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# The Use of Integrative Assessment and the Results of the Mean Percentage Score (MPS): Basis for Learning Assessment Design

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## **ABSTRACT**

This study argues for the value of integrative assessment to help teachers know if students have learned what they intended to teach them and how the teaching and learning have changed both student and teacher. Considering teaching and learning as a partnership between students and their teacher, integrative assessment focuses on the learners, providing both written and performance tasks. It gives opportunities for teachers to be self-reflective and assess their teaching performance and its impact on student learning. Integrative assessment is framed by the ideas of Paulo Freire that teaching and learning are a partnership—and that learning takes place only when both teacher and student are changed. The purpose of this study is to develop an integrative assessment design for the learning areas of Inosloban-Marawoy Integrated National High School that is effective in Junior and Senior High School. Development of blended learning leads to reconceptualization of teaching methods, transformation of assessment tools and design. This study proves the relevance of the integrative assessment design regarding the use of distance modality through the results of Mean Percentage Score (MPS) in each learning area. The researcher introduces the learning assessment design for integrative assessment combining both written and performance tasks perspectives.

Keywords: Integrative, assessment, Mean Percentage Score, written task, performance task

## 1. INTRODUCTION

Learning and examinations were disturbed by Covid-19 as a result, people are depending on flexible learning to go forward and "do more harm." Distance Learning Delivery Modalities (DLDMs) have gone from being a niche to a mainstream alternative [1]. The DLDMs ecosystem provides with an excess of new student evaluation options as well as several



opportunities. What worked in a face-to-face/classroom setting will not function in an online setting [2]. The necessity for a flexible assessment and grading system that makes education and learning inclusive is critical for DepEd's blended learning strategy.

Prior to the outbreak, classroom recitations, quizzes, and periodic examinations were all part of the educational process. With the current shift to distant learning modes, these old evaluation methodologies have become difficult, if not impossible, to employ [3]. The school system across the world, including in the Philippines, was entirely revamped due to restrictions imposed because of the coronavirus outbreak.

At this time, Inosloban-Marawoy Integrated National High School must employ assessment and grading procedures that may best promote student growth and adapt to a variety of circumstances. DepEd aspires to create selfsufficient students who can study and complete examinations on their own. Quarterly assessments will not be given during the current school year. Days set aside for quarterly assessments, on the other hand, may be utilized to showcase important performance for the quarter that addresses the performance criterion.

# 2. LITERATURE REVIEW

Assessment needs to be meaningful to students where they can see its relevance to their life and future, and hence are motivated to immerse themselves in the experiences to which they are exposed. Assessment needs to provide space and opportunities for students to learn from the

assessment, rather than simply requiring them to demonstrate their learning [4-5]. To encourage students to engage with the assessment and take up the opportunities to learn, assessment details such as objectives, requirements and procedures need to be made clear to students [6]. Adequate preparation for students, including making these points clear, has also been demonstrated to be critical in enhancing learning from assessment for personal and professional development [6]. Engagement of students learning opportunities from the assessment highlights the role of the teacher. The teacher must make sure students are appropriately supported throughout the assessment processes. The need to design and implement assessment so that it is supportive of student learning is particularly relevant when learning to become who students endeavor to can be expected to be challenging to students. One major challenge may associated with the fact that students are required to seek ways of being who they are not yet to be. Students may find disoriented within new practice worlds and the possibilities that are opened to them [7]. Through promoting reflexivity, assessment can contribute to increasing awareness of, and provide a focus for, students seeking possibilities for ways of being who they endeavour to be.

In terms of implementing assessment, the teacher must be available to provide support, supervision, and direction for student learning. In particular, the teacher needs to provide a fear-reduced and supportive environment. In this environment, students can be encouraged to interrogate the knowledge and skills they seek the professional activities they practice and



thereby, develop their own ways of knowing, acting and being.

There are three terms that have a close relationship and are difficult to be distinguished, namely (1) evaluation, (2) measurement, and (3) assessment. According to Rashid, *et al.* (2009) evaluation is the process of determining the value of the performance and student learning outcomes based on information obtained through the assessment [9].

There are two types of assessments conducted in schools, namely: formative assessment and summative assessment. Cowie and Bell (1999) reveal that "formative assessment is the process used by teachers and children to recognize to pupil learning, in order to enhance that learning during the activity or task" [9]. Indonesian language learning in high school is a learningbased integrative thematic. Integrative term refers to two things, namely external and internal integration. External integration is learning materials of Bahasa Indonesia that are associated with other disciplines, such as environment, religion, socio-cultural, political, economic, and law. Internal integration is to integrate the four components of language skills in whole or in part of a linguistic context.

Indonesian language learning is learning that is packaged in the form of themes (thematic). Rusman (2010) explains that the theme is a medium to introduce various concepts or competencies to students [10]. Building thematic aims at unifying the curriculum content in an intact unit so that it makes and integrated and meaningful learning material. In

addition, it can be easily understood by students.

The integrative assessment evaluates aspects of linguistics and aspects of language skills through a comprehensive assessment rather than through a separate assessment. Thus, the assessment using the integrative approach realizes the aspects of language and skills in an integrated manner [11]. The integration is intended to test the ability of learners to use two or more language skills simultaneously.

A strategy which connects other subject matter in other subject area is called integrative approach. This is another way of organizing those learning that came from another subject area and making an instructional design be interesting and integrative. In this strategy, all the factors that can contribute to the teachinglearning process are considered [12]. Demonstration method of teaching is another form of traditional classroom strategy that requires step by step process of solving math problems [13]. It focuses on achieving psychomotor and cognitive objectives. Another approach that teaches the students to learn how to learn rather than what to learn is induction. This is an effective approach for helping understand concepts students to generalizations and for developing their higher order thinking skills [14]. The inductive approach is a much more student-centered approach that makes use of a strategy known as 'noticing.' Here, various facts and examples are presented to the learners from where they must find out rules or establish a general formula.



Integrating assessment with real-world practice demands an understanding of what practice is and from there, how integration can be achieved in concrete ways. We often think of practice (in professional practice) as professionals practicing their occupation. In this sense, practice refers to everyday activities and the conduct of those activities. However, professionals do not randomly carry out an activity in a vacuum. They do it with a purpose, in the web of interrelationships with people and things who, together with the professionals, form the occupation. For instance, the teaching practice may involve delivering a lecture to, and interacting with, our students according to a meaningful schedule, using our teaching tools, in our educational institution. Teachers, students, teaching material and tools, the educational institution, to name just a few, altogether form the teaching occupation.

In line with the interrelated aspects of the professional practice, an assessment task should require students to perform one or more essential activities of the profession to the standards, under the conditions, and in the manners, one would expect from professionals. These requirements would also include students collaborating with relevant people whether they are team members, clients or other stakeholders and reflecting on their thinking, acting and being as they are being immersed in practicing the activities. Being designed in this way, assessment can allow students to learn to practice in an authentic way. Assessment can help to make evident to students what it means to be skillful, and from these departures, encourage them to develop their own ways of being and acting. To focus and support student

learning in this direction, assessment should also be designed to integrate with the learning that they are engaged in ace and society at large".

Wiggins and McTighe (2005) have proposed a framework for designing curricula, assessment tasks and performance standards that facilitate the development of deep approaches to learning in students [15]. Their framework promotes the concept of designing for understanding using the six facets of students being able to explain, interpret, apply, have perspective, empathize, and have self-knowledge about a particular issue. Assessment rubrics have heen constructed based on these six facets of understanding; the final facet, self-knowledge, can be aligned with metacognitive awareness, and includes an appreciation of what we do not understand and an ability to project current approaches to learning onto unfamiliar situations.

Traditionally, assessment and learning has been connected through John Biggs' famous constructive alignment. Biggs (2003) devised a model of three components, namely: intended learning outcomes, teaching/learning activities, and assessment tasks [16]. The constructive alignment among these components is achieved when the intended learning outcomes are expressed clearly, the teaching/learning activities are designed to facilitate the attaining of the outcomes, and the assessment tasks assess the extent to which these intended outcomes are attained by the students.

Undoubtedly, constructive alignment is a powerful model that contributes greatly to the



integrity of curriculum development and makes students' learning experience more coherent and meaningful. However, this model seems to reinforce the long-existing illusion that learning, and assessment are time-separated activities. Geoffrey Crisp (2010) pointed out the danger of the illusion in that "this has led to a fragmented approach to setting assessment tasks and for students to feed from the breadcrumb trail of instructor comments" [17]. Furthermore, the model seems to emphasize the constructive alignment within a course, learning module or unit. Yet, student learning can benefit from not only alignment within a course but also the integrity of the whole program.

Assistance can be provided to students through timely and meaningful feedback as well as engagement with that feedback. Timely feedback provides students with a picture of their current learning and allows them to act on the feedback [17-18]. Meaningful feedback clarifies to students what good performance means, as well as their strengths, weaknesses, and the quality of their work. However, according to Graham Gibbs (2006), what matters is "not the quality of feedback but the quality of student engagement with that feedback" [19]. Discussing feedback can engage students in sharing their understanding of the feedback and use feedback to improve teaching and learning practices. In this way, when assessment is integrated with learning, feedback from the assessment is likely to feedforward future learning [20-21]. The importance of feedback on supporting student learning highlights the need to integrate summative with formative purposes of assessment when designing assessment practices.

Assessment with a formative purpose focuses on generating information that can be used for improving teaching and learning. Formative assessment can happen at the start, during, or at the conclusion of a learning unit or session. It aims to diagnose students' understanding to structure the teaching and learning that meets students' emerging needs; to prepare students for the session and engage them in learning; or to consolidate the learning and provide feedback to feedforward future learning [21-22]. While formative assessment focuses on supporting ongoing teaching and learning, assessment with a summative purpose focuses on valid and reliable measurement of student learning, often at culmination points of learning. Summative assessment purports to provide overall judgments, documents, and reports on students' achievement for grading and certification purposes [23].

Students' achievement in a course or a program must be documented, reported, and certified for qualifications and progression, thus assessment with a summative purpose is inevitable. The high-stakes status of assessment can, indeed, motivate student learning. On this ground, Biggs (1998) proposed that a combination of 'backwash' (from a summative purpose of assessment) and feedback (from a formative purpose) is likely to exert positive effects[16]. These same formative and summative tasks must serve a multitude of purposes, ranging from identifying weaknesses in prior knowledge or skill levels (diagnostic assessment) to providing timely feedback to students on their development of new capabilities resulting from their current learning and finally to identifying strategies that will give the high-stakes status of



assessment. integrating formative with summative assessment tasks can allow for assessing student learning to form a solid base for certification whilst striving to enhance this learning. Integration of this type can be achieved by incremental, or progressive, assessment [24]. In progressive assessment, one task feeds into another in a meaningful way. Through connecting assessment tasks, feedback from early assessments can inform student learning and performance in later assessments. In this way, learning can be emphasized over assessing. Students can be encouraged to be more open to learning to interrogate knowledge, skills, routine practices, and the conduct of those practices, with timely feedback and assistance in doing so [7]. On this basis, students can embark on a journey of asking who one is, searching for possibilities for being, and becoming who one endeavors to be.

Assessment allows both instructor and student to monitor progress towards achieving learning objectives and can be approached in a variety of ways. Formative assessment refers to tools that identify misconceptions, struggles, and learning gaps along the way and assess how to close those gaps. It includes effective tools for helping to shape learning and can even bolster students' abilities to take ownership of their learning when they understand that the goal is to improve learning, not apply final marks [25]. It can include students assessing themselves, peers, or even the instructor, through writing, quizzes, conversation, and more. In short, formative assessment occurs throughout a class or course, and seeks to improve student achievement of learning objectives through

approaches that can support specific student needs [26].

When distant learning modalities are implemented this school year, parents and guardians will play a critical role in assisting their children in adjusting to the changes in distance learning procedures. The grading approach used in this interim policy allows for appropriate tolerance for learners who have been adversely affected by the epidemic, while maintaining the integrity and principles of assessment and grading. Grading, on the other hand, is described as the process of giving a value to assessment findings as a record of students' ability, success, or progress. But the deployment of various remote learning delivery modalities has spurred a bigger discussion concerning the function of grades in student learning, according to the Department of Education.

Assessment should be viewed as a multi-step process including a variety of activities and procedures that consider academic, social, and interpersonal factors. Students gain the ability to critically examine the information and skills they seek, the professional activities they engage in, and the way they interact with people and things they meet by completing an assessment assignment. In this approach, evaluation is not a means to a goal, but rather a means for students to learn to take up and react to the issue of who they are becoming while attempting to be skilled in their chosen professions.

The purpose of this study is to develop an integrative assessment design for the learning areas of Inosloban-Marawoy Integrated National



High School that is effective in Junior and Senior High School.

# 3. METHOD AND MATERIALS

## 3.1. Research Design

The study took place after the implementation of integrative assessment. To see the effect of the application of integrative assessment in the students' success, the data were collected for the First semester consisted of first and second quarter, without the application of integrative assessment and then after the application of integrative assessment in the second semester, consisted of third and fourth quarter.

## 3.2. Participants

The respondents of the study were the Grades 7 to 12 teachers in Inosloban-Marawoy Integrated National High School, school year 2020-2021. These respondents were composed of one hundred seven (107) teachers. These groups answer the survey questionnaires pertaining to the use of integrative assessment.

# 3.3. Data collection

The gathering of data was facilitated using a survey questionnaire designed to assess the level of acceptance about the implementation of integrative assessment in Inosloban-Marawoy Integrated National High School. The questionnaire consisted of 11 questions in integrative assessment. The researchers also asked for profile of the teachers as to learning area being taught. The result of the study was the basis of the learning assessment design to be used. The 11-item survey questionnaire was administered to all teachers, after

implementation of integrative assessment in the second semester. The 11- item survey questionnaire did not pose any difficulty for the participants as it was designed with the intent of being used with junior and senior high teachers.

## 3.4. Data analysis

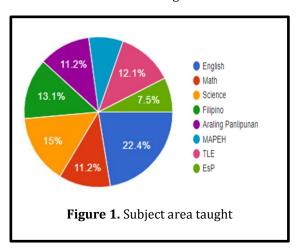
To analyze the quantitative data, simple percentages, mean and standard deviation statistics were used. The qualitative data obtained through open-ended questions and interviews were analyzed and interpreted thematically. Analysis of quantitative data are displayed through tables and pie charts, then corroborated by qualitative data analysis in the form of texts.

#### 3.5. Ethical Issues

Confidentiality procedures were taken to protect teachers' privacy. Participants were informed that all responses would be anonymous and only used for the purposes of this study.

# 4. RESULTS AND DISCUSSION

A system of well-constructed integrative assessments allows students to demonstrate their abilities and knowledge and then reflects





how close they are to meeting educational goals and standards. Evidence from assessments can be directly beneficial to students.

To promote student learning to integrate what they know and can do with who they are becoming, assessment must build on real-world activities in realistic context, engage students in learning from the assessment and carefully scaffold their learning. Designing assessment in this direction can be achieved through integrating assessment with real-world practice, assessment with learning.

Evidence from assessments can be directly beneficial to students. When assessment activities are aligned with instructional activities and content standards, teachers can provide students with information about which concepts and skills they need to learn. Then teachers can use integrative assessment results to help students understand what they already know

and what they still need to work on.

The figure 1 show that the greatest number of teachers who answered the survey came from the English Department with 22.4 % respondents, while MAPEH and ESP have 7.5% respondents. This can be stated that English teacher were very eager to answer the given survey for integrative assessment.

The table 1 depicts that teachers disagree that integrative assessment increases teachers' workload and takes too much time with 38.3% while 36.4% agree with it. The table presents that 58.9% teachers agree that teachers need more training to use integrative assessment effectively. It also shows that teachers strongly agree and disagree with 19.6% and 14% respectively.

It also reveals that 46.7% of the teachers disagree that integrative assessment can

Table 1. The questionnaire to find the integrative assessment					
To what extent do you agree with the following statements about integrative assessment?	SA	A	SD	D	NO
Integrative assessment increases teachers' workload and takes too much time.	14	39	8	41	5
Teachers need more training to use integrative assessment effectively.	21	63	7	15	1
Integrative assessment can discourage students with special educational needs or learning difficulties.	6	33	12	50	6
There is a lack of useful digital resources for integrative assessment.	12	57	9	26	3
Integrative assessment is something that teachers feel confident in using this in class.	16	78	2	8	3
Integrative assessment is something that the administration encourages or requires the use of.	35	68	0	2	2
Teachers feel like that they need more training in integrative assessment and participate in a workshop or training if it was available.	21	64	6	13	3
Integrative assessment is an important tool for teachers to collect the written and performance tasks data.	40	61	1	3	2
Integrative assessment can be a fast and effective way to learn about the students' strengths and weaknesses.	30	64	6	5	2
Integrative assessment can be an effective way to increase the Mean Percentage Score (MPS) of the class in each learning area.  Strongly Agree=(SA), Agree=(A), Strongly Disagree=(SD), Disagree=(D), No Opinion=(NO)	23	73	2	2	7

discourage students with special educational needs or learning difficulties. On the other hand, 30.8% agree with it. The results may be related with the idea professed by earlier studies that assessment needs to provide space and opportunities for students to learn from the assessment, rather than simply requiring them to demonstrate their learning [4, 20].

The result shows that 53.3% teachers agree that there is a lack of useful digital resources for integrative assessment while 24.3% disagree and 11.2% strongly agree with it.

The result poses that 72.9% agree and 15% strongly agree of the teachers, said that integrative assessment is something that teachers feel confident in using this in class.

The result discloses that 63.6% of the teachers agree and 32.7% strongly agree that integrative assessment is something that the school encourages or requires the use of. The findings were given light on the comments by Higgs, (2012), that to integrate assessment with real-world practice, the teacher can identify essential activities of the designated professional practice, the network of people and things involved in the activities and a concrete context for carrying out the activities [27]. The teacher can then use the information to design the assessment task and articulate assessment

The result also tells that 59.8% agree and 19.6% strongly agree but 12.1% disagree that teachers feel like that they need more training in integrative assessment and participate in a workshop or training if it makes available.

About 57% agree of the teachers and 37.4% strongly agree that integrative assessment is an important tool for teachers to collect the written and performance tasks data. The findings shed light to the idea professed by Lin Norton (2004) who advocated the integration of assessment criteria with intended learning outcomes [28]. This integration is to eliminate the adverse impact of assessment on learning that students "may take a strategic approach and end up focusing on the superficial aspects of their assessment tasks" to address the mechanics of the tasks.

It unwraps that 59.8% and 28% of the teachers agree and strongly agree respectively that integrative assessment can be a fast and effective way to learn about the students' strengths and weaknesses. The findings relate somehow with the idea professed by Nicol & Macfarlane-Dick (2006), who mentioned that meaningful feedback clarifies to students what good performance means as well as their strengths, weaknesses, and the quality of their work [29].

It uncovers that 68.2% agree of the teachers and 28% strongly agree that integrative assessment can be an effective way to increase the Mean Percentage Score (MPS) of the class in each learning area. Integrating the assessment criteria with intended learning outcomes and restructuring learning activities accordingly can direct students' focus to learning what is intended and scaffold their learning in that direction.



Teachers play a major role in implementing the Integrative Assessment to our learners. Their answers can be of great help to everyone.

The data in the table reveals that the highest Overall Mean Percentage Score (MPS) in the written task was obtained in the fourth quarter with 75.07% as well as in the Performance task with 78.61%. On the other hand, the lowest MPS for written test was 61.34% and 67.55% for performance task, both in the first quarter. The first semester was first and second quarters with no integrative assessment used while second semester was third and fourth quarters with integrative assessment. It can be concluded that the use of Integrative Assessment (IA) increases the results of the class MPS.

Based on the findings, the researcher came up with the 2 CIA process to be followed by the teachers as their guide in the implementation of Integrative Assessment (IA) in the school

Conceptualization: Interdisciplinary, social reconstructionism

- What are the covered Most Essential Learning Competencies (MELCs) of each subject area for two weeks (i.e., Weeks 1 & 2, Weeks 3 & 4, Weeks 5 & 6, and Weeks 7 & 8)?
- Which subject areas have linked MELCs which are feasible to be group for an Integrative Assessment?
- What social issue or current event may be used as the backbone of the Integrative Assessment?

Creation: Student-centered, rubrics aided

 What product-based GRASPS (Goal, Role, Audience, Situation, Product, Standards for Success) Activity may be designed for the learners?

Implementation: teacher guided, project-based

- What is the prior knowledge of the learners about the task?
- How can teachers assist students under distance learning towards the completion of the performance task?

Appraisal: evidence based, action-oriented

- Which tasks in the integrative assessment were carried out by the learners? which were not carried out?
- How can teachers reinforce successes and remediate hitches of the students towards the attainment of the targeted MELCs?
- Did integrative assessment increase the Mean Percentage Score (MPS) in each learning area?

## 5. CONCLUSION

Based on the findings of this study, it could be concluded that when integrative assessment is used for written and performance tasks, it improved the academic performance of the students on the subject and enable them to understand the contents of the subject better than the use of summative in each learning area. Also, integrative assessment serves as a basis for finding out the sources of difficulties on the contents of the subject based on the Minimum Learning Competencies (MELCs). In this way, the teacher can give necessary remediation and correctives measure improve the to



understanding of learners on the contents of the subject to improve their academic achievements in the subject concerned. The study has revealed that those grade levels who are not exposed to integrative assessment have less increase in the Mean Percentage Score (MPS). This was proven in the absence of integrative assessment in the first semester (First and Second Quarters).

Integrative assessment was found to differ widely in their defining characteristics and the way teachers assess students has a major impact on their learning. Teachers as the driver of the vehicle to the learning outcomes of the learners, play a major role in their achievements. They were aware in the use of integrative assessment and how they will collaborate to have a better result needs enhancement. The volume of written and performance tasks of assessment is known to have a positive impact on the quality of learning outcomes. Finally, integrative assessment can be viewed as being a means of helping students to learn, a way of reporting on student progress, and a way of making decisions about teaching.

## 6. RECOMMENDATIONS

Based on the survey, teachers need more training to use the integrative assessment effectively. They also agreed that there is a lack of useful digital resources for it. In this case, the school head can have the Focus Group Discussion (FGD) by learning area on the use of integrative assessment. This can also be included in the Instructional Supervision (IS), Learning Action Cell (LAC) session, In-Service Trainings (INSET) or other trainings conducted

by the DepEd. This can be part of the teacher's professional growth and development.

- Continuous monitoring, follow up and supervision of the School Head, Department Heads and Subject Heads in the implementation of integrative assessment to learners by the teachers should be sustained.
- Enhancement of the learning assessment design if needed.
- Further research with learners and parents can be implemented to support the results of this action research.

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# 8. CONFLICT OF INTEREST

The authors have declared that there is no conflict of interest.

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NA

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