentation skills; and encourage deeper understanding.*" (Multimodal assessment supports differentiated instruction, helps teachers identify individual learning gaps, builds student motivation, develops communication and presentation skills, and encourages deeper understanding.) Participant 14

added, *“It helps learners develop their real-world skills; provide opportunities for creativity; increase engagement; allow for self-assessment; and give teachers multiple data points for instruction.”* (It helps learners develop real-world skills, provides opportunities for creativity, increases engagement, allows for self-assessment, and gives teachers multiple data points for instruction.)

Participant 19 emphasized, *“Multimodal assessments help teachers assess both content Knowledge and 21st-century skills; promote higher-order thinking; allow for authentic, real-world tasks; foster independence; and encourage peer learning.”* (Multimodal assessments help teachers assess both content knowledge and 21st-century skills, promote higher-order thinking, allow for authentic and real-world tasks, foster independence, and encourage peer learning.) Participant 11 noted, *“They encourage learners’ reflection and metacognition; accommodate visual, auditory, and kinesthetic learners; offer authentic assessment experiences; support formative feedback; and help develop critical thinking.”* (They encourage learners’ reflection and metacognition, accommodate visual, auditory, and kinesthetic learners, offer authentic assessment experiences, support formative feedback, and help develop critical thinking.) These responses reflect the value of multimodal assessment in creating inclusive, skill-based, and authentic learning environments.

Weaknesses – Time Demands and Teacher Workload

A recurring concern was the time and effort required to plan, implement, and evaluate multimodal assessments. Participant 1 admitted, *“Tumagal ng mas maraming oras upang mamarkahan at ipaliwanag nang malinaw ang iba’t ibang mga opsyon.”* (It took more time to grade and clearly explain the different options.) Participant 7 echoed, *“Nangangailangan sila ng higit na pagsisikap upang ayusin at suriin.”* (They require more effort to organize and evaluate.) Participant 13 added, *“It can be time-consuming to manage and assess multiple formats.”* (It can be time-consuming to manage and assess multiple formats.) Participant 17 shared, *“Kaso sa part ng teachers kelangan natin ng more time to prepare and grade.”* (For teachers, we need more time to prepare and grade.) Participant 15 noted, *“Extra preparation time is needed for teachers.”* (Extra preparation time is needed for teachers.) These insights highlight the logistical challenges teachers face when integrating multimodal assessments into their practice, especially in large or resource-limited classrooms.

Weaknesses – Fairness, Consistency, and Assessment Clarity

Teachers expressed difficulty in maintaining fairness and consistency across diverse outputs. Participant 2 said, *“Medyo challenging ang pag ensure ng fairness.”* (Ensuring fairness is quite challenging.) Participant 3 added, *“Medyo mahirap magcompare ng results ng gawa ng mga pupils lalo na kun gumamit ng different formats.”* (It’s quite difficult to compare the results of pupils’ work, especially when they use different formats.) Participant 6 noted, *“It can be challenging to standardize grading.”* (It can be challenging to standardize grading.)

Participant 14 explained, *“Designing clear expectations for different modes takes time and feedback delivery can be more complex.”* (Designing clear expectations for different modes takes time, and providing feedback can be more complex.) Participant 18 observed, *“Ang ibang bata na sa shock sa dami ng pagpipilian.”* (Some students get overwhelmed by the many choices.) Participant 8 warned, *“Maaaring nalilito ang ilang mga mag-aaral tungkol sa mga inaasahan nang walang malinaw na patnubay.”* (Some students may become confused about the expectations without clear guidance.) These responses suggest that without clear rubrics and guidance, multimodal assessment can lead to confusion and inconsistent evaluation.

Weaknesses – Technology Access and Group Dynamics

Technology-related issues and group work dynamics were also identified as challenges. Participant 9 stated, *“Technology issues can disrupt the assessment.”* (Technology issues can disrupt the assessment.) Participant 11 added, *“Not all learners have equal access to technology outside the classroom.”* (Not all learners have equal access to technology outside the classroom.) Participant 16 echoed, *“Technology access can be unequal and assessing group work fairly requires careful monitoring.”* (Technology access can be unequal, and assessing group work fairly requires careful monitoring.) Participant 12 noted, *“Group work can sometimes lead to uneven participation.”* (Group work can sometimes lead to uneven participation.) Participant 19 concluded, *“Pagdesign ng rubrics that fairly assess diverse outputs can be complex.”* (Designing rubrics that fairly assess diverse outputs can be complex.)

These reflections underscore the need for equitable access to resources and thoughtful planning to ensure fair participation and evaluation.

(c): **“Are there successful initiatives or assessment programs you’ve implemented to positively impact student learning outcomes?”**

Project-Based and Real-World Learning Initiatives

Many teachers successfully implemented project-based assessments that connected classroom learning to real-world contexts. Participant 1 shared, *“I introduced project-based learning assessments where my learners applied concepts in real-world scenarios... pinalalim din ang kanilang pag-unawa, na makikita sa pinahusay na pagganap sa mga standardized na pagsusulit.”* (I introduced project-based learning assessments where my learners applied concepts in real-world scenarios... this deepened their understanding, which was reflected in improved performance on standardized tests.) Participant 4 echoed this with, *“I developed a project-based assessment model where learners worked on real-world problems... binoboost nito ang critical thinking.”* (I developed a project-based assessment model where learners worked on real-world problems... it boosts critical thinking.) Participant 9 added, *“I assigned simple projects where my learners apply what they’ve learned to real-life situations... Ginagawa nitong praktikal at hindi malilimutan ang pag-aaral.”* (I assigned simple projects where my learners apply what they’ve learned to real-life situations... it makes learning practical and unforgettable.) Participant 8 also emphasized hands-on relevance: *“Nagsama ako ng mga praktikal na gawain, tulad ng mga eksperimento o paglutas ng problema sa totoong buhay, na ginawang mas hands-on at nakakaengganyo ang pag-aaral.”* (I included practical tasks, such as experiments or solving real-life problems, which made learning more hands-on and engaging.) These initiatives helped deepen understanding, promote engagement, and improve performance by making learning more meaningful and applicable.

Interactive and Gamified Assessments

Several teachers used interactive games and gamified quizzes to boost participation and retention. Participant 6 stated, “I used gamified quizzes and interactive assessments to make learning fun and competitive, which boosted participation and retention.” Participant 14 added, *“Gumamit ako ng mga interactive games at pagsusulit para gawing mas nakakaengganyo ang mga sesyon ng pagsusuri at mapabuti ang pagpapanatili.”* (I used interactive games and quizzes to make assessment sessions more engaging and improve retention.) Participant 16 shared, *“Gumamit ako ng mga games sa pag-aaral upang suriin ang mga paksa, na ginawang masaya at epektibo ang mga sesyon ng pagsusuri.”* (I used learning games to review topics, making the assessment sessions fun and effective.) These playful approaches helped reduce stress, increase motivation, and make assessment sessions more dynamic and enjoyable for learners.

Hands-On and Manipulative-Based Activities

Hands-on learning was a recurring strategy among teachers to enhance understanding and engagement. Participant 3 explained, “I implement simple, hands-on math assessments using counting objects and number games... *ginagawang nakakaengganyo at naa-access ang pagtatasa.*” (making the assessment engaging and accessible.) Participant 11 noted, “*Pinagawa ko ang aking mga mag-aaral sa mga hands-on na aktibidad na nauugnay sa paksa... pinahusay na pagpapanatili.*” (I let my students do hands-on activities related to the topic, which improved retention.) Participant 13 added, “*Isinama ko ang mga hands-on na aktibidad... nagpapalakas ng pakikipag-ugnayan at pag-unawa.*” (I integrated hands-on activities that strengthen engagement and understanding.) Participant 18 shared, “*Mayroon akong mga mag-aaral na gumagamit ng mga building blocks o manipulatives upang ipakita ang mga konsepto sa matematika tulad ng pagbibilang o mga pattern.*” (I have students who use building blocks or manipulatives to demonstrate math concepts such as counting or patterns.) These tactile strategies helped learners visualize and internalize concepts more effectively.

Role-Play, Presentations, and Performance-Based Tasks

Teachers also used role-play and presentations to assess understanding in expressive and interactive ways. Participant 7 said, “I introduced short presentations where my pupils explain what they’ve learned... *Binubuo nito ang kanilang kumpiyansa.*” (It builds their confidence.) Participant 10 shared, “*Nagsama ako ng mga simpleng role-play... Pinatataas nito ang pakikipag-ugnayan at praktikal na pag-unawa.*” (I included simple role-plays... This increases engagement and practical understanding.) Participant 19 added, “I ask my pupils *na isadula ang isang kuwento o konsepto... tumutulong sa pagtatasa ng pag-unawa sa isang interactive na paraan.*” (to dramatize a story or concept... it helps assess understanding in an interactive way.) Participant 17 emphasized variety: “*Gumamit ako ng magkakaibang mga assessment... mga nakasulat na ulat, video, o oral na presentasyon... tumutugon sa iba't ibang istilo ng pag-aaral.*” (I used various assessments—written reports, videos, or oral presentations—that cater to different learning styles.) These strategies supported communication skills, confidence, and deeper comprehension.

Visual Tools and Organizational Strategies

Some teachers used visual tools to support conceptual understanding and comparison. Participant 12 shared, “*Gumamit ako ng mga graphic organizer tulad ng mga Venn diagram upang matulungan ang aking mga mag-aaral na paghambingin ang mga ideya.*” (I used graphic organizers such as Venn diagrams to help my students compare ideas.) Participant 15 implemented learning stations: “*Nag-implement ako ng mga learning station na may iba't ibang gawain... nagpapahintulot sa aking mga mag-aaral na galugarin ang mga paksa sa maraming paraan.*” (I implemented learning stations with various activities... allowing my students to explore topics in multiple ways.) These approaches helped students organize their thoughts, explore topics from multiple angles, and engage in differentiated learning experiences.

Formative Feedback and Peer Collaboration

A few teachers emphasized formative feedback and peer collaboration as key to improving learning outcomes. Participant 2 said, “*I developed a peer-assessment initiative... Pinopromote nito ang pakikipagtulungan, critical thinking, at self-reflection.*” (It promotes collaboration, critical thinking, and self-reflection.) Participant 5 noted, “*I started using quick exit tickets at the end of class... Nakatulong ito sa akin na ayusin ang aking pagtuturo at mapabuti ang kanilang pagkatuto.*” (It helped me adjust my

teaching and improve their learning.) These strategies fostered a reflective classroom culture and allowed teachers to adjust instruction based on real-time insights.

IV. (a): “In your experience, how do you believe multimodal assessment impacts learners’ engagement and learning outcomes?”

Enhanced Engagement Through Choice and Personal Expression

Teachers consistently observed that multimodal assessment increases student engagement by allowing learners to express understanding in ways that align with their strengths and preferences. Participant 1 shared, “*Ang multimodal assessment ay nagdaragdag ng pakikipag-ugnayan ng mag-aaral... ginagawang mas naa-access at makabuluhan ang pag-aaral.*” (Multimodal assessment increases student engagement... making learning more accessible and meaningful.) Participant 2 added, “*By offering different ways upang ipakita ang kanilang nalalaman... nagpapanatili sa mga mag-aaral na interesado.*” (By offering different ways to show what they know... it keeps students interested.) Participant 7 emphasized, “*Multimodal assessment encourages active, nakasentro sa mag-aaral na pag-aaral... Ang empowerment na ito ay nagtutulak ng pakikipag-ugnayan.*” (Multimodal assessment encourages active, student-centered learning... this empowerment drives engagement.) Participant 10 noted, “*Nag-aanyaya sa mga mag-aaral na makisali sa nilalaman sa mga paraan na personal na umaalingawngaw... nagpapataas ng motibasyon at pagmamay-ari ng pag-aaral.*” (It invites students to engage with content in personally resonant ways... increasing motivation and ownership of learning.) Participant 19 reinforced this by saying, “*Nagpapalakas ng pakikipag-ugnayan sa pamamagitan ng pagpayag sa mga mag-aaral na ipahayag ang kanilang pag-aaral sa iba't ibang paraan.*” (It strengthens engagement by allowing students to express their learning in multiple ways.) These reflections show that when students have agency and choice, they become more invested and motivated in their learning.

Improved Learning Outcomes and Deeper Understanding

Multimodal assessment was also credited for promoting deeper comprehension and stronger academic performance. Participant 3 stated, “*Ginagawang aktibo at masaya ang pag-aaral... panatilihin ang impormasyon nang mas matagal.*” (It makes learning active and enjoyable... helping students retain information longer.) Participant 5 explained, “*Tina-transform ang karanasan sa pagkatuto... nagpapalalim ng pag-unawa at nagpapatibay ng intrinsic motivation.*” (It transforms the learning experience... deepening understanding and strengthening intrinsic motivation.) Participant 13 added, “*Inililipat ang pokus mula sa pag-uulit na pagsasaulo patungo sa makabuluhang mga karanasan... isinasalin sa pinabuting mga resulta.*” (It shifts the focus from rote memorization to meaningful experiences... leading to improved outcomes.) Participant 15 noted, “*Nagta-tap sa magkakaibang proseso ng pag-iisip... pinahuhusay ang pagpapanatili ng memorya at mga kasanayan sa critical thinking.*” (It taps into diverse cognitive processes... enhancing memory retention and critical thinking skills.) Participant 18 shared, “*Binibridge ang gap sa pagitan ng pagtuturo at mga kasanayan sa komunikasyon sa totoong mundo... nagpapahusay sa kanilang pagganap sa akademiko.*” (It bridges the gap between instruction and real-world communication skills... improving their academic performance.) These insights reflect how multimodal assessment supports long-term retention, critical thinking, and real-world application of knowledge.

Inclusivity and Support for Diverse Learning Styles

Teachers emphasized that multimodal assessment creates a more inclusive classroom environment by accommodating different learning styles and intelligences. Participant 6 said, “*Lumikha ng isang mas*

napapabilang na kapaligiran... nagpapahintulot sa mga mag-aaral na kumonekta sa materyal sa isang personal na antas.” (It creates a more inclusive environment... allowing students to connect with the material on a personal level.) Participant 8 explained, *“Nag-tap sa kanilang mga natatanging kagustuhan sa pag-aaral... nagpapataas ng motibasyon at pagpapanatili.”* (It taps into their unique learning preferences... increasing motivation and retention.) Participant 11 added, *“Nagiging mas dynamic at tumutugon ang mga assessment sa magkakaibang pangangailangan ng mag-aaral.”* (Assessments become more dynamic and responsive to diverse student needs.) Participant 14 highlighted, *“Ginagawang mas pantay ang pag-aaral... mas malalim silang nakikibahagi.”* (It makes learning more equitable... allowing deeper engagement.) Participant 17 concluded, *“We move beyond a single metric of success... nagpapalaki ng pag-unlad ng mga mag-aaral.”* (We move beyond a single metric of success... fostering greater student growth.) These responses show that multimodal assessment fosters equity and supports learners with varied strengths and needs.

Development of 21st-Century Skills and Learner Empowerment

Teachers recognized that multimodal assessment helps build essential skills such as creativity, communication, collaboration, and self-reflection. Participant 9 stated, *“Nagpo-provide ng mas mayamang data... nagbibigay-daan sa mas naka-target at epektibong pagtuturo.”* (It provides richer data... allowing for more targeted and effective instruction.) Participant 12 shared, *“Nagbibigay ng kapangyarihan sa mga mag-aaral... nagpapalaki ng pagkamalikhain at kritikal na pag-iisip.”* (It empowers students... enhancing creativity and critical thinking.) Participant 16 described, *“Transform ang silid-aralan sa isang makulay na espasyo... hinihikayat silang kumuha ng mga intelektwal na panganib.”* (It transforms the classroom into a vibrant space... encouraging them to take intellectual risks.)

Participant 17 emphasized, *“Ang komprehensibong pagsusuring ito ay nagpapalaki ng kamalayan sa sarili at mas malalim na pag-unawa.”* (This comprehensive assessment fosters self-awareness and deeper understanding.) Participant 5 added, *“Bumuo ng mga kritikal na kasanayan tulad ng pagkamalikhain at komunikasyon.”* (It builds critical skills such as creativity and communication.) These reflections highlight how multimodal assessment prepares students for future success by nurturing higher-order thinking and personal growth. (b): **“What specific multimodal assessment have positively impacted your teaching practices and the learning outcomes?”**

Video Presentations and Role-Play for Deeper Understanding and Confidence

Teachers found video-based assessments and role-playing activities highly effective in enhancing student engagement, comprehension, and communication skills. Participant 1 shared, *“Ang isang multimodal assessment na may malakas na epekto ay ang mga video presentation na ginawa ng mag-aaral... Ito ay makabuluhang pinalakas ang pakikilahok, lalo na sa mga mas tahimik na mag-aaral.”* (A multimodal assessment with strong impact is the student-created video presentations... This significantly increased participation, especially among quieter learners.) Participant 3 added, *“Ang pagsasama ng mga role-play na video... ay nagbigay-daan sa akin na masuri ang pag-unawa sa kabila ng mga nakasulat na pagsusulit... Ang mga resulta ay nagpakita ng mas malakas na pagpapanatili at mas masigasig na pakikilahok.”* (Incorporating role-play videos... allowed me to assess understanding beyond written tests... The results showed stronger retention and more enthusiastic engagement.) Participant 5 noted, *“Ang role-playing vocabulary words has made learning more engaging and allowed me to assess comprehension.”* (Role-playing vocabulary words made learning more engaging and allowed me to assess comprehension.) Participant 10 emphasized, *“Ang mga simpleng puppet show o role-playing*

activity pagkatapos magbasa ay mainam para sa mga batang nahihiya o nahihirapan sa pagsusulat.” (Simple puppet shows or role-playing activities after reading are ideal for students who are shy or struggle with writing.) These strategies allowed students to express themselves more freely and helped teachers assess learning beyond traditional formats.

Visual Storytelling and Comic Strips for Literacy and Creativity

Visual storytelling tools like storyboards and comic strips were praised for supporting literacy development and creative expression. Participant 2 explained, “*Ang paggamit ng mga storyboard... Nakatulong ito sa akin na masuri ang kanilang pag-unawa sa istruktura ng pagsasalaysay, bokabularyo, at pagkakasunud-sunod.*” (The use of storyboards... helped me assess their understanding of narrative structure, vocabulary, and sequencing.) Participant 6 shared, “*Ang paggawa ng mga comic strips para ikwento muli ang mga kuwento... maipahayag ang kanilang mga ideya nang visual and written.*” (Creating comic strips to retell stories... allowed them to express their ideas both visually and in writing.) Participant 11 added, “*Ang mga comic strip na gawa sa papel at mga krayola ay tumutulong sa mga bata na buod ng mga kuwento at ipakita ang pang-unawa.*” (Comic strips made with paper and crayons help children summarize stories and show understanding.) Participant 17 noted, “*Sa pamamagitan ng pagsasama ng storytelling at visual arts... nakita ko ang aking mga mag-aaral na gumawa ng mga koneksyon na hindi nila makukuha sa pamamagitan ng pagsusulat lamang.*” (By combining storytelling and visual arts... I saw my students make connections they wouldn’t get through writing alone.) These multimodal tools helped students synthesize ideas and demonstrate comprehension in engaging, age-appropriate ways.

Hands-On Activities with Verbal and Visual Explanations

Teachers highlighted the value of combining tactile tasks with verbal or visual explanations to assess understanding. Participant 4 shared, “*Ang pagsasama ng mga manipulative na may verbal at written na mga paliwanag sa math... tumutulong sa akin na makilala ang mga puwang sa pag-unawa.*” (Combining manipulatives with verbal and written explanations in math... helps me identify gaps in understanding.) Participant 9 stated, “*Ang paggamit ng mga hands-on activities na may mga verbal na paliwanag ay gumagana nang maayos... mas natututo sa pamamagitan ng paggawa at pakikipag-usap kaysa sa pagsulat.*” (Using hands-on activities with verbal explanations works well... they learn more through doing and talking than through writing.) Participant 16 reflected, “*Ang pagsasama-sama ng mga hands-on activities sa assessment... nagbibigay-daan sa akin na masuri ang parehong kasanayan at pag-unawa.*” (Integrating hands-on activities into assessment... allows me to assess both skills and understanding.) Participant 18 added, “*Ang pagsasama-sama ng visual at verbal na mga assessment... mas malinaw na maipahayag ang mga ideya.*” (Combining visual and verbal assessments... helps ideas be expressed more clearly.) These approaches allowed teachers to observe student thinking processes and support learners with different strengths.

Drawing and Oral Explanation for Early Literacy and Expression

Drawing paired with oral or written explanation was especially helpful for younger learners or those developing writing skills. Participant 12 shared, “*Hinahayaan ko ang aking mga mag-aaral na gumamit ng mga drawing na sinamahan ng mga simpleng pangungusap... binabawasan ang kanilang frustration.*” (I allow my students to use drawings accompanied by simple sentences... it reduces their frustration.) Participant 19 added, “*Ang paggamit ng mga simpleng drawing na may maiikling pasalitang pagpapaliwanag malinaw na maipahayag ang kanilang pag-unawa.*” (Using simple drawings with short oral explanations... helps them express their understanding clearly.) Participant 13 emphasized, “*Ang*

pag-integrate ng mga oral explanations sa mga visual aid... nagpapakita ng kanilang proseso ng pag-iisip nang mas ganap.” (Integrating oral explanations with visual aids... shows their thinking process more fully.) These multimodal strategies helped students communicate ideas more effectively and gave teachers deeper insight into their understanding.

Inclusive Assessment Through Multiple Modalities

Teachers appreciated how multimodal assessment supports differentiated instruction and cultural inclusivity. Participant 14 noted, “*Ang mga multimodal assessments ay nakatulong sa akin na mas mabisa ang pagkakaiba ng pagtuturo... maaaring magpakita ng pag-unawa sa pamamagitan ng isang video o oral presentation.*” (Multimodal assessments helped me make differentiated instruction more effective... students can demonstrate understanding through a video or oral presentation.) Participant 15 shared, “*Ang paggamit ng maraming mode—pagguhit, pagsasalita, pag-arte—ay nagbibigay-daan sa akin na maabot ang mga mag-aaral na may magkakaibang istilo ng pagkatuto at kultural na background.*” (Using multiple modes—drawing, speaking, performing—allows me to reach students with diverse learning styles and cultural backgrounds.) These reflections show that multimodal assessment not only improves learning outcomes but also creates a more equitable and responsive classroom environment.

(c): “**How does the use of multiple modes (e.g., visual, auditory, written) impact your teaching practices and learning outcomes during multimodal assessment?**”

Inclusivity and Support for Diverse Learners

Teachers consistently emphasized that using multiple modes allows them to reach a wider range of learners, especially those who struggle with traditional assessments. Participant 1 shared, “*Ang pagsasama ng visual, pandinig, at nakasulat na mga pagtatasa ay nakakatulong sa mga mag-aaral na nahihirapan sa pagbabasa o pagsusulat na ipakita pa rin ang kanilang kaalaman nang may kumpiyansa.*” (Integrating visual, auditory, and written assessments helps students who struggle with reading or writing still demonstrate their knowledge with confidence.) Participant 2 added, “*Ang paggamit ng maraming mga mode ay nakakatulong sa akin na maabot ang bawat mag-aaral... Ginagawa nitong mas flexible at inclusive ang pagtuturo ko.*” (Using multiple modes helps me reach every learner... It makes my teaching more flexible and inclusive.) Participant 18 reinforced this by saying, “*Ang ilang mga mag-aaral ay nahihirapang ipahayag ang kanilang mga iniisip sa pamamagitan ng pagsulat, ngunit kapag sila ay nagsasalita o gumuhit, nakikita ko kung gaano nila talaga naiintindihan.*” (Some students struggle to express their thoughts through writing, but when they speak or draw, I can see how well they truly understand.) Participant 14 noted, “*Ang paggamit ng maraming mode ay naghihikayat sa pagkamalikhain at ginagawang mas kasiya-siya ang pag-aaral para sa mga batang nag-aaral.*” (Using multiple modes encourages creativity and makes learning more enjoyable for young learners.) These reflections show that multimodal assessment fosters equity and empowers students to express their learning in ways that suit their strengths.

Improved Engagement and Reduced Stress

Multimodal assessment was credited for making learning more enjoyable and less intimidating. Participant 3 explained, “*Ginagawang hindi gaanong nakaka-stress ang mga assessment... nagpapalakas sa kanilang pakikipag-ugnayan at pagganyak.*” (Assessments become less stressful... strengthening their engagement and motivation.) Participant 7 added, “*Pinapanatili nitong dinamiko at masaya ang mga aralin... mas aktibong lumahok sa mga assessment.*” (It keeps the lessons dynamic and fun... encouraging more active participation in assessments.) Participant 15 shared, “*Ginagawang hindi gaanong parang mga pagsubok ang mga pagtatasa at parang mga pagkakataon para sa mga mag-aaral na ipakita ang kanilang*

nalalaman.” (Assessments feel less like tests and more like opportunities for students to show what they know.) Participant 19 concluded, *“Sa maraming mode, ang mga assessments ay parang mga aktibidad sa pag-aaral kaysa sa mga pagsubok. Malaki ang pagkakaiba nito sa kung paano tumugon ang mga mag-aaral.”* (With multiple modes, assessments feel more like learning activities than tests. It makes a big difference in how students respond.) These insights highlight how multimodal assessment transforms the classroom into a more engaging and student-centered environment.

Deeper Understanding and Stronger Learning Outcomes

Teachers observed that combining multiple modes helps students connect ideas more deeply and retain information longer. Participant 4 stated, *“Nakakatulong sa mga mag-aaral na ikonekta ang mga ideya nang mas malalim... pagpapabuti ng pagpapanatili.”* (It helps students connect ideas more deeply... improving retention.) Participant 10 shared, *“Combining listening, speaking, and visual tasks... nakakatulong na palakasin ang pag-aaral.”* (Combining listening, speaking, and visual tasks helps reinforce learning.) Participant 17 added, *“Ang mga visual at auditory na elemento ay nakakatulong na palakasin ang pag-aaral... suriin ang pag-unawa sa mas malikhaing paraan.”* (The visual and auditory elements help strengthen learning... allowing understanding to be assessed in more creative ways.) Participant 13 emphasized, *“Ang paggamit ng maraming mode ay nagpapayaman sa proseso ng assessment at ginagawa itong mas nakasentro sa mag-aaral at epektibo.”* (Using multiple modes enriches the assessment process and makes it more student-centered and effective.) These responses reflect how multimodal assessment enhances comprehension and supports long-term learning.

Instructional Flexibility and Diagnostic Insight

Teachers appreciated how multimodal assessment helps them adapt instruction and identify learning gaps more effectively. Participant 5 said, *“Tinutulungan ako ng assessment ng multimodal na tukuyin ang mga puwang sa pag-unawa... kung umaasa ako sa isang form lang.”* (Multimodal assessment helps me identify gaps in understanding... which I might miss if I rely on only one form.) Participant 6 noted, *“Nakikita ko kung aling mode ang bawat mag-aaral ay nag-eexcell at scaffold mula doon.”* (I can see which mode each student excels in and scaffold from there.) Participant 8 added, *“Nagbibigay sa akin ng mas maraming impormasyon... tinutulungan akong ayusin ang pagtuturo.”* (It gives me more information... helping me adjust my teaching.) Participant 12 shared, *“Nakakatulong ito sa akin na maiba ang feedback... matutukoy ko kung kailangan ng aking mag-aaral ng suporta sa pasalitang wika, pag-unawa, o mga kasanayan sa pagsulat.”* (It helps me differentiate feedback... I can determine whether my student needs support in oral language, comprehension, or writing skills.) Participant 16 concluded, *“Nakakatulong ito sa akin na makita kung paano naiiba ang pagproseso ng impormasyon... iniangkop ang aking mga aralin.”* (It helps me see how students process information differently... allowing me to tailor my lessons.) These reflections show that multimodal assessment enhances instructional responsiveness and personalization.

V: What multimodal assessment exemplar should be prepared to serve as a model for teachers?

I. Introduction

In today’s diverse and dynamic classrooms, traditional assessment methods often fall short in capturing the full range of student understanding and potential. Elementary learners, in particular, benefit from assessments that allow them to express their knowledge in ways that align with their unique strengths, interests, and learning styles. This is where multimodal assessment becomes a transformative tool—not just for measuring learning, but for enriching it.

Multimodal assessment refers to the use of multiple forms of communication and expression—such as visual, auditory, written, and kinesthetic modes—to evaluate student learning. It moves beyond the

confines of pen-and-paper tests and opens up opportunities for creativity, collaboration, and deeper engagement. When thoughtfully designed, multimodal assessments can foster inclusivity, motivation, and critical thinking.

For teachers, having a well-crafted exemplar of multimodal assessment is essential. It serves as a guidepost for designing meaningful tasks, setting clear expectations, and ensuring that learning outcomes are met. A strong exemplar also helps educators balance creativity with structure, making the assessment process both manageable and impactful.

This SOP proposes a multimodal assessment exemplar that integrates multiple subjects and modes of expression, centered on a theme that is both relevant and engaging for elementary learners. The exemplar is designed to be flexible, scalable, and inclusive—making it suitable for a wide range of classroom contexts and student profiles.

By preparing and sharing a model like this, schools and educators can promote best practices in assessment, support differentiated instruction, and elevate the overall quality of teaching and learning. The exemplar outlined below is not just a template—it's a catalyst for innovation and equity in the classroom.

II. Suggested Exemplar: Integrated Performance Task on Environmental Awareness

The proposed exemplar is a performance-based multimodal assessment titled “*Our Planet, Our Responsibility*.” This task is designed for elementary learners and integrates Science, English, Arts, and Values Education. It centers on the theme of environmental protection and sustainability—a topic that is both timely and meaningful for young students.

This assessment invites learners to explore real-world environmental issues such as pollution, conservation, and climate change. They are then asked to express their understanding through a combination of written, visual, oral, and optional kinesthetic outputs. This approach ensures that students can engage with the content in ways that resonate with their individual learning preferences.

The task is structured to promote inquiry, creativity, and collaboration. Students may work individually or in small groups to complete their outputs, which include a written reflection or poem, a visual poster or infographic, and a short oral presentation or video recording. For kinesthetic learners, a role-play or skit may be added to dramatize their message.

This exemplar is designed to be inclusive and adaptable. Teachers can modify the complexity of the tasks based on grade level, available resources, and student needs. The multimodal nature of the assessment ensures that all learners—regardless of their strengths in writing, speaking, or artistic expression—have an opportunity to succeed.

Ultimately, “*Our Planet, Our Responsibility*” serves as a model of how multimodal assessment can be used to deepen understanding, promote student agency, and connect classroom learning to real-world issues. It is a powerful example of how assessment can be both rigorous and joyful.

III. Learning Objectives

The exemplar aims to achieve four key learning objectives that span cognitive, communicative, and affective domains. First, students will demonstrate understanding of environmental issues such as pollution, conservation, and sustainability. This objective ensures that the content focus remains grounded in science and social awareness. Second, students will communicate ideas effectively using multiple modes of expression. This includes written reflections, visual representations, oral presentations, and

optional performance tasks. By engaging with different formats, learners develop flexibility and fluency in communication.

Third, students will collaborate with peers to produce meaningful outputs. Group work encourages teamwork, negotiation, and shared responsibility. It also helps learners develop interpersonal skills and appreciate diverse perspectives. Fourth, students will reflect on their personal responsibility toward the environment. This objective connects academic learning to values education, encouraging students to think critically about their role in protecting the planet and making ethical choices. Together, these objectives ensure that the assessment is not only comprehensive but also transformative. It promotes academic rigor, personal growth, and social responsibility—all within a multimodal framework that supports diverse learners.

IV. Assessment Design and Implementation

The assessment begins with an exploration of environmental topics through class discussions, readings, and multimedia resources. Students then choose how they want to express their understanding—whether through writing, drawing, speaking, or performing. This choice empowers learners and fosters intrinsic motivation. Written outputs may include poems, reflections, or short essays that express the student’s thoughts and feelings about environmental issues. Visual outputs might be posters, infographics, or drawings that illustrate a problem and propose a solution. Oral presentations can be delivered live or recorded, allowing students to explain their work and share their insights.

Teachers should provide clear instructions, scaffolds, and sample outputs to guide students. Rubrics should be shared in advance to clarify expectations and support self-assessment. Flexible grouping can be used to encourage collaboration, and time should be allocated for peer feedback and revision. Materials should be accessible and inclusive. Basic art supplies, paper, and digital tools (if available) can be used to support creativity. Teachers should also ensure that students with limited access to technology are given alternative options that are equally valued and supported.

Throughout the process, teachers should observe, document, and provide formative feedback. This helps students refine their work and deepens the learning experience. The final outputs can be shared in a classroom gallery, presentation day, or digital showcase—celebrating student voice and achievement.

V. Impact and Conclusion

A multimodal assessment exemplar like *“Our Planet, Our Responsibility”* has a profound impact on both teaching practices and student learning outcomes. It transforms assessment from a static measurement into a dynamic learning experience that values creativity, diversity, and depth.

For teachers, this exemplar provides a roadmap for designing inclusive and engaging assessments. It encourages flexibility in instruction, supports differentiated learning, and offers richer insights into student understanding. It also fosters a classroom culture of collaboration, reflection, and respect.

For students, the exemplar promotes agency, confidence, and critical thinking. It allows them to express their knowledge in ways that feel authentic and empowering. It also helps them connect academic content to real-world issues, making learning more relevant and meaningful.

The exemplar supports the development of 21st-century skills such as communication, collaboration, and problem-solving. These skills are essential for lifelong learning and future success, and multimodal assessment provides a powerful platform for cultivating them.

Preparing and sharing a multimodal assessment exemplar like this is a vital step toward more equitable,

engaging, and effective education. It serves not only as a model for teachers but as a catalyst for transforming how we assess, teach, and inspire our learners.

An exemplar of a multimodal assessment tool designed for English, Science, Math, and Reading at the elementary level. Each subject integrates two distinct modes of assessment to support diverse learning styles and provide a richer understanding of student performance.

English Multimodal Assessment

In an English lesson focused on character development and storytelling, students are first asked to write a short paragraph describing a character's traits and actions from a story they've read. This written task allows them to practice sentence construction, vocabulary, and comprehension. To complement this, students then perform a short role-play where they act out a scene involving the character they described. This oral and kinesthetic mode enables learners to demonstrate understanding through expression and dialogue. The combination of writing and performance helps teachers assess both literacy and communication skills while engaging students in creative interpretation.

English

In an English lesson focused on character development and storytelling, students engage in a multimodal assessment that integrates written, oral, visual, and kinesthetic modes of learning.

First, students write a short paragraph describing a character's traits, feelings, and motivations from a story they have read. This written component assesses comprehension, vocabulary, and sentence construction, helping students express their understanding through structured language. Next, students create a simple visual aid—such as a character map or drawing—that represents the character's emotions and relationships. This visual mode enhances creative thinking and conceptual clarity.

Finally, students perform a short role-play where they act out a scene involving the same character they described. This oral and kinesthetic activity allows them to demonstrate comprehension through dialogue, tone, and body language, reinforcing communication and empathy skills. By combining written, visual, oral, and kinesthetic elements, this assessment enables teachers to evaluate a broad range of skills, including literacy, interpretation, creativity, and expression. It also supports diverse learning styles, making the experience engaging and inclusive.

English Sample: Character Exploration

Activity: After reading a short story, students will:

1. Write a paragraph describing the main character's traits, actions, and motivations.
2. Create a simple visual representation (drawing or chart) of the character.
3. Perform a short role-play based on a scene involving that character.

Modes Used: Written + Visual + Oral + Kinesthetic

Purpose: To assess comprehension, vocabulary, creative expression, and communication skills while encouraging confidence, collaboration, and storytelling engagement.

Science Multimodal Assessment

For a unit on plant life cycles, students begin by drawing and labeling the stages of a plant's growth—from seed to full bloom. This visual task encourages observation and reinforces scientific vocabulary. Following this, students explain their diagram orally to a partner or teacher, describing each stage and its function. Then, students write a short reflection or caption explaining how each stage contributes to the plant's overall development. This written component strengthens comprehension and scientific communication. The integration of visual, oral, and written modes supports learners with different strengths and provides a more inclusive and engaging way to demonstrate knowledge.

Science

For a unit on the water cycle, students begin by drawing and labeling the stages—evaporation, condensation, precipitation, and collection. This visual task helps reinforce scientific vocabulary and sequencing. Then, students explain the diagram orally to a partner or teacher, describing each stage and its role in the cycle. This verbal explanation allows teachers to assess conceptual understanding and clarity of thought. The pairing of visual and oral modes supports learners who may struggle with written expression and encourages deeper engagement with the topic.

Science Sample: Life Cycle Presentation

For a unit on the water cycle, students begin by drawing and labeling the stages—evaporation, condensation, precipitation, and collection. This visual task helps reinforce scientific vocabulary and sequencing. Then, students explain the diagram orally to a partner or teacher, describing each stage and its role in the cycle. Afterward, they write a short paragraph summarizing the impact of the water cycle on living things and the environment. This written task deepens understanding and reflection. The combination of visual, oral, and written modes supports diverse learners and encourages deeper engagement with the topic.

Science Sample: Life Cycle Presentation

Activity: Students will draw and label the stages of a butterfly’s life cycle. Afterward, they will explain each stage orally to a partner or teacher and write a short paragraph describing what happens and why it’s important.

Modes Used: Visual + Oral + Written

Purpose: This activity assesses scientific understanding, communication, and writing skills. It allows students to demonstrate knowledge in multiple ways, supports learners who struggle with one mode, and encourages creativity and reflection.

Math Multimodal Assessment

In a math lesson on addition and subtraction, students use manipulatives such as counters or blocks to solve simple word problems. They physically group and separate items to represent mathematical operations, which supports kinesthetic learning and conceptual clarity. After solving the problems, students write number sentences to represent their solutions. Finally, students explain their process orally or through a short video presentation, describing how they used the materials to find their answers. This multimodal approach—combining hands-on, written, and oral modes—captures procedural fluency, conceptual understanding, and communication skills.

In a lesson on measurement, students use rulers or measuring tapes to measure classroom objects and record the lengths in a chart. This hands-on activity supports kinesthetic learning and real-world application. After collecting data, students write simple comparison statements such as “The pencil is longer than the eraser” or “The book is 20 cm wide.” Then, they create a simple digital or drawn bar graph to visually present their measurements. This visual and written component reinforces mathematical representation and communication. By combining physical measurement, written analysis, and visual display, the assessment captures both procedural skill and conceptual understanding.

Math Sample: Measurement Challenge

Activity: Students will use rulers or measuring tapes to measure classroom objects and record the lengths in a chart. Then, they will write comparison statements such as “The pencil is longer than the eraser” and create a simple bar graph to show their data.

Modes Used: Kinesthetic + Written + Visual

Purpose: This activity assesses practical math skills, data representation, and communication. It supports diverse learning styles and helps students connect mathematical concepts with real-world contexts.

Reading Multimodal Assessment

During a guided reading session, students read a short passage aloud while the teacher listens for fluency, pronunciation, and decoding skills. This oral reading task provides immediate insight into their reading level and confidence. Afterward, students draw a picture of the main character and setting, visually retelling the story. Then, they record a short video or audio clip explaining the events of the story or the character's actions in their own words. This multimodal approach—combining oral reading, visual representation, and verbal explanation—allows learners to demonstrate comprehension through multiple formats and supports diverse literacy levels.

Reading

During a guided reading session, students read a short passage aloud while the teacher listens for fluency, pronunciation, and decoding. This oral reading task provides immediate insight into their reading level and confidence. Afterward, students draw a picture of the main character and setting, visually retelling the story. Then, they explain the story orally or record a short video/audio describing the main events and character actions. Combining oral, visual, and verbal modes allows learners to express understanding in multiple ways, supporting those still developing writing and literacy skills.

Reading Sample: Story Retelling

Activity: Students will read a short passage aloud to the teacher, focusing on fluency and decoding. After reading, they will draw a picture of the main character and setting to visually retell the story, and then verbally explain the story events or character actions through a short oral presentation or recording.

Modes Used: Oral + Visual + Verbal/Recorded

Purpose: This activity assesses reading fluency, comprehension, and expressive communication. It provides multiple ways for students to demonstrate understanding and supports learners with varying literacy skills.

Multimodal Assessment Exemplar: Our Community Helpers (Grade 1)

Theme: Our Community Helpers

This assessment aims to evaluate Grade 1 students' understanding of community helpers, their roles, and related concepts in English, Math, and Language through a series of engaging, multimodal tasks. The assessment encourages students to demonstrate their learning through visual, auditory, kinesthetic, and written means.

English Assessment Components

Task 1: Community Helper Storytelling and Illustration

Objective: To assess comprehension, vocabulary, narrative skills, and visual representation.

Description: Students will choose one community helper (e.g., firefighter, doctor, police officer, teacher) and create a short story about a day in their life. The story should include at least three sentences describing their actions and importance. Students will then illustrate their story on a provided template or a blank sheet of paper. They will present their story and illustration to the class or a small group.

Multimodal Elements:

- **Visual:** Illustration of the community helper and their actions.
- **Auditory/Oral:** Oral presentation of the story.
- **Kinesthetic:** Drawing and writing.

Assessment Criteria:

- **Story Content:**
- Identifies a community helper.
- Describes at least three relevant actions of the helper.
- Demonstrates understanding of the helper's role.
- Uses simple, clear sentences.
- **Illustration:**
- Clearly depicts the chosen community helper.
- Relates to the story content.
- Shows effort and detail appropriate for Grade 1.
- **Oral Presentation:**
- Speaks clearly and audibly.
- Maintains eye contact (as appropriate for age).
- Presents the story in a logical sequence.

Materials: Story template (optional), blank paper, crayons/markers, pencils.

Task 2: "Who Am I?" Riddle Creation

Objective: To assess descriptive language, vocabulary, and understanding of community helper characteristics.

Description: Students will create a three-sentence riddle about a community helper without explicitly naming them. They will then draw a picture of the community helper that provides clues but doesn't give away the answer immediately. The riddles will be shared with classmates to guess the helper.

Example Riddle: "I wear a uniform and drive a big red truck. I help people when there is a fire. I keep our community safe."

Multimodal Elements:

- **Written:** Writing the riddle.
- **Visual:** Drawing clues for the riddle.
- **Auditory/Oral:** Reading the riddle aloud and listening to guesses.

Assessment Criteria:

- **Riddle Content:**
- Provides accurate clues about the chosen helper.
- Uses descriptive words.
- Is challenging but solvable for peers.
- **Drawing:**
- Includes relevant visual clues.
- Is neat and clear.

Materials: Index cards or small paper, pencils, crayons/markers.

Math Assessment Components**Task 1: Community Helper Counting and Graphing**

Objective: To assess counting, data collection, and basic graphing skills.

Description: Students will be presented with a collection of pictures or manipulatives representing different community helpers (e.g., 5 doctors, 3 firefighters, 4 police officers). They will count the number of each type of helper and then create a simple bar graph to represent their findings. The graph should have labeled axes (types of helpers, number of helpers) and a title.

Multimodal Elements:

- **Visual:** Pictures/manipulatives, creating the bar graph.
- **Kinesthetic:** Counting, coloring/drawing bars on the graph.
- **Written:** Labeling /putting title.

Assessment Criteria:

- **Counting Accuracy:**
- Correctly counts each type of community helper..

Materials: Pictures/manipulatives of community helpers, graph paper or pre-drawn graph template, pencils, crayons/markers.

Task 2: Community Helper Problem Solving (Addition/Subtraction)

Objective: To assess basic addition and subtraction skills within a real-world context.

Description: Students will solve two word problems related to community helpers. They can use drawings, manipulatives, or number sentences to show their work.

Example Problems:

1. "The fire station has 7 fire trucks. 3 fire trucks went out to help with a small fire. How many fire trucks are left at the station?"
2. "A doctor saw 5 patients in the morning and 4 more patients in the afternoon. How many patients did the doctor see in total?"

Multimodal Elements:

- **Written:** Reading the word problems, writing number sentences.
- **Visual:** Drawing to represent the problem, using manipulatives.
- **Kinesthetic:** Manipulating objects to solve.

Assessment Criteria:

- **Problem Comprehension:**
- Understands what the problem is asking.
- **Calculation Accuracy:**
- Correctly solves the addition/subtraction problems.
- **Showing Work:**
- Clearly demonstrates their strategy (drawings, manipulatives, number sentence).

Materials: Word problem sheet, pencils, optional manipulatives (e.g., counters, blocks).

Language Assessment Components**Task 1: Community Helper Vocabulary Matching and Sentence Building**

Objective: To assess vocabulary recognition, understanding of word-picture relationships, and basic sentence construction.

Description: Students will be given a set of pictures of community helpers and a corresponding set of word cards with their names. They will match each picture to its correct name. Then, they will choose two matched pairs and use each word in a simple sentence.

Multimodal Elements:

- **Visual:** Matching pictures to words.
- **Written:** Writing sentences.
- **Kinesthetic:** Manipulating cards.

Assessment Criteria:

- **Vocabulary Matching:**

- Correctly matches all pictures to their names.
- **Sentence Construction:**
- Writes grammatically correct simple sentences.
- Uses the chosen vocabulary words appropriately.
- Demonstrates understanding of the word's meaning in context.

Materials: Pictures of community helpers, word cards with names, sentence writing sheet, pencils.

Task 2: Community Helper Role-Play and Dialogue

Objective: To assess oral language, understanding of social roles, and collaborative communication.

Description: In small groups (2-3 students), students will choose a community helper scenario (e.g., a patient visiting a doctor, a customer at a grocery store with a cashier, a child reporting a lost item to a police officer). They will then create and perform a short dialogue (2-3 exchanges per student) demonstrating the interaction between the community helper and a community member.

Multimodal Elements:

- **Auditory/Oral:** Speaking dialogue, listening to peers.
- **Kinesthetic:** Acting out roles, using gestures and facial expressions.
- **Social:** Collaborating with peers.

Assessment Criteria:

- **Role Understanding:**
- Accurately portrays the chosen community helper's role and actions.
- Accurately portrays the community member's role.
- **Dialogue Quality:**
- Uses appropriate vocabulary for the roles.
- Speaks clearly and audibly.
- Engages in a relevant and coherent conversation.
- Collaborates effectively with group members.

Materials: Simple props (optional, e.g., toy stethoscope, apron), scenario cards.

This multimodal assessment exemplar provides a comprehensive approach to evaluating Grade 1 students' learning about community helpers, leveraging various modes of expression to cater to different learning styles and demonstrate a deeper understanding of the concepts across English, Math, and Language. The most relevant answer part is the detailed breakdown of multimodal assessment components for English, Math, and Language, including objectives, descriptions, multimodal elements, and assessment criteria for each task.

CHAPTER V: DISCUSSION

This chapter provides an interpretation and contextualization of the findings in Chapter 4, relating them to the study's initial theoretical framework and research objectives. The findings are analyzed in the context of previous research, emphasizing areas of agreement, disagreement, and surprising results. This chapter examines the results' ramifications, possible limitations, and the study's overall importance through critical analysis. In doing so, it offers a more profound comprehension of the data and establishes the foundation for the ensuing conclusions and recommendations.

1. Multimodal Assessment as a Pathway to Inclusive, Creative, and Meaningful Learning

Elementary teachers have increasingly adopted multimodal assessment as a powerful means to promote inclusive, creative, and meaningful learning experiences in the classroom. Unlike traditional forms of

assessment that rely primarily on written tests or rote memorization, multimodal assessments allow students to demonstrate understanding through various expressive formats such as visual arts, oral presentations, videos, performances, and digital tools. This approach aligns with findings from Rocamora and Baguio (2025), who found that public elementary teachers in the Philippines possess high levels of multimodal literacy, and that such literacy significantly influences their ability to teach creatively and responsively. Their study showed that allowing students to express learning through different modes helped foster student engagement and inclusivity. Similarly, Lim, Towndrow, and Tan (2023) conducted a classroom-based study in Singapore, where they observed how teachers used student-constructed and multimodal tasks in English language lessons to support viewing and representing skills. The teachers reported that multimodal assessment improved learner confidence and deepened understanding, particularly for students who struggled with traditional assessments. These findings are echoed in Zeng's (2024) study on multilingual learners in the United States, where multimodal writing tasks allowed a fourth-grade bilingual student to express personal experiences, make meaning more effectively, and grow in writing fluency. This supports the idea that multimodal assessment can affirm students' identities, particularly among culturally and linguistically diverse learners, thus reflecting principles of culturally responsive pedagogy as advocated by Ladson-Billings (1994). Moreover, a recent intervention by Alateeq and Alshahrani (2025) involved the use of infographics among EFL students showed that multimodal tools not only improved reading comprehension but also supported critical thinking and engagement. These multimodal practices align with Kress's (2010) theory of multimodality, which emphasized that meaning-making occurs through the interplay of multiple semiotic modes—not just through language. However, despite the growing evidence of its benefits, teachers also face challenges such as limited time, lack of standardized rubrics, and insufficient training, as highlighted in a systematic review by Li (2024). Nevertheless, the trend is clear: elementary educators are embracing multimodal assessment not only to align with 21st-century learning goals but also to create more inclusive and meaningful educational experiences that reflect the diverse ways in which children learn and express understanding.

Multimodal assessment unlocks learning through many ways

Multimodal assessment refers to an evaluative approach that incorporates multiple modes or channels of communication and expression to capture student learning in a more holistic and authentic manner. Unlike traditional assessments that often rely solely on written or oral responses, multimodal assessment embraces diverse forms such as images, videos, gestures, speech, digital texts, and artistic expressions, recognizing that meaning-making is a complex, multi-layered process.

Jewitt (2019) stated that multimodal assessment is grounded in the understanding that learning and communication occur through various semiotic modes, each carrying distinct affordances that contribute uniquely to meaning construction. This approach aligned with Kress's (2010) earlier multimodality theory, which asserted that contemporary communication involves an interplay of modes beyond language alone. Building on these foundations, Walsh (2016) highlighted that multimodal assessment enables educators to better capture students' creativity, critical thinking, and digital literacy skills by assessing how students integrate and navigate multiple modes of expression.

Furthermore, Cunha and Ferreira (2021) defined multimodal assessment as an inclusive strategy that respects the diverse cultural and linguistic backgrounds of learners, providing multiple entry points for demonstrating knowledge and skills. This approach supports differentiated learning and fosters equity by valuing students' unique strengths and ways of understanding.

A teacher's prior knowledge and teaching style shape their perception of multimodal assessment, influencing how effectively they implement diverse, inclusive evaluation strategies

A teacher's background, including their prior knowledge, beliefs about teaching and learning, and personal teaching style, significantly shapes how they perceive and implement multimodal assessment in the classroom. Educators who have been exposed to progressive pedagogies that emphasize student-centered learning and multiple intelligences tend to view multimodal assessment as an effective and inclusive tool that aligns with their instructional philosophy. Conversely, teachers with more traditional backgrounds or limited experience with multimodal practices may feel hesitant or uncertain about integrating such assessments due to concerns about time, complexity, or evaluation standards.

Research by García and Warner (2018) highlighted that teachers with prior training in multimodal literacy and constructivist approaches are more confident in designing and using multimodal assessments because these methods resonate with their understanding of learning as a dynamic, socially situated process. They emphasized that familiarity with digital tools, multimedia resources, and culturally responsive teaching practices enables teachers to see multimodal assessment as a natural extension of their pedagogy rather than an add-on. Similarly, Chen and Tsai (2019) found that teachers' epistemological beliefs about knowledge—whether they view knowledge as fixed or constructed—impact their openness to multimodal assessment. Teachers who believe learning is multifaceted and contextual are more likely to embrace assessments that allow students to demonstrate understanding through various modes.

Additionally, Jang and Tsai (2021) suggested that teaching style influences multimodal assessment perception. For instance, educators who adopt a facilitative or inquiry-based teaching style tend to favor multimodal approaches because these allow for student autonomy and creativity. In contrast, more didactic teaching styles may struggle to incorporate multimodality effectively, perceiving it as disruptive or difficult to manage.

Key differences between multimodal and traditional assessment

The distinction between multimodal assessment and traditional assessment lies primarily in the scope and methods of evaluating student learning. Traditional assessments—such as standardized tests, written exams, and quizzes—typically focus on evaluating students' knowledge through singular modes, usually text-based responses. These assessments emphasize recall, discrete skills, and often measure learning in a linear, one-dimensional manner. They tend to prioritize uniformity and comparability, allowing for easy grading but often neglecting the diverse ways students understand and express knowledge.

In contrast, multimodal assessment embraces a broader, more holistic approach by allowing students to demonstrate their learning through a variety of expressive modes, including visual, auditory, gestural, spatial, and digital forms, alongside or instead of written language. This approach recognizes that learning is a complex process involving multiple literacies and communication channels. As Jewitt (2019) explained, multimodal assessment acknowledges that meaning-making is not limited to language but is distributed across modes that each contribute unique semiotic resources for learning and expression.

Studies like Walsh (2016) emphasized that while traditional assessments often emphasize memorization and discrete answers, multimodal assessment evaluates higher-order thinking skills, creativity, and students' ability to synthesize and communicate ideas across different formats. For example, a student might explain a scientific concept through a video presentation or create an infographic that integrates text, images, and data, showcasing deeper understanding that a written test alone might not capture.

Furthermore, Cunha and Ferreira (2021) highlighted the inclusive nature of multimodal assessment. Unlike traditional assessments, which can disadvantage students with varying linguistic, cultural, or

cognitive backgrounds, multimodal approaches provide diverse entry points for learners to express their knowledge according to their strengths and preferences. This inclusivity aligns with principles of differentiated instruction and culturally responsive pedagogy, allowing educators to honor student diversity and promote equity.

Another critical difference noted by Kern and Schultz (2020) is the feedback and reflection opportunities inherent in multimodal assessment. Because multimodal tasks often involve creative processes and multiple drafts (e.g., digital storytelling, portfolio creation), students receive ongoing formative feedback, encouraging self-reflection and continuous improvement. Traditional assessments, in contrast, frequently focus on summative outcomes with limited feedback, which may not foster deep learning or growth.

However, despite its many advantages, multimodal assessment poses challenges, such as the need for clear rubrics and teacher training to fairly evaluate diverse outputs, as noted by Li (2024). Traditional assessments, by comparison, benefit from established scoring systems and ease of administration. Yet, many educators and researchers argue that the depth, inclusivity, and engagement offered by multimodal assessment far outweigh these challenges.

Key characteristics of an effective multimodal assessment: authentic, inclusive, and creative

An effective multimodal assessment embodies several key characteristics that distinguish it from traditional assessment methods and enhance its capacity to capture the full spectrum of student learning. Central to these characteristics is authenticity—the assessment tasks must reflect real-world communication practices and meaningful contexts where students apply knowledge creatively and critically. Walsh (2016) said that effective multimodal assessments engage students in producing and interpreting multimodal texts that mirror contemporary literacy demands, allowing learners to connect academic content to their lived experiences.

Another defining feature is flexibility and inclusivity, which permits learners to express understanding through various modes that align with their strengths and cultural backgrounds. Cunha and Ferreira (2021) emphasized that multimodal assessment provides multiple entry points for diverse learners, fostering equity by valuing different semiotic resources such as visuals, speech, digital media, and movement. This characteristic supports culturally responsive pedagogy by accommodating linguistic and cognitive diversity and encouraging all students to participate meaningfully.

Integration of formative and summative feedback is also crucial in effective multimodal assessment. Research by Kern and Schultz (2020) highlighted that ongoing feedback during multimodal tasks helps students refine their work, reflect on their learning process, and develop metacognitive skills. Unlike traditional one-off tests, multimodal assessments often include drafts, revisions, and peer collaboration, enhancing student engagement and deepening learning.

Moreover, clear and transparent criteria or rubrics tailored to multimodal outputs are essential for fairness and reliability. As Li (2024) noted, assessing multimodal products can be challenging without explicit guidelines that address different modes of communication and creativity. Effective rubrics consider not only content accuracy but also the purposeful use of modes, coherence, and aesthetic design, thereby promoting both rigor and creativity.

Finally, teacher preparedness and technological fluency are vital for successful implementation. Rocamora and Baguio (2025) stated that teachers' confidence in using digital tools and understanding multimodal literacy directly impacts the quality of multimodal assessment. Professional development that builds teachers' multimodal pedagogical skills ensures that assessments are thoughtfully designed and meaningfully integrated into the curriculum.

2. Visual projects (drawings, posters), oral presentations and storytelling, digital tools (videos, podcasts, digital portfolios), role-playing and drama, and collaborative group work as effective multimodal assessment strategies

Elementary school teachers increasingly integrate multimodal assessment strategies into their daily teaching practices as a means to engage diverse learners and capture the complexity of student understanding. Rather than relying solely on traditional paper-and-pencil tests, teachers employ a variety of modes—such as visual arts, oral presentations, digital storytelling, and collaborative projects—to assess students' knowledge and skills. According to Walsh (2016), this multimodal approach recognizes that students communicate and learn through multiple channels, including images, speech, movement, and technology, thereby providing richer and more authentic insights into their learning. Similarly, Cunha and Ferreira (2021) emphasized that multimodal assessment fosters inclusivity by offering students with different learning styles, language backgrounds, and abilities various ways to express their understanding, which is especially critical in elementary education where foundational skills are being developed. Teachers also integrate technology tools like tablets and multimedia platforms, enabling students to create videos, podcasts, or digital portfolios, as highlighted by Rocamora and Bagoio (2025), who found that digital literacy is increasingly essential in the classroom. Furthermore, these assessments are often embedded within formative practices, allowing teachers to provide timely feedback and support student reflection, thereby promoting deeper learning and metacognition (Kern & Schultz, 2020). However, successful integration depends on teacher preparedness and access to resources, as noted by Li (2024), who stressed the need for professional development to equip teachers with the skills to design and evaluate multimodal tasks effectively.

Multimodal assessment: clear, creative, inclusive—and designed to unlock every learner's potential.

Multimodal assessment has become an increasingly valued approach in education because it allows students to express learning through multiple channels, reflecting the complexity of knowledge and communication in the 21st century. To be effective, multimodal assessment must include several essential components that ensure it is meaningful, inclusive, and aligned with learning goals.

First, the use of multiple modes of expression is fundamental. As noted by Jewitt (2017), effective multimodal assessment embraces not only traditional textual responses but also visual, auditory, gestural, spatial, and digital modes. This diversity recognizes that learners communicate and process information differently and that assessment should capture these varied competencies.

Clear learning objectives are also critical. According to Walsh (2016), defining precise goals helps both teachers and students understand what skills and knowledge are being assessed, ensuring that multimodal tasks are purposeful rather than purely creative exercises. This clarity is necessary to maintain academic rigor while allowing flexibility in how students demonstrate understanding.

The authenticity and relevance of tasks constitute another key component. Cunha and Ferreira (2021) emphasized that multimodal assessments should connect with real-world contexts, helping students see the value of their learning beyond the classroom. Tasks grounded in authentic scenarios motivate learners and develop transferable skills.

Inclusivity and flexibility are central to multimodal assessment, addressing diverse learner needs. As highlighted by Florian and Black-Hawkins (2015) and reinforced in later studies, offering multiple avenues for expression accommodates differences in language, culture, ability, and learning style. This inclusivity aligns with the principles of universal design for learning (UDL), promoting equity.

A robust rubric or assessment criteria that evaluates both content knowledge and the effective integration

of different modes is necessary. Li (2024) stressed the importance of transparent and comprehensive rubrics that address not only accuracy and coherence but also creativity, design, and mode-specific skills, ensuring fairness and consistency in grading.

Formative feedback plays a vital role in the multimodal assessment process. Kern and Schultz (2020) argued that providing ongoing feedback during the creation of multimodal products encourages reflection and improvement, turning assessment into a learning opportunity rather than just a summative judgment. Moreover, encouraging student reflection on their multimodal work enhances metacognitive skills, fostering deeper learning. Students learn to evaluate their choices in mode and content, which strengthens their ability to communicate effectively across different formats (Rocamora & Baguio, 2025).

Lastly, teacher preparedness is indispensable. As pointed out by Li (2024) and others, the successful implementation of multimodal assessment hinges on educators' understanding of multimodal literacies and their ability to design, facilitate, and assess multimodal tasks confidently. Professional development and resource support are therefore essential components of effective multimodal assessment systems.

Multimodal assessments ignite creativity and deeper learning in every student

Multimodal assessment in science and environmental lessons illustrate how multimodal assessment can be effectively embedded in daily teaching to support diverse learners and deepen understanding. As Walsh (2016) emphasized, incorporating multiple modes—such as visuals, audio, and text—reflects authentic communication practices and allows students to express knowledge in ways that suit their strengths. The use of digital tools and collaborative work aligns with Rocamora and Baguio's (2025) findings on the importance of integrating technology and social interaction in multimodal learning environments to enhance engagement and digital literacy.

The project's inclusion of formative feedback and opportunities for revision echoes Kern and Schultz's (2020) recommendation that multimodal assessments serve as ongoing learning processes, not just final evaluations. Moreover, the use of diverse modes promotes inclusivity, a critical point raised by Cunha and Ferreira (2021), who argued that multimodal tasks accommodate learners with different language abilities and cultural backgrounds.

Finally, this context underscores the need for clear criteria and teacher preparedness, as discussed by Li (2024). The rubric provided structure and fairness, guiding students and ensuring that creativity was balanced with academic rigor. Teachers must be skilled in designing and assessing such multimodal tasks to fully realize their benefits.

Multimodal assessment is limited by Time, Planning, and Teacher Workload, Student Confusion and Distraction from Learning Goals, Equity and Resource Limitations, Consistency, Objectivity, and Assessment Validity, Classroom Management and Stakeholder Understanding

Time, planning, and teacher workload are critical factors influencing the effectiveness of assessment strategies in the classroom. A report by the UK Department for Education's Planning and Resources Review Group emphasizes the need to eliminate unnecessary workload related to lesson planning to improve teaching quality and reduce teacher burnout. Similarly, a study by Weldon and Ingvarson (2016) surveyed teachers in Victoria, Australia, revealing that excessive workload, particularly in planning and assessment, negatively impacts teachers' well-being and the quality of instruction. These findings underscore the importance of efficient planning and assessment practices to mitigate teacher stress and enhance educational outcomes.

In the context of multimodal assessment, which includes diverse methods such as performance tasks, interactive assessments, and self-assessment tools, the efficient use of time and resources becomes even

more crucial. Teachers must balance the demands of these varied assessment strategies with their existing workload. Without adequate support and streamlined planning processes, the implementation of such comprehensive assessment approaches may lead to increased stress and diminished teaching effectiveness. Therefore, addressing the challenges related to time, planning, and workload is essential for the successful adoption of multimodal assessment strategies. Educational policies and school leadership must prioritize the reduction of unnecessary workload and provide teachers with the necessary resources and support to implement effective assessment practices. By doing so, they can foster a more sustainable and impactful educational environment.

Student confusion and distraction from learning goals are significant challenges in education, particularly in environments where learning objectives are unclear or instructional methods are misaligned with students' needs. Arguel et al. (2017) explored how confusion in digital learning environments can be both beneficial and detrimental to learning. The researchers found that while confusion can engage students and promote deeper understanding, if not addressed promptly, it can lead to disengagement and hinder learning progress. This highlights the importance of providing clear guidance and support to help students navigate confusion constructively. Additionally, research by Arguel et al. (2017) emphasized the need for interactive digital learning environments to detect and respond to students' emotional states, such as confusion. By identifying signs of confusion, educators can intervene appropriately to clarify concepts and keep students on track toward achieving learning goals.

Furthermore, a study by Boray Tek et al. (2017) examined the relationship between students' implicit theories of intelligence and their performance in an introductory programming course. The findings suggested that students who believed their abilities were fixed were more likely to experience confusion and frustration, leading to decreased motivation and performance. This underscores the importance of fostering a growth mindset to help students overcome challenges and stay focused on their learning objectives.

Collectively, these studies highlight the complex interplay between student confusion, goal clarity, and instructional design. To mitigate confusion and maintain focus on learning goals, educators should provide clear objectives, timely feedback, and supportive learning environments that acknowledge and address students' emotional responses to learning challenges.

Student confusion and distraction from learning goals are significant challenges in education, particularly in environments where learning objectives are unclear or instructional methods are misaligned with students' needs. Atapattu et al. (2019) investigated how learners' confusion in online learning environments, such as MOOCs, can be identified through language and discourse analysis. The researchers found that confusion often arises when students are uncertain about how to proceed with their learning, which can lead to disengagement and hinder their progress toward learning goals. This highlights the importance of providing clear guidance and support to help students navigate confusion constructively. Similarly, research by Sharma et al. (2019) developed a system to detect student engagement levels using emotion analysis, eye tracking, and head movement with machine learning. The study demonstrated that students' engagement levels are closely linked to their ability to focus on learning objectives. Periods of low engagement, often characterized by distraction, can impede students' progress and achievement of learning goals.

These findings underscore the need for educators to recognize and address factors that contribute to student confusion and distraction. By implementing strategies that clarify learning objectives, provide timely feedback, and foster an engaging learning environment, educators can help students maintain focus and

effectively work towards their learning goals.

One significant limitation of multimodal assessment is ensuring consistency, objectivity, and validity in scoring and interpretation, as the multiple modes (textual, visual, auditory, etc.) introduce variance in how work is judged. Shabani & Panahi (2020) found that even when essays were evaluated with established rubrics from high-stakes exams, discrepancies emerged among raters—particularly when raters were unfamiliar with certain rubrics or formats. The study showed that while overall agreement was high, some essays scored very differently depending on which rubric or rubric criteria a rater emphasized, pointing to issues of reliability (consistency) and measurement error. This suggests that in classroom settings, multimodal assessment—if not supported with well-designed, familiar rubrics and rater training—can suffer from low inter-rater reliability and questionable validity. Furthermore, the more complex the modes involved (for example, integrating visual, audio, and performance elements), the greater the potential for subjectivity, which can reduce objectivity unless very clear scoring guides, exemplars, and training are in place. Thus, while multimodal assessment enriches what can be assessed, its validity (are we measuring intended learning outcomes rather than design flair or media sophistication?) and objectivity often hinge on careful design, calibration, and consistency among assessors.

While multimodal assessment offers many promising benefits, classroom management and stakeholder understanding is one of the factors that can hinder effective implementation. Henning Fjørtoft (2020) explored the examples of digital multimodal assessment in classroom settings, developed in collaboration with practitioners. The study finds that although using ICT and multiple modes (visual, audio, etc.) has strong potential, its effectiveness is heavily influenced by contextual and management factors—such as how well the teacher can manage the workflow, keep students focused, ensure that resources are available and well-coordinated, and integrate assessments without causing disruption to class routines. In other words, even the best-designed multimodal assessment tasks can falter if classroom management is weak—if students are not well-prepared, if there is insufficient time, or if managing equipment/tasks across modes creates logistical difficulties. Lynde Tan, Katina Zammit, Jacqueline D'warte, Anne Gearside (2020) found that one frequent concern is that teachers, students, and other stakeholders (e.g. school administrators, parents) may not fully understand what multimodal literacies imply, how multimodal assessments are evaluated, or what criteria are important. Misalignment between stakeholder expectations and what multimodal assessment tasks actually demand can lead to confusion, resistance, or inconsistent support.

3. The need for systemic support, including better resource allocation, ongoing teacher training, and curriculum reforms

Implementing multimodal assessment presents several notable challenges that have been widely recognized in recent educational research. A primary concern is the lack of resources, including access to technology and materials, which limits teachers' ability to design and facilitate multimodal tasks effectively. Li (2024) highlighted how schools with limited funding struggle to provide the necessary tools, making equitable implementation difficult. Alongside this, limited teacher training remains a significant barrier; many educators lack sufficient professional development to confidently create, manage, and assess multimodal assessments, as noted by Kern and Schultz (2020). This gap impacts the quality and consistency of evaluation.

The time demands associated with planning, executing, and grading multimodal assessments are another major obstacle. Unlike traditional tests, multimodal tasks often require more extensive preparation and personalized feedback, which can overwhelm already busy teachers (Walsh, 2016). Furthermore, grading

difficulties arise due to the subjective nature of assessing creative and diverse modes of expression, raising concerns about fairness and reliability unless clear rubrics are established (Cunha & Ferreira, 2021).

Accessibility issues also complicate implementation; not all students have equal access to digital devices or the skills needed for complex multimodal projects, which risks widening achievement gaps (Florian & Black-Hawkins, 2015). Lastly, strict curriculum limits and the pressure of standardized testing often restrict teachers' flexibility to integrate multimodal assessments regularly, as these mandates prioritize traditional assessment formats (Rocamora & Baguio, 2025).

Key strategies that enhance classroom teaching: Performance tasks and real-world applications, Games and interactive assessments, Hands-on activities, Visual tools and graphic organizers, Quick checks and self-assessment tools, Differentiated and multimodal assessment approaches

Several assessment strategies have been identified as effective in enhancing classroom instruction, particularly those that engage students actively and cater to diverse learning styles. Performance tasks and real-world applications, for instance, require students to apply their knowledge to authentic scenarios, fostering deeper understanding and critical thinking.

Performance tasks and real-world applications are pivotal in education as they compel students to apply theoretical knowledge to authentic scenarios, thereby fostering deeper understanding and critical thinking. A study by Petalla and Doromal (2019) emphasized that such assessments, integral to the K–12 curriculum, enhance students' ability to transfer learning to real-life contexts, promoting quality instruction and the development of 21st-century competencies. Similarly, research by Alonzo and Buenvenida (2019) demonstrated that performance tasks, when structured using the S.T.R.A.P.S. format, significantly improve pupils' achievement in English by engaging them in realistic roles and authentic audiences. These studies collectively highlight the effectiveness of performance tasks in bridging the gap between classroom learning and real-world applications, thereby enhancing students' critical thinking and problem-solving skills.

Games and interactive assessments leverage elements of play to motivate students, making learning more engaging and enjoyable. Zhang (2022) compared the impacts of gamification and game-based learning on student achievement and motivation, finding that both approaches positively influenced learning outcomes. However, gamification, which involves integrating game elements into non-game contexts, was found to have a more significant effect on motivation-related factors such as self-efficacy and goal orientation. This suggests that the incorporation of game-like elements can make learning experiences more engaging and enjoyable for students. Similarly, a study by Suri et al. (2022) developed educational game-based interactive learning media to improve student learning outcomes and motivation. The research demonstrated that the use of such interactive games led to enhanced student engagement and academic performance, highlighting the potential of game-based approaches in fostering a more dynamic and participatory learning environment.

These findings underscore the value of integrating games and interactive assessments into educational practices. By leveraging elements of play, educators can create learning experiences that are not only more engaging but also more effective in promoting deeper understanding and sustained motivation among students.

Hands-on activities, such as experiments and projects, allow students to explore concepts physically, reinforcing learning through experience. Hands-on activities, such as experiments and projects, are integral in education as they provide students with opportunities to engage directly with learning materials, thereby reinforcing concepts through active participation. Oladayo and Diri (2019) investigated the impact

of hands-on activities on students' academic performance in geometry. The findings revealed that students who engaged in hands-on activities demonstrated significant improvement in their understanding of geometric concepts compared to those who received traditional instruction. This suggests that tactile engagement can deepen comprehension and retention of abstract mathematical ideas. Similarly, Tupas (2019) explored the effects of hands-on and minds-on activities on students' academic performance and motivation. The study found that students who participated in these interactive activities showed enhanced academic achievement and a greater enthusiasm for learning, indicating that such approaches can make complex scientific concepts more accessible and engaging. These studies collectively highlight the value of hands-on learning experiences in fostering a deeper understanding of academic content. By actively involving students in the learning process, hands-on activities not only improve academic performance but also cultivate critical thinking skills and a lasting interest in the subject matter.

Visual tools and graphic organizers help in structuring information, aiding in comprehension and retention. Visual tools and graphic organizers have been recognized for their effectiveness in enhancing student comprehension and retention by providing structured frameworks that facilitate the organization and visualization of information. Wang, Mayer, and Lin (2020) examined the impacts of different types of graphic organizers on middle school students' learning processes, outcomes, experiences, and preferences. The findings revealed that both filled-in and interactive graphic organizers led to better retention and comprehension compared to text-only materials. Notably, interactive graphic organizers, which require students to actively engage with the content, were associated with deeper cognitive processing and higher levels of learning satisfaction. These results support generative learning theory, suggesting that interactive tools encourage students to integrate and elaborate on information, thereby enhancing understanding.

In the context of online learning environments, a study by Torre Franca, Estacio, and Reyes (2022) explored the impact of graphic organizers on students' performance and self-efficacy in a Science, Technology, and Society course. The research indicated that students who utilized graphic organizers demonstrated improved academic performance and higher self-efficacy beliefs, highlighting the role of visual tools in supporting learning in digital settings.

These studies collectively emphasize the value of incorporating visual tools and graphic organizers into educational practices. By aiding in the organization and visualization of information, these tools not only enhance comprehension and retention but also foster active engagement and deeper cognitive processing among students.

Quick checks and self-assessment tools are pivotal in modern education, offering students immediate feedback that empowers them to monitor their learning progress and take ownership of their educational journey. Research from 2022 underscores the efficacy of these formative assessment strategies in enhancing student engagement and performance. Ifenthaler and Greiff (2022) utilized learning analytics to analyze students' use of self-assessments in higher education. The findings revealed that students who engaged with self-assessment tools, particularly before summative assessments, demonstrated improved performance in final exams. This suggests that self-assessment practices not only help students identify their learning gaps but also enhance their preparedness for formal evaluations.

Similarly, research by Sui et al. (2023) examined the impact of technology-enhanced environments on self-regulated learning. Their study highlighted that self-assessment tools, when integrated into digital learning platforms, significantly influenced students' self-regulation by fostering a deeper understanding of their learning processes and outcomes. This underscores the importance of incorporating self-assessment mechanisms in educational technologies to support autonomous learning.

Furthermore, a study by Suraworachet et al. (2022) explored the effects of combining human and analytics feedback on students' engagement with reflective writing tasks. The results indicated that students who received both types of feedback engaged more deeply with their writing and showed improved performance, highlighting the value of diverse feedback sources in enhancing student learning experiences. Collectively, these studies affirmed that quick checks and self-assessment tools are instrumental in fostering a reflective and self-regulated learning environment. By providing immediate feedback, these tools enable students to identify areas for improvement, set personal learning goals, and take proactive steps towards achieving them, thereby enhancing their overall learning outcomes.

Differentiated and multimodal assessment approaches recognize the varied ways students learn, offering multiple avenues for demonstrating understanding and ensuring inclusivity. Poma Solier (2025) found that graphic organizers significantly enhanced meaningful learning in Educational Management courses. Similarly, Zhyhadlo (2022) highlighted the effectiveness of digital game-based tools in formative assessments during foreign language lessons, noting improvements in student engagement and learning outcomes. Furthermore, research by Makkonen and Jaquet (2020) indicated that formative assessment practices, including self-assessment and peer feedback, positively influenced students' use of self-regulated learning strategies. These findings underscore the importance of employing diverse and interactive assessment methods to improve classroom instruction and support student learning.

Strengths and weaknesses of multimodal assessment

Multimodal assessment holds several key strengths that make it a powerful tool for enhancing student learning, particularly in diverse and modern classrooms. One of its core advantages is engagement—by incorporating various modes such as visual, audio, kinesthetic, and digital elements, multimodal tasks often feel more interactive and relevant to students. Walsh (2016) argued that when students are given the chance to express themselves through different forms, their emotional and cognitive engagement significantly increases, leading to deeper learning. This naturally leads to greater creativity and learner confidence, as students feel more ownership over their work. According to Cunha and Ferreira (2021), multimodal tasks empower students to explore their ideas freely, build self-expression skills, and take academic risks in a safe, personalized environment.

Another major strength is differentiation—multimodal assessment supports a range of learning styles, linguistic backgrounds, and ability levels, making it more inclusive than traditional tests. Florian and Black-Hawkins (2015) highlighted the importance of flexible assessment approaches that respond to the needs of all learners, not just those who perform well in written or verbal formats.

Moreover, multimodal assessment helps develop real-world skills, such as digital literacy, collaboration, visual communication, and critical thinking—skills essential in today's technology-driven world. Darling-Hammond et al. (2017) emphasized that education systems must go beyond rote memorization and embrace tasks that mirror the complexity and multimodality of real-life communication and problem-solving.

Lastly, authentic learning is a cornerstone of multimodal assessment. Because students are often tasked with creating products or presentations that have real-world relevance, they are more likely to find purpose and meaning in their work, which increases motivation and retention. This aligns with the work of Li (2024), who emphasized that authentic, multimodal tasks help bridge the gap between classroom learning and real-life application, making learning more lasting and impactful.

Even as multimodal assessment offers many pedagogical advantages, recent studies (post-2015) highlighted several key weaknesses that complicate its implementation in real classroom settings. A

recurring issue is time demands and teacher workload: teachers report that designing multimodal tasks, preparing multimedia resources, coordinating group presentations, and grading complex student outputs require significantly more planning and feedback time than traditional assessments. Research on equitable technology-supported teaching practices underscores how time constraints often limit how frequently teachers can employ multimodal activities in their lessons. Relatedly, fairness, consistency, and assessment clarity present difficulties: without well-specified rubrics and transparent criteria for all modes of expression (visual, oral, textual), assessments may feel subjective and vary greatly between students or teachers. Studies on multimodal pedagogy note that students and pre-service teachers often perceive a lack of clarity in expectations, which can reduce confidence and trust in the process.

Technology access is another major challenge; many schools lack the hardware, software, reliable internet, or technical support needed for smooth multimodal work, which exacerbates equity gaps. Teacher education studies (TESOL contexts, for example) show that even when multimodal strategy is valued, pre- and in-service teachers feel underprepared technically, which hampers implementation.

Finally, group dynamics in collaborative multimodal tasks can introduce uneven contributions, coordination issues, or disparities in student skill sets that unfairly impact individual grades or learning experiences. These weaknesses, while real, point toward areas for improvement: professional development, resource investment, clear assessment design, and scaffolding around group work are often recommended in the literature to mitigate these issues.

Assessment programs that can significantly enhance student learning outcomes

Assessment programs that actively engage students—such as project-based learning (PBL), interactive and gamified assessments, hands-on activities, and formative feedback with peer collaboration—have been shown to significantly enhance learning outcomes. Project-Based Learning (PBL) connects academic content to real-world problems, making learning more meaningful and applicable. According to Darling-Hammond et al. (2017), PBL fosters deeper understanding, critical thinking, and collaboration, especially when combined with authentic assessment tools like presentations or portfolios.

Similarly, interactive and gamified assessments, which use elements of game design (points, levels, challenges), have been found to boost motivation and engagement. Bai et al. (2020) noted that when students are emotionally invested in learning experiences, they are more likely to retain and apply knowledge effectively.

Hands-on and manipulative-based activities, particularly in subjects like math and science, support experiential learning and conceptual understanding. Boaler (2016) emphasized the power of tactile learning in building number sense and problem-solving skills, especially for younger or struggling learners.

Lastly, formative feedback and peer collaboration are essential components of effective assessment. Research by Panadero (2017) showed that when students receive timely, specific feedback and engage in peer discussions, they develop stronger metacognitive skills and take more responsibility for their learning. Together, these approaches represent dynamic, student-centered assessment programs that align with contemporary educational goals and have been consistently supported by post-2015 research as positively impacting student learning.

4. Multimodal assessments can significantly boost learner engagement and improve learning outcomes by catering to diverse learning styles and needs

Multimodal assessment, which integrates diverse modes such as text, visuals, audio, and interactive elements, has been shown to significantly enhance student engagement and learning outcomes. Rahat et

al. (2024) found that students demonstrated higher engagement and comprehension when exposed to multimedia-rich online learning modules compared to conventional text-based approaches. Furthermore, multimodal assessments promote deeper understanding by encouraging students to synthesize information across different formats. Gong et al. (2021) on the HoloBoard system revealed that immersive, multimodal teaching tools resulted in improved learning outcomes and increased student engagement. Inclusivity is another significant benefit of multimodal assessment. It caters to diverse learning styles and needs, promoting inclusivity. A study on adaptive learning systems for students with intellectual disabilities highlighted how personalized, multimodal approaches can enhance engagement and learning outcomes in this group. Moreover, multimodal assessment empowers learners by providing them with choices in how they demonstrate their learning. This fosters a sense of ownership and autonomy, leading to increased motivation and a more personalized learning experience. The integration of multimodal assessment allows students to express their understanding in ways that align with their strengths and preferences.

Video presentations, role-plays, visual storytelling, and hands-on activities contribute to a more equitable and responsive classroom environment

Multimodal assessments—such as video presentations, role-plays, visual storytelling, and hands-on activities—have been shown to significantly enhance student engagement and learning outcomes. These approaches cater to diverse learning styles, promote deeper understanding, and foster inclusivity in the classroom.

For instance, video-based assessments and role-playing activities have been found to improve student engagement, comprehension, and communication skills. Participants have noted that these methods encourage active participation, especially among quieter students, and provide opportunities to assess understanding beyond traditional written tests. Similarly, visual storytelling tools like storyboards and comic strips support literacy development and creative expression, helping students synthesize ideas and demonstrate comprehension in engaging ways. Hands-on activities combined with verbal or visual explanations allow teachers to observe student thinking processes and support learners with different strengths. Drawing paired with oral or written explanation has been particularly helpful for younger learners or those developing writing skills, enabling them to communicate ideas more effectively. Moreover, multimodal assessments support differentiated instruction and cultural inclusivity, catering to diverse learning styles and needs. These approaches not only improve learning outcomes but also create a more equitable and responsive classroom environment.

Research by Callow (2020) emphasized the importance of integrating visual and verbal elements in assessments to enhance students' comprehension and engagement. Callow's study highlights how multimodal assessments can bridge the gap between different learning styles and promote a more inclusive learning environment. Furthermore, a study by Ruiz-Pérez (2020) demonstrated how digital storytelling projects can amplify student voice and agency, allowing learners to express their understanding in creative and meaningful ways. These findings underscore the effectiveness of multimodal assessments in fostering deeper learning and engagement among students.

The use of multiple modes in multimodal assessments positively impacts teaching practices and learning outcomes by fostering inclusivity, enhancing engagement, promoting deeper understanding, and providing valuable diagnostic insights

The integration of multiple modes—such as visual, auditory, and written forms—into multimodal assessments has notably influenced teaching practices and learning outcomes, particularly in fostering

inclusivity and supporting diverse learners. This approach aligns with findings from 2018 studies that emphasized the benefits of multimodal literacy in education.

Teachers have observed that incorporating various modes allows them to reach a broader range of students, especially those who face challenges with traditional assessments. For instance, some students who struggle with reading or writing can still demonstrate their knowledge confidently through visual or auditory means. This flexibility makes teaching more inclusive and adaptable to individual learning needs. Such practices are supported by research indicating that multimodal assessments enable students to express their understanding in ways that suit their strengths, thereby promoting equity in the classroom.

Moreover, the use of multiple modes in assessments has been credited with enhancing student engagement and reducing stress. Teachers have noted that these assessments transform learning into a more enjoyable and less intimidating experience, encouraging active participation and motivation among students. This aligns with studies highlighting how multimodal approaches can make learning more dynamic and student-centered.

Additionally, combining different modes helps students connect ideas more deeply and retain information longer. Teachers have observed that integrating listening, speaking, and visual tasks strengthens learning and allows for more creative assessments of understanding. This approach supports deeper comprehension and long-term retention, as evidenced by research on the effectiveness of multimodal assessments in enhancing learning outcomes.

Furthermore, multimodal assessments provide teachers with greater flexibility and diagnostic insight. By observing students' performance across various modes, educators can identify learning gaps more effectively and tailor instruction to meet individual needs. This adaptability is crucial for responsive teaching and personalized learning experiences.

5. The Multimodal Assessment Exemplar

The multimodal assessment exemplar titled **“Our Planet, Our Responsibility”** is grounded in contemporary educational research and theory, particularly in the context of inclusive and differentiated instruction for elementary learners. Multimodal assessment, which incorporates various modes of expression—written, oral, visual, and kinesthetic—aligns with the principles of Universal Design for Learning (UDL), promoting flexible learning environments that accommodate diverse learner needs (Centre for Applied Special Technology, 2024). Guerrero-Sosa et al. (2025) emphasized that multimodal learning analytics (MMLA) provided a comprehensive view of student engagement by integrating diverse data sources such as speech, gesture, and visual representation, thereby capturing both observable behaviors and internal cognitive-affective states. This supports the idea that learning is multidimensional and should be assessed through varied modalities. Jonathan Paul White (2024) highlighted that multimodal assessment fosters creativity, inclusivity, and engagement, especially among neurodivergent learners and those with varied linguistic or cognitive profiles. These benefits are particularly relevant in elementary classrooms, where students are still developing foundational skills and benefit from opportunities to express their understanding in diverse ways. The exemplar integrates Science, English, Arts, and Values Education, encouraging students to explore environmental issues through inquiry, collaboration, and creative expression. It allows learners to demonstrate their knowledge in ways that resonate with their strengths—whether through writing, drawing, speaking, or performing. Blikstein and Worsley (2016) further supported the use of multimodal tools in learning environments, noting that such approaches offer deeper insights into student learning trajectories, especially in open-ended and hands-on contexts. Their

work underscores the value of multimodal assessment in capturing emotional engagement, motivation, and conceptual understanding. Overall, the exemplar serves as a practical and research-informed model for teachers, demonstrating how multimodal assessment can enhance student learning, foster inclusivity, and connect classroom activities to real-world issues.

Theoretical Implications

The findings of this study on the experiences of elementary teachers in using multimodal assessment reveal critical theoretical implications that challenge traditional assessment paradigms and support more inclusive, learner-centered approaches. Central to these implications is the reinforcement of constructivist learning theory, which posits that learners actively construct knowledge through meaningful experiences and interactions. Teachers in the study reported that when students are given the opportunity to express their understanding through a variety of modes—such as visual arts, music, drama, oral presentations, and digital tools—they are more engaged and demonstrate deeper comprehension. This supports the idea that learning is not linear or uniform but is instead a dynamic process influenced by context, culture, and modality.

The findings also aligned strongly with Howard Gardner's theory of multiple intelligences, which asserted that individuals possess diverse kinds of intelligences beyond the traditional linguistic and logical-mathematical domains often prioritized in standardized tests. Teachers observed that multimodal assessment provides avenues for students with different strengths—such as spatial, musical, bodily-kinesthetic, or interpersonal intelligence—to succeed and feel validated in the learning process. This not only enhances student motivation but also promotes equity in assessment by valuing diverse talents.

In addition, the study resonated with Lev Vygotsky's sociocultural theory, which emphasized the fundamental role of social interaction and cultural tools in cognitive development. Teachers reported that multimodal assessment often involves collaborative work, storytelling, and the integration of cultural elements, all of which contribute to meaningful learning experiences. The incorporation of local languages, indigenous knowledge, and community-based themes in assessment tasks also highlights the contextualized nature of learning, as advocated by sociocultural theory.

The study supported the principles of Universal Design for Learning (UDL), particularly in its call for multiple means of expression and representation. Teachers shared that multimodal assessments allow learners with diverse needs—including those with disabilities, learning difficulties, and language barriers—to access the curriculum and demonstrate their learning in ways that are appropriate and empowering. By removing the constraints of text-heavy, written exams, multimodal assessments foster an inclusive classroom environment where all learners can thrive.

These theoretical implications were also reflected in the Department of Education (DepEd) Order No. 8, s. 2015, which provides the Policy Guidelines on Classroom Assessment for the K to 12 Basic Education Program. This policy emphasizes the importance of using both formative and summative assessments, and explicitly encourages the use of performance-based, process-oriented, and authentic assessment tools. It states that "learners must be given varied ways to demonstrate their learning," which directly supports the implementation of multimodal assessment. Teachers' experiences affirm the practicality of this directive, as they noted that offering multiple assessment formats—such as portfolios, projects, oral presentations, and visual representations—enabled more accurate and holistic evaluation of student learning.

Moreover, the emphasis on formative assessment, as outlined in the DepEd policy, aligned with the Assessment for Learning (AfL) framework. Teachers found that multimodal assessment allowed them to provide timely, constructive feedback that informed instruction and supported continuous learning, rather

than merely assigning grades. This highlights a shift in assessment culture from one of compliance and finality to one of growth and reflection.

Lastly, the teachers' narratives suggested implications for critical pedagogy, a framework that critiques traditional power dynamics in education and advocates for more democratic and inclusive practices. By allowing students to choose how they want to present their understanding and by valuing diverse cultural expressions, multimodal assessment promotes student agency and voice. This approach disrupts the dominance of standardized, one-size-fits-all assessments and opens up possibilities for more culturally responsive and socially just classrooms.

Practical Implications

This study highlighted the need for a more flexible and inclusive approach to classroom assessment in elementary education. Teachers' positive experiences with multimodal assessment suggest that schools should move beyond relying solely on traditional, text-based evaluations and instead adopt varied assessment formats that cater to different learning styles, abilities, and intelligences. This can include the use of visual projects, oral presentations, role-playing, multimedia outputs, creative writing, and hands-on activities. By doing so, students are given more opportunities to express their understanding in ways that are meaningful to them, which can lead to increased engagement, motivation, and academic confidence.

For classroom practice, teachers should be encouraged and trained to design assessments that integrate multiple modes of learning, ensuring alignment with lesson objectives and student needs. School administrators can support this by providing professional development workshops focused on differentiated assessment strategies and the integration of technology and arts into assessment design. Additionally, curriculum planners should incorporate multimodal assessment options into standard assessment guidelines, giving teachers the autonomy to adapt tools based on their learners' profiles.

Teacher education institutions can also integrate multimodal assessment training into pre-service programs, ensuring that new educators are prepared to assess students in diverse and creative ways. Lastly, school policies and leadership practices must support an assessment culture that values creativity, collaboration, and student-centered learning, in alignment with the principles of DepEd Order No. 8, s. 2015, which advocates for varied forms of assessment to capture learners' progress more holistically.

Limitations of the Findings

While the findings of this study provide valuable insights into the experiences of elementary teachers using multimodal assessment, several limitations must be acknowledged. First, the study may have limited generalizability due to its small sample size or localized context. If participants were drawn from a specific region, school type, or demographic, their experiences may not fully represent those of teachers across different educational settings, especially in rural or resource-constrained areas. Second, the study relies on self-reported data from teachers, which may be influenced by personal biases, selective memory, or the desire to present their practices in a favorable light. Without classroom observations or student performance data to corroborate these reports, it is difficult to fully assess the effectiveness of the multimodal assessments described. Third, the study may not have adequately captured the perspectives of students, whose voices are essential in evaluating the impact and inclusivity of multimodal assessment.

Additionally, the findings may not fully account for institutional constraints such as large class sizes, limited access to technology, or rigid curriculum requirements, which can hinder the practical implementation of multimodal strategies. Finally, the study may not have explored in depth the challenges teachers face in designing valid and reliable multimodal assessments, particularly in aligning them with learning standards or grading practices. These limitations suggest that while the findings are promising,

further research involving a broader range of stakeholders, more diverse settings, and mixed-method data collection is needed to strengthen and expand the conclusions.

CHAPTER VI: CONCLUSION

This chapter explores the principles, purposes, and practices of multimodal assessment, highlighting how it supports inclusive education, fosters creativity, and better reflects 21st-century literacies. Through case studies, theoretical frameworks, and practical examples, readers will gain insight into how educators can design fair, flexible, and meaningful assessments that accommodate diverse learner needs and capitalize on the strengths of multimodal communication. The aim of this chapter is to examine the role of multimodal assessment in enhancing teaching and learning by promoting student agency, creativity, and equity. It explores the theoretical foundations, practical strategies, and real-world applications of multimodal assessment.

Problem Statement

1. What are the insights of elementary school teachers regarding the effectiveness of multimodal assessment in evaluating learners learning?
2. How do elementary school teachers integrate multimodal assessment strategies into their daily teaching practices?
3. What challenges do elementary school teachers face when implementing multimodal assessment in their classroom?
4. How do elementary school teachers perceive the impact of multimodal assessment on learner's engagement and learning outcomes?
5. What multimodal assessment exemplar should be prepared to serve as a model for teachers?

Findings

1. Elementary school teachers generally perceive multimodal assessment as an effective approach to evaluating learners' understanding and skills. Teachers noted that multimodal assessments—such as projects, presentations, visual arts, digital media, and oral explanations—allowed students to demonstrate learning in diverse ways that traditional tests often fail to capture. This approach was seen as particularly beneficial for students with different learning styles, language abilities, and levels of confidence, as it promoted engagement, creativity, and deeper comprehension. However, some teachers also expressed concerns about the time and resources required to implement multimodal assessments effectively and consistently.
2. Elementary school teachers integrate multimodal assessment strategies into their daily teaching by incorporating activities such as group projects, visual presentations, storytelling, role-playing, and the use of digital tools. These strategies are often embedded in lessons to assess student understanding in real time. Teachers reported adapting assessments based on students' learning styles and using a variety of modes to ensure all learners have opportunities to demonstrate their knowledge and skills.
3. Elementary school teachers face challenges such as limited time, insufficient resources, lack of training, and difficulties in creating clear evaluation criteria when implementing multimodal assessments in their classrooms.
4. Elementary school teachers perceive multimodal assessment as having a positive impact on learners' engagement and learning outcomes. They believe that using varied modes of assessment motivates

students, caters to different learning styles, and helps deepen understanding, leading to improved participation and academic performance.

5. The exemplar calls for a shift toward more inclusive and learner-centered assessment practices in elementary education. It emphasizes the need to move beyond traditional, text-based assessments and adopt multimodal approaches that recognize students' diverse ways of learning and expressing understanding. It also calls for stronger teacher training, policy support (such as alignment with DepEd Order No. 8, s. 2015), and adequate resources to help teachers implement these strategies effectively.

Conclusion:

1. Elementary school teachers perceive multimodal assessment as an effective way to evaluate student learning, supporting diverse learning styles and creativity, but note that proper training, time, and resources are needed for effective implementation.
2. Elementary school teachers integrate multimodal assessment strategies daily, using visual, oral, written, and digital activities to cater to diverse learning styles, enhance engagement, and better evaluate student understanding.
3. Elementary school teachers face challenges in implementing multimodal assessments, such as time constraints, limited resources, insufficient training, and difficulty developing clear assessment criteria, which can affect their effectiveness.
4. Elementary school teachers believe that multimodal assessment enhances student engagement and improves learning outcomes by providing diverse ways for students to express their understanding and stay motivated throughout the learning process.
5. The exemplar emphasizes the importance of adopting multimodal assessment to create a more inclusive, equitable, and learner-centered education that supports diverse learning styles and enhances teacher capacity.

Recommendations:

1. To support the effective use of multimodal assessment, schools provide teacher training and ensure access to necessary resources. Clear rubrics and guidelines must be established to maintain consistency. Regular monitoring and feedback can help improve implementation and address challenges.
2. Schools support teachers in integrating multimodal assessment by providing access to diverse teaching and assessment tools, as well as regular training on effective strategies.
3. Overcome challenges in implementing multimodal assessment, schools should provide teachers with adequate training, sufficient resources, and clear guidelines for assessment.
4. Schools support teachers with ongoing professional development and provide tools that enable varied and creative assessment approaches, helping to sustain student interest and improve learning results.
5. Promote the use of multimodal assessment exemplars to guide teachers in creating more inclusive, equitable, and learner-centered assessment practices.

Future Research Directions

Future research should comprehensively examine the long-term effects of multimodal assessment on various student outcomes, including academic achievement, motivation, engagement, and self-efficacy. Understanding how these assessments influence student learning trajectories over time would provide

stronger empirical evidence to support their widespread adoption. Additionally, incorporating students' perspectives through qualitative studies or mixed-methods research is crucial to assess how learners experience multimodal assessments, whether these methods genuinely accommodate diverse learning needs, and how they affect student confidence and sense of agency.

It is equally important for future studies to investigate the practical challenges teachers encounter when integrating multimodal assessment into their classrooms. These challenges may include limited access to resources and technology, insufficient training or professional development, difficulties aligning multimodal assessments with existing curriculum standards, and constraints related to large class sizes and time management. Research should explore effective supports such as collaborative teacher networks, targeted professional development programs, and policy interventions that could alleviate these barriers and promote successful implementation.

Comparative research across different cultural, regional, and socio-economic contexts would shed light on how these factors impact the adoption and effectiveness of multimodal assessment. Such studies would help identify culturally responsive practices and adaptations necessary to meet the unique needs of diverse student populations. Moreover, investigating the role of school leadership and institutional culture in supporting or hindering multimodal assessment practices can provide valuable insights for creating enabling environments.

With the rapid advancement of educational technology, future research should also focus on the integration of digital tools and platforms that facilitate multimodal assessment. Exploring how technology can enhance student creativity, provide personalized learning experiences, and streamline assessment processes is essential in modern classrooms. Additionally, studies could examine the effectiveness of blended and remote learning environments in implementing multimodal assessments, especially in light of recent shifts towards online education.

Finally, longitudinal and large-scale mixed-methods studies that combine quantitative outcomes with rich qualitative data would provide a holistic understanding of multimodal assessment's impact on teaching and learning. By addressing these diverse areas, future research can guide policymakers, educators, and stakeholders in refining assessment practices that are inclusive, equitable, and aligned with 21st-century educational goals.

REFERENCE LIST

6. Adamson, C. (2020). New teacher assessment literacy: Determining and narrowing the gaps. *Emerging Perspectives: Interdisciplinary Graduate Research in Education and Psychology*.
7. Alateeq, M. A., & Alshahrani, K. (2025). *Developing EFL students' multimodal literacy with the use of infographics*. *Smart Learning Environments*, 12(1), 1–15. <https://doi.org/10.1186/s40862-025-00322-3>
8. Al-Azawi, R., Al-Faliti, F., & Al-Blushi, M. (2020). Educational gamification vs. game-based learning: Comparative study. *International Journal of Emerging Technologies in Learning*, 15(1), 23–35. <https://doi.org/10.3991/ijet.v15i01.12538>
9. Amakiri, H. A. E., & Inko-Tariah, D. C. (2021). An investigation of secondary school teachers' assessment literacy in Rivers-East senatorial district, Nigeria: Implication for classroom assessment.
10. Amiri, A., Wang, J., Slater, N., & Visak, V. N. (2021). Enhancement of process modeling and simulation evaluation by deploying a test for assessment and feedback individualisation.
11. Ancheta, R., & Ancheta, H. (2020). The new normal in education: Challenge to the private basic education institutions in the Philippines?
12. Ang, K. N., & Chaw, L. Y. (2022). Enhancing student engagement through multimodal assessment: A case

- study in higher education. *Journal of Education and Learning*, 11(2), 98–110.
13. Asamoah, D., Masitah, S., & Abdul Latif, S. N. (2022). A review of formative assessment techniques in higher education during COVID-19. *The Qualitative Report*, 27(2), 475–487.
 14. Baidoo-Anu, D., Asamoah, D., & Adusei, A. (2023). Teachers' beliefs and attitudes towards students' self-assessment: A latent profile analysis.
 15. Bennett, R. E. (2018). Educational assessment: What to watch in a rapidly changing world. *Educational Measurement: Issues and Practice*, 37(1), 7–15. <https://doi.org/10.1111/emip.12231>
 16. Bennett, R. E. (2019). Reinventing assessment for the 21st century: Integrating creative tasks with traditional evaluation. *Educational Measurement: Issues and Practice*, 38(2), 11–22.
 17. Black, P., & Wiliam, D. (2018). *Inside the black box: Raising standards through classroom assessment*. GL Assessment.
 18. Blikstein, P., & Worsley, M. (2016). Multimodal learning analytics: A methodological framework for research in constructivist learning. *Journal of Learning Analytics*. Retrieved from https://tiilt.northwestern.edu/assets/papers/jla_blikstein_worsley_2016.pdf(https://tiilt.northwestern.edu/assets/papers/jla_blikstein_worsley_2016.pdf)
 19. Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to coronavirus pandemic.
 20. Brookhart, S. M. (2022). *How to give effective feedback to your students* (2nd ed.). ASCD.
 21. Brown, G. T. L. (2013). Assessing assessment for learning: Reconsidering the policy and practice. In M. East & S. May (Eds.), *Making a difference in education and social policy*
 22. Brown, G. T., & Gao, L. (2015). Chinese teachers' conceptions of assessment for and of learning: Six competing and complementary purposes. *Cogent Education*, 2(1), Article 1030815. <https://doi.org/10.1080/2331186X.2015.1030815>
 23. Buckendahl, C. W. (2016). Public perceptions about assessment in education. In G. T. L. Brown & L. R. Harris (Eds.), *Handbook of human and social conditions in assessment*
 24. Cano, R. D. L. G. (2020). *Language assessment literacy development: Exploring, experimenting and reflecting on the status quo of EFL teachers among educational sectors in Tamaulipas, Mexico* (Doctoral dissertation, University of Southampton).
 25. CAST. (2018). *Universal Design for Learning guidelines* (Version 2.2). <http://udlguidelines.cast.org>
 26. Centre for Applied Special Technology. (2024). Universal design for learning guidelines version 3.0. Retrieved from <https://udlguidelines.cast.org>
 27. Chen, Y., & Kumar, P. (2023). Dual coding theory and multimodal learning in classrooms. *Cognitive Science Education Journal*
 28. Chenail, R. J. (2011). Interviewing the investigator: Strategies for addressing instrumentation and researcher bias concerns in qualitative research. *The Qualitative Report*, 16(1), 255–262. <https://nsuworks.nova.edu/tqr>
 29. Choi, H., & Thompson, L. (2023). Multimodal learning: Integrating visual arts and literacy to enhance comprehension. *Educational Psychology Review*.
 30. Cope, B., & Kalantzis, M. (2016). *Multiliteracies and diversity in education: New media, new learning*.
 31. Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed method research* (2nd ed.). Sage.

32. Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Sage.
33. Creswell, J. W., Klassen, A. C., Plano Clark, V. L., & Smith, K. C. (2019). Universal Design for Learning and multimodal assessment: A framework for inclusive education. *Educational Researcher*, 48(3), 171–182.
34. Hickey, D. T., et al. Assessing learning in a technology-supported genetics environment: Evidential and systemic validity issues.
35. Dalton, B., & Proctor, C. P. (2017). Multimodal assessment and student engagement. *Reading Research Quarterly*, 52(3), 275–292.
36. Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97–140.
37. Darling-Hammond, L. (2020). Teacher education around the world: Changing policies and practices (pp. 151–169).
38. Dawson, P. (2021). *Defending assessment security in a digital world: Preventing e-cheating and supporting academic integrity in higher education*. Routledge.
39. DeLuca, C., Klinger, D., Pyper, J., & Woods, J. (2016). *Educational Assessment, Evaluation and Accountability*, 28(3), 251–272.
40. DeLuca, C., Klinger, D., Pyper, J., & Woods, J. (2015). Instructional rounds as a professional learning model for systemic implementation of Assessment for Learning. *Assessment in Education: Principles, Policy & Practice*, 22(1), 122–139. <https://doi.org/10.1080/0969594X.2014.967168>
41. Denzin, N. K. (2016). The international congresses on qualitative inquiry. *Qualitative Research in Organizations and Management: An International Journal*, 1(2), 1–5. <https://doi.org/10.1108/qrom.2006.29801baf.002>
42. Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The handbook of qualitative research* (4th ed.). Sage.
43. Denzin, N. K., & Lincoln, Y. S. (Eds.). (2005). *Handbook of qualitative research* (3rd ed.). Sage.
44. Department of Education, Philippines. (2015). https://deped.gov.ph/wp-content/uploads/2015/04/DO_s2015_08.pdf
45. Diamantopoulou, S., & Ørevik, S. (Eds.). (Year). Designing for assessment as recognition of multimodal work in the EAL classroom. In *Multimodality in English language learning* (pp. 207–220). <https://doi.org/10.4324/9781003155300-15>
46. Doucet, A., Netolicky, D., Timmers, K., & Tuscano, F. J. (2020). Thinking about pedagogy in an unfolding pandemic.
47. Dunn, K. E., & Mulvenon, S. W. (2019). A critical review of research on formative assessment: The limited scientific evidence of the impact of formative assessment in education. *Practical Assessment, Research & Evaluation*, 14(7), 1–11. <https://doi.org/10.7275/jg4h-rb87>
48. Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative content analysis: A focus on trustworthiness. *Sage Open*, 4(1), Article 2158244014522633. <https://doi.org/10.1177/2158244014522633>
49. Emerson, R. M., Fretz, R. I., & Shaw, L. L. (2011). *Writing ethnographic field notes* (2nd ed.). University of Chicago Press.

50. Englander, M. (2012). The interview: Data collection in descriptive phenomenological human science research. *Journal of Phenomenological Psychology, 43*, 13–35. <https://doi.org/10.1163/15692112X632943>
51. Formative assessment in the disciplines: Framing a continuum of professional learning.
52. Furnham, A., Batey, M., & Martin, N. (2021). How would you like to be evaluated? The correlates of students' preferences for assessment methods. *Personality and Individual Differences, 50*, 259–263.
53. Garcia, M., & Lee, D. (2024). Multimodal assessment for differentiated instruction. *Educational Assessment Quarterly*.
54. García-Carrasco, E., Hernández, M., & López, R. (2020). Using multimodal assessment to promote creativity and active learning in science classes. *Science Education International, 31*(4), 321–333.
55. Ghaicha, A. (2016). Theoretical framework for educational assessment: A synoptic review. *Journal of Education and Practice, 7*(24), 212–231.
56. Gibbs, G. (2016). How assessment frames student learning. In C. Bryan & K. Clegg (Eds.), *Innovative assessment in higher education* (pp. 23–36).
57. Gikandi, J. W., Morrow, D., & Davis, N. E. (2019). Multimodal assessment in higher education: A framework for authentic evaluation. *Journal of Educational Technology & Society, 22*(3), 45–58.
58. Gomez, L., Tan, Y., & Rivera, J. (2022). Embodied mathematics: The role of physical interaction and visual representation in conceptual understanding. *Journal of Mathematics Education, 15*(2), 105–123.
59. Gray, J. S., Connolly, J. P., & Brown, A. M. (2019). *Studies in Educational Evaluation, 62*(9), 142–148.
60. Guerrero-Sosa, J. D. T., Romero, F. P., Menéndez-Domínguez, V. H., Serrano-Guerrero, J., Montoro-Montarroso, A., & Olivas, J. A. (2025). A multimodal framework for explainable evaluation of soft skills in educational environments. arXiv. <https://doi.org/10.48550/arXiv.2505.01794>
61. Hattie, J., & Clarke, S. (2019). *Visible learning: Feedback*.
62. Hattie, J., & Timperley, H. (2019). The power of feedback in formative assessment: Balancing rigor and flexibility. *Assessment in Education: Principles, Policy & Practice, 26*(3), 365–385.
63. Hayes, D. G., & Singh, A. A. (2011). *Qualitative inquiry in clinical and educational settings*. Guilford Press.
64. Hill, K. (2017). Understanding classroom-based assessment practices: A precondition for teacher assessment literacy. *Melbourne Papers in Language Testing and Assessment, 6*(1), 1–17.
65. Huang, Y.-S., & Asghar, A. (2016). Science education reform in Confucian learning cultures: Policymakers' perspectives on policy and practice in Taiwan. *Asia-Pacific Science Education, 2*(3), 1–22.
66. Jankowski, N. A. (2020). Assessment during a crisis: Responding to a global pandemic.
67. Joaquin, J. J. B., Biana, H. T., & Dacela, M. A. (2020). The Philippine higher education sector in the time of COVID-19. *Frontiers in Education, 5*, 576371. <https://doi.org/10.3389/educ.2020.576371>
68. Johnson, L., & Martin, S. (2021). Multimodal assessment in mathematics education: Enhancing conceptual understanding through manipulatives and digital tools. *Journal of Mathematics Teacher Education, 24*(2), 125–144.

69. Kang, J., & Zhang, J. (2022). Multimodal learning environments and inclusive education: Strategies for diverse learners. *Educational Review*, 74(4), 530–548.
70. Kim, J., & Park, S. (2019). Multimodal assessment and student creativity: Enhancing engagement through choice. *Journal of Educational Technology & Society*, 22(1), 34–46.
71. Kivunja, C. (2023). Teaching students 21st-century skills: A framework for integrating critical thinking, creativity, communication, and collaboration. *International Journal of Learning and Development*.
72. Koch, T. (2016). Establishing rigor in qualitative research: The decision trail. *Journal of Advanced Nursing*, 53(1), 91–100.
73. Lee, H., Kim, M., & Yoon, S. (2021). Developing scientific literacy through multimodal assessments: Integrating verbal, visual, and written modes. *Journal of Research in Science Teaching*, 58(3), 345–367.
74. Li, M. (2024). Review and prospects of the multimodal assessment. *Journal of Teaching Practice and Contemporary Education*, 5(2), 101–112. <https://centuryscipub.com/index.php/jtpce/article/view/606>
75. Licorish, S. A., Owen, H. E., Daniel, B., & George, J. (2020). Students' perception of Kahoot!'s influence on teaching and learning. *Research and Practice in Technology Enhanced Learning*, 15(1), 1–23. <https://doi.org/10.1186/s41039-020-00152-x>
76. Lim, F. V., Towndrow, P. A., & Tan, A. L. (2023). Unpacking the teachers' multimodal pedagogies in the primary English language classroom in Singapore. *Language and Education*, 37(1), 35–50. <https://doi.org/10.1080/09500782.2022.2095344>
77. Martinez, A., & Chen, Y. (2023). Dramatic play and assessment in early childhood education: Reducing anxiety, building communication skills. *Early Childhood Research Review*.
78. Martinez, S., Nguyen, T., & Patel, R. (2024). Comics and literacy: Bridging art and language learning. *International Journal of Educational Media*.
79. Mills, K. A., & Unsworth, L. (2017). Multimodal literacy and assessment: New directions for educators. *Language and Education*, 31(3), 217–233.
80. Mills, K. A., & Unsworth, L. (2020). [Study on digital multimodal composition]. [Journal info not provided].
81. Mishra, P., & Koehler, M. J. (2016). Technological pedagogical content knowledge (TPACK): A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017–1054.
82. Mitchell, H., & Ward, C. (2023). Transforming classrooms through multimodal learning: Promoting engagement, risk-taking, and creativity. *Journal of Learning Sciences*.
83. Nguyen, T., & Brown, S. (2023). Manipulatives and verbalization: Enhancing math conceptual understanding. *Journal of Educational Psychology*.
84. Nguyen, T., Garcia, R., & Smith, J. (2021). Integrating multimodal assessment to promote problem-solving and communication skills in math classrooms. *International Journal of STEM Education*, 8(1), 22.
85. Nguyen, T., Patel, R., & Smith, J. (2024). Role-play and multimedia integration: Effects on cognitive retention and engagement. *Learning and Instruction Journal*.
86. Park, J., & Choi, E. (2020). Multimodal assessment in science education: Enhancing conceptual understanding through diverse modes of expression. *International Journal of Science Education*, 42(14), 2375–2393.

87. Pasquini, R. (2019). Conceptually broadening the curriculum alignment model to understand the coherence of teachers' graded summative evaluative practices: Issues and perspectives. *Educational Measurement and Evaluation*, 42(1), 63–92.
88. Pham, T. H. T., & Renshaw, P. (2015). Formative assessment in Confucian heritage culture classrooms: Activity theory analysis of tensions, contradictions and hybrid practices. *Assessment & Evaluation in Higher Education*, 40(1), 45–59.
89. Ramos, M. T., & De La Cruz, R. P. (2023). Multimodal assessment as a tool for promoting authentic learning in basic education. *International Journal of Educational Innovation*, 25(1), 33–45.
90. Rincon-Flores, E. G., Santos-Guevara, B. N., & Rodríguez, M. A. (2022). Multimodal approaches to formative assessment in inclusive classrooms. *Educational Assessment and Technology Journal*.
91. Rocamora, J. R., & Baguio, B. C. (2025). Multimodal literacy and creative teaching practices of public elementary school teachers. *Asian Conference on Research in Instruction*, 3(1), 93–105. <https://journalacri.com/index.php/ACRI/article/view/1325>
92. Rodríguez, L., & Kim, H. (2022). Role-playing in language acquisition: Enhancing vocabulary through active learning. *TESOL Quarterly*.
93. Román-González, M., Moreno-León, J., & Robles, G. (2019). Combining assessment tools for a comprehensive evaluation of computational thinking interventions.
94. Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54–67.
95. Saavedra, A. R., & Opfer, V. D. (2018). Teaching and learning 21st-century skills: Lessons from the learning sciences. *The Phi Delta Kappan*, 99(6), 8–13.
96. Seden, K., & Svaricek, R. (2018). Teacher subjectivity regarding assessment: Exploring English as a foreign language teachers' conceptions of assessment theories that influence student learning. *CEPS Journal*, 8(3), 119–139.
97. Shin, D., Sutherland, L. M., & Copeland, M. (2022). Multimodal composition and student engagement in elementary classrooms. *Journal of Literacy Research*, 54(2), 145–168.
98. Shin, D., Sutherland, L., & Copeland, M. (2022). Multimodal assessments and equitable learning opportunities in elementary education. *Journal of Literacy Research*, 54(3), 289–305.
99. Smith, R., Johnson, L., & Torres, A. (2022). Active learning and student retention: The role of hands-on and verbal strategies. *Teaching and Learning Review*.
100. Tang, K. N., & Chaw, L. Y. (2022). Enhancing student engagement through multimodal assessment: A case study in higher education. *Journal of Education and Learning*, 11(2), 98–110.
101. Tobin, K., & Binkley, M. (2018). Learner agency in multimodal learning environments. *Journal of Educational Psychology*, 110(6), 847–858.
102. Wang, A. I. (2020). The wear-out effect of a game-based student response system. *Computers & Education*, 150, 103838. <https://doi.org/10.1016/j.compedu.2020.103838>
103. Wang, Y., & Gomez, A. (2022). Hands-on visual storytelling and early childhood literacy development. *Early Childhood Education Journal*.
104. Wang, Y., & Lee, C. (2021). The impact of multimodal assessments on student engagement and achievement in early mathematics learning. *Educational Research Review*, 33, 100389.
105. Wang, Y., & Nichols, R. (2022). Multimodal literacy practices in assessment: Supporting diverse learners through art, performance, and narrative. *Language and Literacy Education Journal*, 18(3), 241–259.

106. White, J. P. (2024). Unlocking potential with multimodal learning and assessment: A discussion of the barriers and benefits. *GILE Journal of Skills Development*, 4(2), 106–111. <https://doi.org/10.52398/gjds.2024.v4.i2.pp106-111tiilt.northwestern.edu>
107. Zammit, K., & Downes, T. (2020). Rethinking assessment for a digital age: Multimodal strategies for student success. *Australian Educational Researcher*, 47(3), 555–572.
108. Zeng, M. (2024). A window into multilingual students' worlds: Using multimodal writing to support writing growth. *The Reading Teacher*, 77(1), 39–49. <https://doi.org/10.1002/trtr.2352>

Books and book chapters:

1. Jewitt, C. (2017). *The Routledge handbook of multimodal analysis* (2nd ed.). Routledge.
2. Koretz, D. (2017). *The testing charade: Pretending to make schools better*. University of Chicago Press.
3. Kress, G. (2015). *Multimodality: A social semiotic approach to contemporary communication*.
4. Kress, G., & Selander, S. (2017). Multimodal design, learning and cultures of recognition. *Internet and Higher Education*, 33, 154–160.
5. Kress, G., & van Leeuwen, T. (2017). *Reading images: The grammar of visual design* (3rd ed.).
6. Lambert, S., & Loiselle, C. (2007). Combining individual interviews and focus groups to enhance data richness. *Journal of Advanced Nursing*, 62(2), 228–237.
7. Lingard, B., & Lewis, S. (2016). Globalization of the Anglo-American approach to top-down, test-based educational accountability. In G. T. L. Brown & L. R. Harris (Eds.), *Handbook of human and social conditions in assessment* (pp. xx-xx). Routledge.
8. Mayer, R. E. (2021). *Multimedia learning* (3rd ed.). Cambridge University Press.
9. McMillan, J. H. (2015). *Classroom assessment: Principles and practice for effective standards-based instruction*. Pearson.
10. Seiber, J. E., & Tolich, M. B. (2013). *Planning ethically responsible research* (2nd ed.). Sage.
11. Trilling, B., & Fadel, C. (2016). *21st century skills: Learning for life in our times* (Updated ed.). Jossey-Bass.
12. Turner, C., & Purpura, J. (2016). Learning oriented assessment in the classroom. In D. Tsigari & J. Banerjee (Eds.), *Handbook of second language assessment* (pp. 255–272). Walter de Gruyter.
13. UNESCO. (2021). *Understanding inclusive education: A global perspective*. UNESCO Publishing.
14. Van Manen, M. (2014). *Phenomenology in practice: Meaning-giving methods in phenomenological research and writing*. Left Coast.
15. Walsh, M., Rowsell, J., & Simpson, A. (2020). *Reconceptualizing literacy in the 21st century: Multimodal, digital, and global perspectives*.

Websites:

1. Canadian Teacher Magazine. (2022, September 26). Standardized testing vs teachers' classroom assessment practices. <https://canadianteachermagazine.com/2022/09/26/standardized-testing-vs-teachers-classroom-assessment-practices/>
2. Castilla Sorsogon Government. (n.d.). History of Castilla. <http://www.castillasorsogon.gov.ph/history-of-castilla/>
3. Eurydice. (n.d.). Assessment in a single structure education: Finland. <https://eurydice.eacea.ec.europa.eu/national-education-systems/finland/assessment-single-structure-education>

4. FeedbackFruits. (n.d.). Assessment and feedback: Challenges and opportunities. <https://feedbackfruits.com/blog/assessment-and-feedback-challenges-and-opportunities>
5. New Zealand Curriculum. (n.d.). Assessment for learning. <https://newzealandcurriculum.tahurangi.education.govt.nz/assessment-for-learning/5637190483>
6. Education Estonia. (n.d.). Innovation in assessment. <https://www.educationestonia.org/innovation/assessment/>
7. Indeed Career Guide. (n.d.). Assessment strategies. <https://www.indeed.com/career-advice/career-development/assessment-strategies>
8. IPGCE. (n.d.). Assessment and evaluation methods in Japan. <https://www.ipgce.com/assessment-and-evaluation-methods-in-japan>