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# EDUCATIONAL ECOSYSTEM FRAMEWORK IN PUBLIC SCHOOL SETTING FOR AN IMPROVED LEARNERS' ENGAGEMENT AND ACADEMIC MOTIVATION

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#### ABSTRACT

The study aimed to determine the relationship between educational ecosystem, learners' engagement, and academic motivation.

The research adapted the descriptive correlational design which includes 100 out of teachers and 100 intermediate learners in San Francisco District under the Division of San Pablo City during the school year 2024-2025. A four-part survey questionnaire was utilized to determine and interpret the respondents' perception of educational ecosystem, learners' engagement, and academic motivation.

The results revealed that there is a positive significant relationship between educational ecosystem and the learners' engagement in terms of behavioral engagement, cognitive engagement, and emotional engagement. Also, a positively significant relationship exists between the respondents' educational ecosystem and academic motivation in terms of academic decision, participation, persistence, learning environment and teachers' behaviors. Therefore, the hypothesis stating that there is no significant relationship between educational ecosystem and learners' engagement as to behavioral engagement, cognitive engagement and emotional engagement was not sustained. Likewise, the null hypothesis stating there is no significant relationship between respondents' educational ecosystem and academic motivation academic decision, participation, persistence, learning environment and teachers' behavior was not sustained.

Keywords: educational ecosystem, learners' engagement, academic motivation

## 1. Introduction

Active learning in schools entails student involvement in the educational process. Active learning emphasizes the influence of the teacher's role-playing on the activities that students participate in when it comes to teaching and learning in the classroom. This may motivate students and teachers to take an active role in their education by packaging and managing learning to provide support and allow students to engage fully in the process (Hyun, Ediger, & Lee, 2017).

Assisting students in realizing their full potential is a shared goal in education. It is well known that an individual's education has a significant impact on their future as well as the future of their community. Although there are several factors that influence education quality, one crucial one that is often overlooked is school infrastructure. The actual physical environments in which teachers and students work and learn have a big impact on the outcomes of education. Adequate school infrastructure is the foundation for creating optimal learning environments, promoting student engagement, and facilitating effective teaching strategies. It is essential to realize potential in this field since education has the capacity to transform individuals, groups, and even whole nations. By recognizing and supporting each student's unique talents, abilities, and capabilities, we can help them realize their full potential and help them thrive in several areas of life. The significance of education in achieving potential is supported by the following: Each child has a unique blend of skills, passions, and aptitudes. People may maximize their potential and make use of their natural abilities when we help them realize their potential (Fisher, 2018).

Students' motivation is a subject of importance; therefore, many studies have tried to address this topic as it leads to desirable outcomes. Of late, scholars working on student motivation suggest that motivation leads to student engagement. Due to a paucity of literature on the subject, this relationship requires more research (Hsieh &Yu, 2022).

In the scientific investigation of motivation, it has always been necessary to take into account the environment in which individuals live and behave in order to comprehend the underlying mechanisms of their motivation. However, various motivation theorists have different perspectives on the role of the environment in motivation. Some view it as merely providing external cues that activate people's innate drives, while others see it as significantly influencing motivation and behavior through reward and punishment systems or cultural norms for roles and conduct. The varying perspectives on the influence of the environment on motivation have significant consequences for the types of inquiries researchers pursue, the data they gather, the manner in which they analyze that data, and the suggestions they propose for creating stimulating learning settings.

The engagement construct, which has received considerable attention in management and academics, is considered one of the most critical factors that contribute to learning. Engagement is a state; therefore, it can be influenced by contexts, policies, practices, and peer interaction. The study of motivation is concerned with energy, purpose, and sustained action. Engagement is focused on vigor, dedication, and absorption. Therefore, the study of motivation and engagement tends to be intertwined (Singh et al., 2022).

Learning engagement and motivation is a critical issue in education today, influencing students' academic success, personal development, and overall well-being. Defined as the extent to which students are involved and motivated in their learning activities, engagement goes beyond mere attendance or completion of learning tasks. It involves emotional, cognitive and behavioral aspects that significantly affect learning outcomes and educational experience.

This study acknowledges the benefits of motivation and engagement. Both have an outcome orientation and appear to be intertwined. This study examines whether motivation is an antecedent of engagement. In sum, this study addresses the knowledge gap and calls for further research in the relationship between student motivation and student work engagement (Ryan & Deci, 2020).

One of the primary reasons learning engagement and motivation is significant issue is its impact with academic achievement. Research consistently shows that motivated and engaged students tend to perform better academically. When students are emotionally involved in their learning, they are more tend to work harder, actively participate in class discussions, and take control of their learning process. Beyond academics, learning engagement plays a significant role in shaping students' overall well-being and personal development. Engaged learners often experience higher levels of self-confidence, motivation, and satisfaction with their learning experience. On the other hand, disengaged students may struggle to understand concepts, exhibit behavioral problems, and experience lower academic performance. These issues emphasize the importance of educational ecosystem that supports engagement and motivation. A good educational ecosystem provides a supportive environment, encourages positive relationships, and offers engaging and relevant learning opportunities, which are essential for keeping student engaged and motivated.

Student engagement and motivation has become one of the desired outcomes of education because of its strong connection to students' well-being. More specifically, previous research and studies have shown clear connections between student engagement in the classroom and academic and mental health outcomes, as well as school dropout rates. It was discovered that actively learning students had higher academic achievement rates and lower dropout rates. It was discovered that their motivation to study, attend classes, and engage in learning activities comes from an internal source. Since it is commonly believed that student engagement is flexible, it is important to identify variables that may be encouraged to positively affect it as well as investigate the determinants of school involvement.

Background of the Study

The educational ecosystem dramatically affects the learning outcomes of students. Personal education beliefs, diversity of student needs, assessment, classroom structures, instructional strategies, discipline knowledge, collaborative practice and stakeholders all make up factors that could be confounding variables affecting students in class. This study was conducted to examine and investigate the relationship of educational ecosystem on learners' engagement and academic motivation in public school setting.

The educational ecosystem is a dynamic and diverse environment that plays a crucial role in shaping learner engagement and motivation. Both internal and external motivation are forces that drive students to achieve the level of interest and participation in their learning activities.

The District of San Francisco, Division of San Pablo, is grappling with significant educational challenges that have implications for its students' academic performance and future opportunities. The School Monitoring, Evaluation, and Adjustment (SMEA) reports reveal persistent issues such as learning gaps in literacy and numeracy, high dropout rates, the prevalence of repeaters, and difficulties faced by students returning to school (balik-aral).

One of the issues, in the district is the gap in academic performance especially particularly to literacy and numeracy skills. The latest results from the SMEA indicate that many students are non-readers or at the frustration level in literacy while numeracy is below numerate or non-numerate. These fundamental skills are crucial for doing and functioning in daily life. When students cannot read or do math tasks it limits their ability to learn subjects and fully engage in society. Despite trying methods to improve these skills, desired results have not been achieved. Another concern of the district is the persistence of dropout rates despite efforts to reduce it suggests that there are underlying issues that are not being effectively dealt with. High dropout rates have lasting effects and can lead to more serious problems in the community. The presence of repeaters in the district points to a significant issue where students are not meeting the required academic standards to progress to the next grade level. Repetition can lead to disengagement, low self-esteem, and an increased likelihood of dropping out.

There have been numerous initiatives aimed at improving the educational ecosystem, such as technology integration. Digital tools and resources have been introduced to create interactive learning experiences. Additionally, teachers receive training and attend seminars to effectively use and integrate these technologies into their learning practices. Another crucial area of focus is teacher professional development. In order to retain quality and increase teaching efficacy, continuous trainings, seminars, and mentorship program should be provided. To further meet and cater the diverse needs of the learners, innovative curriculum and pedagogical practices, such as student-centered learning and culturally responsive teaching are being adopted.

These issues suggest potential problems within the educational framework, such as inadequate teaching methods, lack of resources, insufficient support for struggling students and more. Comprehensive research is needed to identify these issues and propose solutions to close the learning gaps and help students progress academically without the need for repetition.

#### 2. Literature Review

# 2.1 Educational Ecosystem

Ecosystems represent interconnected and diverse entities that mutually enhance each other, generating additional value collectively. In the context of education, adopting an ecosystem framework can help expand the learning experience, fostering an environment where opportunities flourish and collaborative solutions are generated to address today's changing environments. By building ecosystems, the diverse participants increase their resources

and disciplines thereby creating a greater pool of solutions, offers and innovation (Borelly, 2023).

#### 2.2 Learners' Engagement

Engagement is regarded as a crucial element in motivating pupils to graduate from high school with the essential social and academic skills to take part in university enrollment opportunities and future work alternatives. Students' engagement is referred to students' interest, involvement and connectedness with their courses, one another and the instructions of the institution. Interest in the phenomena of student engagement and its impact on academic success has grown in recent years (Khan, 2023).

#### 2.3 Academic motivation

Academic motivation and engagement as two related constructs are of high importance for students' increased achievement, advancement, and academic success. Concerning the value of student academic motivation in instructional-learning environments, both intrinsic and extrinsic motivation of pupils can favorably influence their academic performance. In a similar vein, the sense of enjoyment that highly motivated students experience in classroom contexts encourages them to enthusiastically pursue different stages of learning. This, in turn, contributes to desirable learning outcomes. In this regard, the importance of motivation by referring to its positive effect on students' level of perseverance. They articulated that academic motives can empower students to resist the difficulties that they may experience during the learning process (Howard et al., 2021).

#### 2.4 Conceptual framework

The study is anchored in the Learning environment framework of Catholic University of America Department of Education. The conceptual framework was developed to help educators design consistent and coherent teacher education programs and to help candidates understand the deeper issues of social justice and equity embedded in the technical questions of day-to-day teaching. The framework was built on the fundamental interrelationships among educational theories, meaningful interaction with P-12 students, and personal reflection throughout the teacher education assignments and field experiences starting at the beginning of each program and culminating as a capstone experience during the student teaching semester. All components and aspects of the programs were planned around this philosophical approach to teacher education, requiring gradually richer understanding and application of the reflective framework.

The framework consists of the elements of the learning environment. These elements are designed to help educators systematically analyze the complexities of each teaching and learning experience. Originally based on Schwab's four commonplaces of teacher, student, content, and context. The new model expands include eight elements: diversity of student needs, the educator's personal educational beliefs, stakeholders, collaborative practice, instructional strategies, discipline knowledge, assessment, classroom structures.

The study also supported by two-domain conceptual framework for engagement by Stephenson, 2020. The domains of emotional engagement and cognitive out-of-class engagement focused on items internal to the learner, which cannot be seen by an outside observer. This includes a learner's enjoyment and interest in the topic as well as the learner's motivation to learn and apply the topic in their practice. Given that these domains were internal preferences or motivations, we termed this new domain, "Internal Engagement." Additionally, behavioral engagement and cognitive in-class engagement domains are focused on the external actions of the learner while in class. This includes participating, avoiding distractions, listening and being absorbed in the presentation. Given that these items were in-class actions which could be observed by an external observer, we termed this engagement, "External Engagement." The domains of internal and external engagement parallel concepts in self-determination theory.

Another concept is from Tang et al. (2021) they proposed that student engagement has mostly been conceptualized as a multidimensional construct. The main dimensions of student engagement have included emotional engagement, cognitive engagement, and behavioral engagement. In line with the work engagement literature, school-work engagement has also been conceptualized as energy, dedication, and absorption in studies/school. However, the most dominant perspective on student engagement during the past decade has been the concept of multidimensional engagement, including aspects such as emotions, cognitions, and behaviors. Emotional engagement encompasses the positive affective reactions and attitudes attributed to school activities, such as flow experiences, enjoyment, liking, belonging, and happiness. Cognitive engagement refers to the degree to which students exert the mental effort needed to understand complex ideas and master difficult skills, and the extent to which students show a desire to go beyond the requirements, including a willingness to do high-quality work. Behavioral engagement describes students' participation in classroom and school activities and includes attention, concentration, and on-task behavior, and broader patterns of participation such as attending extracurricular activities and school.

# 3. Hypothesis

The following hypotheses were posited in the study:

- H1. There is no significant relationship between the observed educational ecosystem and learner's engagement as to behavioral engagement, cognitive engagement and motional engagement.
- H2. There is no significant relationship between the observed educational ecosystem and academic motivation as to academic decision, participation, persistence, learning environment and teachers' behaviors.

# 4. Methodology

The study employed the descriptive correlation method using survey technique. The design was used since the study intended to provide a clear picture of how the educational ecosystem affects the learners' motivation and academic motivation.

This quantitative inquiry the descriptive correlation is the most appropriate method to use. Descriptive-correlation method as stated by Bermudo (2019) provides the most effective tool for determining the condition of relationship that exists, it is used to identify something that is happening.

This study involved the participation of purposively selected 100 teachers and randomly selected 100 learners in San Francisco District under the Division of San Pablo City during the school year 2024-2025. The purposive sampling technique was employed for selecting teachers to ensure that only those with relevant qualifications, experience and involvement in the study were included.

In this study, the researcher purposively select teachers in observance of the inclusion criteria as follows: (1) must be a teacher in San Francisco District Division of San Pablo (2) must have rendered at least 3 years in service. These criteria were observed to ensure that the respondents have sufficient teaching experience and familiarity with the study.

The stratified random sampling technique was used to determine the total number of learners to employed as respondents in this study. This technique was used to ensure that all relevant subgroups within the population were adequately represented. The learner participants must be intermediate level and are from one of the medium schools in San Francisco District.

The researcher used purposive sampling technique and stratified random sampling. Purposive sampling, also known as judgmental, selective, or subjective sampling, is a form of non-probability sampling in which researchers rely on their own judgment when choosing members of the population to participate in their surveys. Stratified sampling (SRS) is a probability sampling technique where the total population is divided into homogenous groups. We call these groups 'strata' and they complete the sampling process. Each of these strata is based on similar attributes or characteristics. Research Instrument This study utilized an adapted and research-made survey questionnaire and checklist in gathering the data need to answer the research questions.

Validation of the questionnaires were undertaken to make sure that the items were clear and well understood by the respondents. The questionnaires were checked and validated by the external and internal panel of validators with relevant experiences and knowledge regarding the topic of the study. The researcher consulted her adviser, subject specialist, and the other members of the panel of examiners regarding the questionnaires before these were administered to the respondents.

Upon the approval of the external panel, a reliability test of the instrument was done with a sample population of 30 teachers and 30 learners as the respondents. The reliability of the instrument was measured using Cronbach's Alpha.

After the approval of the contents of the questionnaire and the reliability test, the researcher seek permission from the coordinating District Supervisor of San Francisco District to conduct the study. After which, the researcher personally asked permission from the school heads of the selected schools. The distribution and administration of the survey questionnaire was immediately followed.

The accomplished questionnaires were retrieved with informed consent of the participants. All responses were treated with confidentiality. The data were then tallied, summarized, and submitted to the authorized faculty for the statistical treatment of data, ensuring that ethical standards were upheld throughout the process.

This study used standard deviation to determine the descriptive data of the study. Standard deviation was used to measure the variability or spread of the data, providing insight into how consistently the respondents answered or how much their responses differed from the average. It used Pearson Moment Correlation to test the significant relationship between educational ecosystem and learners' engagement and motivation. This procedure is an inferential statistical hypothesis test, meaning it used samples to conclude the population.

# 5. Results and Discussion

Table 1.1

Perception of the Learner Respondents on Educational Ecosystem as to Personal Educational Beliefs

	Indicators	Mean	SD	VI
1.	I learn best when I get to choose activities that I enjoy.	4.69	0.581	НО
2.	I learn when school activities let me be creative and think of new ideas	4.67	0.604	НО
3.	I am proud when I learn something new.	4.84	0.395	НО
4.	I believe education helps me understand the world better.	4.81	0.465	НО
5.	I believe going to school is important for my future	4.83	0.514	НО
	Overall	4.77	0.380	НО

Legend: 1.0-1.49 Not Observed (NO); 1.50-2.49 Slightly Observed (SLO); 2.50-3.49 Moderately Observed (MO); 3.50-4.49 Substantially Observed (SO); 4.50-5.0 Highly Observed (HO).

Table 1.1 shows that learners perceived their educational ecosystem particularly on their personal educational beliefs as highly observed. With the overall mean, learners show a high level of agreement, indicating that they not only enjoy learning but also value the importance of education in their lives.

For the learners, learning gives a great sense of pride and personal accomplishment. This also demonstrates that learners deeply value education as their mean of achieving success. Learners, regardless of background, have strong positive beliefs about education. These beliefs may be rooted from cultural values in which parents and communities often emphasize the value of education as a way to lift the family from hardship.

The findings suggest that learners recognize the importance of education and are internally motivated to succeed. Apart from conditions of

the limitations that are generally encountered in public school environments such as limited access to resources or long travel distances, learners continue to attend and participate. This observation towards public school learners were also seen by Elvina & Quirap (2024) wherein Filipino public-school learners have high levels of intrinsic motivation towards the purpose of them learning at school. This shows that as learners have a clear purpose of what they do, they can achieve it with a strong internal motivation.

This continued activity can be attributed to a culturally internalized value for education wherein academic success is valued to enhance their own and their families' futures. Overall, learners exhibit clear recognition of the importance of education, and their strong personal beliefs provide a site for long-term involvement, motivation, and persistence in school.

Table 1.2

Perception of the Teacher Respondents on Educational Ecosystem as to Personal Educational Beliefs

	Indicators	Mean	SD	VI
1.	I play a crucial role in motivating learners to achieve academically.	4.75	0.458	НО
2.	I believe learners have the potential to succeed academically if properly motivated.	4.82	0.386	НО
3.	I view education should prepare learners not only for academic success but also for personal and social development.	4.80	0.402	НО
4.	I view education should inspire learners to become lifelong learners and pursue their passions.	4.80	0.402	НО
5.	I believe understanding learners' perspectives helps in tailoring instruction to meet their needs effectively.	4.82	0.386	НО
	Overall	4.80	0.371	НО

Legend: 1.0-1.49 Not Observed (NO); 1.50-2.49 Slightly Observed (SLO); 2.50-3.49 Moderately Observed (MO); 3.50-4.49 Substantially Observed (SO); 4.50-5.0 Highly Observed (HO).

Table 1.2 presents how teachers view their role in education and beliefs about learners. The overall result was interpreted as "Highly Observed" which means that teachers highly perceive the educational ecosystem particularly on their personal education beliefs.

Teachers believe that any student can succeed if directed and encouraged appropriately. They also prefer to learn from each student's perspective as a means of better adjusting teaching. These beliefs are associated with teachers' personal values and opinions that direct how they engage and assist their students.

The responses also indicate teachers' belief that teaching is not just about curricular content and that it has the potential to change students into individuals and lifelong learners. This is also the sentiment of the teacher-respondents from the study of Kelly (2022) aside from focusing with other arising concerns like the potential internationalization and enhancing soft skills. This is evident in how teachers adapt instruction, encourage participation in co-curricular activities, and respond to learners' varied learning styles. Most teachers go beyond their official responsibilities, such as lesson adaptations, offering extra support, and recognizing small successes, showing their deep commitment to students' development.

Together, the results indicate that teachers envision themselves not simply as mere conduits to the transmission of information, but as instrumental in taking on the role of fostering motivation and interest. Their strong personal beliefs in the potential of education transform individuals underpin a learning context where children are encouraged, listened to, and guided toward applicable academic and personal growth.

Perception of the Learner- Respondents on Educational Ecosystem as to Diversity of Learners Needs

	Indicators	Mean	SD	VI
1.	I have a comfortable place to sit and learn in my classroom.	4.59	0.621	НО
2.	I have friends at school who support me.	4.69	0.615	НО
3.	I have the tools and materials I need to do my schoolwork (e.g., books, pencils,	4.75	0.500	НО
	devices).			
4.	I get the help I need from my teachers to understand my schoolwork.	4.78	0.484	НО
5.	I have access to technology (computers, tablets) when I need it for learning.	4.61	0.650	НО
	Overall	4.68	0.434	НО

Legend: 1.0-1.49 Not Observed (NO); 1.50-2.49 Slightly Observed (SLO); 2.50-3.49 Moderately Observed (MO); 3.50-4.49 Substantially Observed (SO); 4.50-5.0 Highly Observed (HO).

Table 2.1 shows that learner-respondents perceive their diverse needs in educational ecosystem as being highly observed. The support that learners receive from their teachers got the highest mean, suggesting that pupils feel guided and assisted in understanding their schoolwork. Peer support and tool and material access were highly rated, indicating that learners gain from supportive learning environment.

They reported having access to basic materials like books, writing materials, and equipment, and they perceive that their learning space is physically conducive to learning. They also reported that they receive assistance from teachers when they are having problems in comprehending their lessons, which means instructional assistance is effective and regular.

Apart from scholarly assistance, learners emphasized the significance of peer interactions. Most of them reported that they are surrounded by peers who provide encouragement, schoolwork assistance, and foster a sense of belonging. The social atmosphere yields a sense of belonging, which boosts students' motivation to participate in learning activities.

Overall, the answers indicate that learners enjoy a balanced support system that considers their material requirements, emotional stability, and academic difficulties. These conditions create a positive and supportive classroom environment, which is fundamental in terms of continuous engagement and motivation. These creates a balanced student support system at higher education institutions, covering academic, emotional and material needs (Sajiene & Tamuliene, 2022).

Table 2.2

Perception of the Teacher Respondents on Educational Ecosystem as to Diversity of Learners Needs

	Indicators	Mean	SD	VI
1.	I recognize the learners' need to have a safe and supportive learning environment	4.83	0.378	НО
	to thrive academically.			
2.	I understand that adequate nutrition and physical well-being significantly impact	4.81	0.394	НО
	learners' academic performance.			
3.	I acknowledge that learners' emotional well-being (e.g., managing stress, anxiety)	4.84	0.368	НО
	affects their ability to learn effectively.			
4.	I provide opportunities for learners to express their feelings and concerns	4.80	0.402	НО
	supports their academic success.			
5.	I encourage a sense of belonging and inclusivity in the classroom enhances	4.83	0.378	НО
	learners' overall well-being and academic success.			
	Overall	4.82	0.340	НО

Legend: 1.0-1.49 Not Observed (NO); 1.50-2.49 Slightly Observed (SLO); 2.50-3.49 Moderately Observed (MO); 3.50-4.49 Substantially Observed (SO); 4.50-5.0 Highly Observed (HO).

Table 2.2 reveals that teacher-respondents perceive diversity of learners' needs in educational ecosystem as highly observed. Particularly in emotional, physical, and social well-being. Teachers give importance in creating safe, inclusive and supportive environments. These are reflected in high ratings in overall result. This shows how teachers value and address the holistic needs of their learners. This also implies that different considerations are embedded in their teaching practices.

The responses suggest that educators always know the impact of variables such as emotional stability, good nutrition, and sense of belonging on the ability of students to perform well. Teachers reported that they take an active role in providing learners with an opportunity to express feelings and concerns and feel that emotional support is part of academic success.

There is also an unmistakable dedication to classroom inclusivity. According to Arguindin, et al. (2020), Filipino teachers have higher levels of attitudes, efficacy and intentions for inclusive practices compared to their Thai counterparts. Teachers promote habits that prioritize acceptance and are worthy of every student's contribution. This is seen in their management of students in distress—through flexible support, confidential consultations, or modifications to meet individual needs.

Altogether, the findings reflect a proactive stance by teachers in addressing a wide range of learner needs. They demonstrate sensitivity not just to academic performance, but to the broader conditions that affect learning. This approach contributes to a learning environment where students are more likely to stay engaged, participate actively, and achieve meaningful growth.

Table 3.1

Perception of the Learner Respondents on Educational Ecosystem as to Assessment

	Indicators	Mean	SD	VI
1.	I understand why we have tests and quizzes in school.	4.73	0.529	НО
2.	I receive helpful feedback on my tests and assignments.	4.71	0.537	НО
3.	I am aware of what I need to do to improve my grades.	4.79	0.498	НО
4.	I understand the lesson more with the help of projects and assignment.	4.76	0.515	НО
5.	I learn when my teacher gives different kinds of assessments, like projects and	4.71	0.556	НО
	presentations, not just tests.			
	Overall	4.74	0.417	НО

 $Legend: 1.0-1.49\ Not\ Observed\ (NO); 1.50-2.49\ Slightly\ Observed\ (SLO); 2.50-3.49\ Moderately\ Observed\ (MO); 3.50-4.49\ Substantially\ Observed\ (SO); 4.50-5.0\ Highly\ Observed\ (HO).$ 

Table 3.1 shows that students' perception of the assessment practices of the educational environment is strongly noted. Students indicated a clear grasp of the purpose of the assessments and voiced appreciation of receiving feedback and diverse formats of assessments.

Learners understood that the tests inform them of what they need to improve, and they appreciate the feedback from teachers as a way of guiding them towards academic improvement. They also indicated that various modes of assessment such as projects, presentations, and written assignments. Leading to the thorough understanding of the lessons, indicating that these modes are both effective and significant.

The students' answers indicate that assessment is not seen as only a grading instrument, but as a fundamental aspect of learning. The application of varied and formative assessments seems to facilitate engagement by enabling students to express what they know in various ways and encouraging personal reflection and motivation to enhance.

In general, the results indicate that students perceive assessment as a positive and helpful practice that promotes learning and engagement. On the study of Hadibarata & Syafiuddin (2018), even Engineering students perceived assessment tasks positively and beneficial for learning among other activities related to learning. The uniformity of their responses indicates a classroom climate in which assessment is implemented responsibly and utilized to support learning instead of impeding it.

Table 3.2

Perception of the Teacher Respondents on Educational Ecosystem as to Assessment

	Indicators	Mean	SD	VI
1.	I use a variety of assessment methods (e.g., quizzes, tests, projects, presentations) to evaluate learners' knowledge and skills.	4.83	0.378	НО
2.	I align assessments with learning objectives to ensure they accurately measure learners understanding.	4.81	0.394	НО
3.	I use assessment data to identify areas where learners may need additional support or enrichment.	4.75	0.435	НО
4.	I believe regular assessments motivate learners to stay engaged in their learning.	4.73	0.468	НО
5.	I use assessment results to inform and adjust my teaching strategies.	4.76	0.429	НО
	Overall	4.78	0.351	НО

Table 3.2 shows the mean perception of teacher respondents on their current educational ecosystem specifically on their assessment as highly observed. This shows that teachers strongly believe in using variety of assessment methods to evaluate learners' knowledge and skills. They align assessments with the learning objectives, analyze assessment data to identify areas needing support or enrichment and change their teaching strategies accordingly. Regular assessments are often use by teachers as a way to keep learners motivated and involved in the learning process.

The consistent high mean scores in every item indicate that teachers are very dedicated to using assessments as tools to improve their teaching methods and learners learning, not merely for evaluation.

There are also times when teachers use differentiated activities or assessments to cater to the diverse needs of their learners. Assessment tools, especially periodical exams, are checked by master teachers and the principal to ensure that the questions are aligned with the learning competencies students are expected to master. Through these assessments, teachers are able to identify the least learned competencies. These help teachers adjust their teaching strategies in the classroom and provide remedial classes to help students improve in these specific areas.

Overall, the findings suggest that assessment is strongly embedded in instructional planning and classroom practice. Teachers see it as an adaptive and interactive process, and it supports student engagement and differentiated instruction. According to Vaugn, et al. (2016), by recognizing the differences of students needs and apply it for adaptive instruction through diverse assessment strategies, students felt that they are a more active participant in the learning process, encouraging them more to exemplify what they really understood after the lesson.

Table 4.1

Perception of the Learner Respondents on Educational Ecosystem as to Classroom Structures

	Indicators	Mean	SD	VI
1.	I can see the board clearly from my seat.	4.60	0.651	НО
2.	I have enough space in the classroom for me to work comfortably.	4.68	0.618	НО
3.	I prefer a classroom that has areas where I can work quietly if I need to.	4.62	0.632	НО
4.	I prefer a classroom which is usually calm and not too noisy.	4.63	0.646	НО
5.	I believe my classroom is a good place for learning.	4.73	0.584	НО
	Overall	4.65	0.446	НО

Legend: 1.0-1.49 Not Observed (NO); 1.50-2.49 Slightly Observed (SLO); 2.50-3.49 Moderately Observed (MO); 3.50-4.49 Substantially Observed (SO); 4.50-5.0 Highly Observed (HO).

Table 4.1 indicates that learners perceived their educational ecosystem as to classroom structure highly observed. They feel that classroom environment, including sufficient space, visibility of the board and a quiet atmosphere, aids their learning. The strongest agreements were with the belief that the classroom is suitable environment for learning, but a preference for a calm area. Even if the majority of learners feel comfortable, small differences in their answers indicate that there might be space for improvement, especially with regard to seating and visibility.

Most classrooms in public schools have also been improved, providing enough space for the students. It also helps that there is a specific number of students allowed per classroom. Because of this, students are given a better opportunity to learn effectively inside the classroom. For instance, is when they have group activity, a flexible seating arrangement allows learners to face each other, communicate easily, and work as a team. This encourages participation and makes the activity more engaging and effective. Another instance is during quizzes or individual seatwork, well-spaced seating helps minimize distractions and prevents cheating. A comfortable, quiet environment allows students to focus better and perform to the best of their ability.

The responses also show that the students understand the physical environment of the learning area. All the elements, such as seating, vision, and levels of background noise, were found to play a part in the extent to which they can engage in lessons. According to Costa & Steffgen (2020), students are more satisfied and engaged in their new and improved physical learning environment. Good and well-maintained classrooms and facilities were viewed by the learners to increase their satisfaction with their lectures.

Generally, the study shows that classroom organization is an enabling factor which ensures learners' attention, comfort, and motivation are sustained. An extremely organized, systematic, and well-planned classroom setting sustains learners in staying attentive and increases learners' learning readiness.

Table 4.2

Perception of the Teacher Respondents on Educational Ecosystem as to Classroom Structures

	Indicators	Mean	SD	VI
1.	I ensure the physical layout of my classroom (e.g., seating arrangement,	4.71	0.456	НО
	classroom setup) supports learners' engagement and interaction.			
2.	I believe building a positive classroom culture and community is important for	4.75	0.435	НО
	fostering a supportive learning environment.			
3.	I ensure effective classroom structures contribute to improved learners focus and	4.71	0.456	НО
	attention during lessons.			
4.	I recognize that classroom structures play a significant role in enhancing overall	4.71	0.456	НО
	learners learning outcomes.			
5.	I set-up my classroom to provide adequate space for students to move around	4.75	0.435	НО
	comfortably.			
	Overall	4.73	0.394	НО

 $Legend: 1.0-1.49\ Not\ Observed\ (NO); 1.50-2.49\ Slightly\ Observed\ (SLO); 2.50-3.49\ Moderately\ Observed\ (MO); 3.50-4.49\ Substantially\ Observed\ (SO); 4.50-5.0\ Highly\ Observed\ (HO).$ 

Table 4.2 shows that teachers highly observed that classroom structures are important in promoting learners' engagement, focus, and overall learning outcomes. Teachers prioritize effective classroom layouts, such as seating arrangements that promotes interaction. They also acknowledge how important classroom framework are for sustaining learners' interest and attentiveness during classes and improving learning results. Teachers also make sure that there is enough space in the classroom for learners to move around comfortably, which helps to create a positive and effective learning atmosphere.

One of the things teachers prepare at the beginning of the school year is the classroom structure, which includes the classroom layout. In the past, classrooms were filled with educational decorations, but according to DepEd Order No. 21, Series of 2023, or the Implementing Guidelines for Brigada Eskwela, "Schools shall ensure that school grounds, classrooms, and all its walls and other school facilities are clean and free from unnecessary artwork, decorations, tarpaulins, and posters at all times." These decorations were removed, which helped make classrooms more spacious and reduced distractions for students.

At the start of the school year, teachers also prepare a seating arrangement, but this setup often changes over time to help minimize unnecessary noise and ensure that students can stay focused on their learning. From the beginning of the school year, teachers also make sure to establish a positive classroom culture where every student feels included and no one is left behind.

In addition, teachers indicated that physical organization supports not only behavioral engagement but also academic success. According to Myers, et al. (2020), teachers agree that the physical organization of the classroom supports not only behavioral engagement but also academic success. By allowing sufficient space and accessible visibility of instructional materials, they avoid impediments that might disrupt participation or attention.

In conclusion, both learners and teachers highly perceive their educational ecosystem specifically on the condition of their classroom structures. The learners collectively agree that they are provided with a good physical learning environment that is conducive for their learning. For the teachers, they consider that they are doing all possible adjustments to ensure good classroom structure to support their whole class and deliver quality learning for all learners.

Table 5.1

Perception of the Learner Respondents on Educational Ecosystem as to Instructional Strategies.

	Indicators	Mean	SD	VI
1.	I learn when my teacher explains things in a simple way.	4.75	0.539	НО
2.	I learn when my teacher uses pictures or drawings.	4.74	0.505	НО
3.	I learn better when we do hands-on activities.	4.65	0.592	НО
4.	I learn a lot from our class discussions.	4.76	0.553	НО
5.	I am comfortable using technology for my schoolwork.	4.65	0.557	НО
	Overall	4.71	0.404	НО

Legend: 1.0-1.49 Not Observed (NO); 1.50-2.49 Slightly Observed (SLO); 2.50-3.49 Moderately Observed (MO); 3.50-4.49 Substantially Observed (SO); 4.50-5.0 Highly Observed (HO).

Table 5.1 shows that learners' perception of instructional strategies in the learning environment is highly observed. Students reported that various forms of instructional methods significantly improve their understanding, interest, and participation in learning activities.

Learners responded positively to strategies that incorporate direct instruction, visual aids, practice exercises, and class discussion. These strategies appear to help them learn difficult concepts more easily and stay interested in the lesson. The incorporation of technology in teaching was also viewed positively, particularly in capturing students' attention and enhancing learning in general.

The uniformity of the response across indicators shows that students benefit from instruction that is differentiated to accommodate varied learning styles. The use of various strategies makes learning engaging and guarantees involvement in individual and group activities. According to Malacapay (2019), the students prefer these diverse learning instructions because they can take advantage of their learning styles while also maximizing available resources. Alignment of students' current capabilities and preferences make the learning process more bearable and more oriented towards learners

In general, the studies indicate that teaching that is student-centered, interactive, and responsive to the needs of learners is crucial in sustaining motivation and improving academic achievement.

Table 5.2

Perception of the Teacher Respondents on Educational Ecosystem as to Instructional Strategies

	Indicators	Mean	SD	VI
1.	I use a variety of instructional strategies (e.g., lectures, discussions, hands-on	4.74	0.441	НО
	activities) to cater to different learning styles.			
2.	I believe differentiated instruction (e.g., adapting lessons based on learners'	4.76	0.429	НО
	readiness, interests, and learning profiles) is effective in my teaching.			
3.	I integrate technology effectively into my lessons to enhance learners'	4.74	0.463	НО
	engagement and learning.			
4.	I encourage active learners' participation and collaboration in the learning	4.82	0.386	НО
	process.			
5.	I believe the instructional strategies I use effectively promote learners'	4.81	0.394	НО
	engagement and motivation to learn.			
	Overall	4.77	0.358	НО

Table 5.2 reflects teachers' perceptions of their instructional strategies and their effectiveness in engaging learners. The overall result rated as "Highly Observed," indicates that teachers strongly agree with the effectiveness of their instructional strategies.

Teachers are confident in their ability to create engaging, learners-centered learning environment. They emphasize using variety of methods, such as lectures, discussions, and hands-on activities, to cater different learning styles, as well as integrating technology and encouraging active learners' participation and collaboration. They also believe that differentiated instruction effectively meets learners' individual needs and that their strategies encourage learner engagement and motivation. The use of various teaching strategies, as well as the integration of ICT, is part of the Classroom Observation Tool. Because of this, teachers have become skilled in using different strategies, which they apply in their daily teaching and not just during class observations.

Overall, the responses suggest that teachers see instructional approaches as a participative, adaptive process, not a recipe. They recognize that instruction is not the transmission of content, teachers perceive it as creating engaging experiences that develop curiosity, motivation, and interest. This approach constructs a culture of learning that is responsive, adaptive, and inclusive to principles of student-centered learning. Teacher educators recognize differentiated instruction as essential for diverse classrooms, increasing motivation and narrowing achievement gaps, but face implementation challenges (Ginja & Chen, 2020).

Table 6.1

Perception of the Learner Respondents on Educational Ecosystem as to Discipline Knowledge

	Indicators	Mean	SD	VI
1.	I understand the topics we learn in class.	4.78	0.462	НО
2.	I enjoy learning about new topics and subjects in school.	4.87	0.418	НО
3.	I learn better when my teacher explains things in a way that is easy to understand.	4.86	0.349	НО
4.	I am interested in the topics we cover in our lessons.	4.71	0.537	НО
5.	I am able to connect what I learn in different subjects.	4.66	0.623	НО
	Overall	4.78	0.370	НО

Legend: 1.0-1.49 Not Observed (NO); 1.50-2.49 Slightly Observed (SO); 2.50-3.49 Moderately Observed (MO); 3.50-4.49 Substantially Observed (SO); 4.50-5.0 Highly Observed (HO).

Table 6.1 presents the learners' perception of their understanding and interests in the topics taught in school. Overall mean is rated as "Highly Observed," indicating that learners have a positive perception of their learning experiences, with high level of understanding, interest, and enjoyment across the subjects.

Learners were also interested in connecting ideas across subjects, showing that they enjoy the process of integrating knowledge and not learning separate subjects. When students can connect what they are learning in science, math, and language, for example, they learn more and are engaged. The way one presents concepts is extremely critical to sustaining this kind of interest and enabling students to be at ease with what they are learning.

Generally, learners enjoy coherent, clear presentation of material and value instructors who render complex ideas accessible. When content is rendered intelligible and meaningful, there is room for more elaborative cognitive processing and active student participation. This is characteristic of a learning environment in which knowledge of the content is not only transmitted but also reconstituted into meaningful learning experiences (Bolkan, et al., 2016).

Table 6.2

Perception of the Teacher Respondents on Educational Ecosystem as to Discipline Knowledge

	Indicators	Mean	SD	VI
1.	I understand the importance of having deep knowledge of the subject matter for	4.81	0.394	НО
	effective teaching.			

	Overall	4.81	0.350	НО	_
	matter.				
5.	I am prepared to address students' questions and challenges related to the subject	4.79	0.409	НО	
	strong grasp of the content.				
4.	I know learners' understanding of the subject matter improves when I have a	4.81	0.394	НО	
	learners' comprehension.				
3.	I connect the subject matter to real-life examples and applications for better	4.83	0.378	НО	
	learners.				
2.	I use my deep understanding of the subject to explain concepts clearly to	4.80	0.426	НО	

Table 6.2 indicates that teachers highly perceived educational ecosystem as to discipline knowledge as the overall mean rated as "Highly Observed'. Teachers prioritize the subject matter mastery. They understand how important it is to both effective instruction and learners' comprehension. Teachers are confident in their abilities to answer learners' questions, relate content to real-life situations, and effectively explain concepts. They believe that their deep understanding of the subject matter significantly enhances learners' comprehension and engagement. Overall, the results suggest that teachers are well-prepared and committed to using their expertise to promote meaningful and successful learning experiences.

Elementary teachers are sometimes assigned to subjects they are not very familiar with. However, because they know how important it is to master the lesson for the class, they make sure to study their topic thoroughly before entering the classroom and teaching it to the students. It is important that they show confidence in what they are teaching. Likewise, when there are topics that students find difficult, teachers explain them in ways that help students understand the lesson more easily. They also relate their lessons to real life—for example, by asking why what they are learning is important and how they can use it in real-life situations. Teachers also use situational examples so students can better understand and relate what they are learning to real-life experiences.

Generally, the responses show that teachers perceive discipline knowledge as the foundation of effective teaching. According to Phillips, et al. (2019), teachers' discipline knowledge determines their pedagogical decision-making inside their classes. Their subject knowledge renders them responsive, versatile, and inventive in presenting lessons. This creates a culture where students feel free to believe in educators' facts and are more motivated to investigate the content thoroughly, which eventually leads to improved learning outcomes.

Table 7.1

Perception of the Learner Respondents on Educational Ecosystem as to Collaborative Practice

	Indicators	Mean	SD	VI
1.	I work in groups with my classmates.	4.72	0.494	НО
2.	I have learned to work better with others because of group activities.	4.77	0.566	НО
3.	I like when my ideas are heard when I work in a group.	4.70	0.541	НО
4.	I can explain what I learn in group activities to others.	4.65	0.626	НО
5.	I think that collaborating with my classmates is an important part of learning.	4.74	0.525	НО
	Overall	4.72	0.429	НО

Legend: 1.0-1.49 Not Observed (NO); 1.50-2.49 Slightly Observed (SLO); 2.50-3.49 Moderately Observed (MO); 3.50-4.49 Substantially Observed (SO); 4.50-5.0 Highly Observed (HO).

Table 7.1 presents that the overall mean under the learners' perception of collaborative practice in the educational ecosystem are rated as "Highly Observed," indicating a strong and consistent agreement among learners regarding the value and impact of collaborative learning experiences. The high mean scores across all the statements reflect that learners actively engage in group work, appreciate having their ideas heard, and recognize the importance of working together to enhance learning.

Learners also reported that they can describe and communicate to others what they have learned, which shows that cooperative learning enhances their understanding of lesson material. This type of interaction not only enhances academic growth but also fosters communication competence, confidence, and classroom belonging. The value placed on learning together signifies a social climate wherein peer interaction is regarded as a worthwhile and useful part of schooling.

Overall, the result suggests a strong feeling of collaborative culture in the students. One of the possible reasons, based on the study of Masiliauskienė & Lenkauskaitė (2020) is that learners embraced and accepted their diversity and leverage on it through brainstorming and collaboration to make their activities and outputs richer and more unique. The group work allows students to have a share of mutual responsibility, cooperation, and active participation. As a result, there is an active and participatory classroom where students are encouraged to learn not only for individual gain but also for the good of the group.

Table 7.2

Perception of the Teacher Respondents on Educational Ecosystem as to Collaborative Practice

	Indicators	Mean	SD	VI
1.	I believe collaborative learning activities enhance learners' understanding of	4.82	0.386	НО
	concepts.			
2.	I recognize learners develop important social skills (e.g., teamwork,	4.79	0.409	НО
	communication) through collaborative practice.			

-	Overall	4.76	0.362	НО	_
	classroom.				
5.	I ensure collaborative activities enhance students' learning experiences in my	4.73	0.446	НО	
	engaged in collaborative learning activities.				
4.	I observe that learners demonstrate improved academic performance when	4.73	0.446	НО	
	tutoring) into my lessons.				
3.	I regularly incorporate collaborative learning activities (e.g., group projects, peer	4.75	0.435	НО	

Table 7.2 shows the perception of the teachers in educational ecosystem as to collaborative practices. Teachers have positive perception about collaboration with the overall mean rated as "Highly observed". They believe that collaborative learning activities are effective. They also recognize that collaborative learning fosters the development of critical social skills like communication and teamwork, which are crucial to learners over all development. These findings imply that teachers view collaboration as effective tool for supporting learners' social and cognitive growth.

Performance-based tasks, often given by teachers as group performances, are part of the grading system. As early as the primary level, teachers already train learners through group activities. Teachers at all grade levels use various collaborative activities such as peer tutoring, group projects, group-based problem-solving, performing a short skit, and more. Through these activities, students develop important social skills such as teamwork and communication, which are essential for their learning and growth. Generally, the result shows that teachers regard collaboration as an essential component of effective teaching. However, Liebech-Lien & Sjølie (2020) stated that even though collaboration is highly valued by teachers, many still overlook it as an educational outcome that should be possessed by learners as part of their soft skills necessary for their future endeavors, too. It is not a ritual in the classroom but a powerful instrument with which learners are encouraged to participate and acquire 21st-century skills. By creating spaces where learners are actively engaged in collaboration, teachers establish a positive and interactive classroom culture that fosters individual and collaborative learning experiences.

Table 8.1

Perception of the Learner Respondents on Educational Ecosystem as to Stakeholders

	Indicators	Mean	SD	VI
1.	I observe that my teachers show care about my progress in school.	4.82	0.411	НО
2.	I am motivated when my parents or family members help me finish my schoolwork.	4.76	0.515	НО
3.	I appreciate our school when it invites community members to help make lessons more engaging.	4.76	0.515	НО
4.	I am excited and motivated to learn when community members visit our school.	4.71	0.518	НО
5.	I am supported by the teachers, parents, classmates and other community members.	4.80	0.449	НО
	Overall	4.77	0.362	НО

 $Legend: 1.0-1.49\ Not\ Observed\ (NO); 1.50-2.49\ Slightly\ Observed\ (SLO); 2.50-3.49\ Moderately\ Observed\ (MO); 3.50-4.49\ Substantially\ Observed\ (SO); 4.50-5.0\ Highly\ Observed\ (HO).$ 

Table 8.1 shows the mean perception of learner respondents on their current educational ecosystem specifically stakeholders. With the overall mean rated as "Highly Observed," it indicates that learners have strong appreciation for the involvement of various stakeholders in their education. Teachers are viewed as extremely supportive, with the highest rating indicating that learners believe that teachers genuinely care about their progress. Parents and family members' involvement in their education is also valued by learners, noting that their assistance with schoolwork boosts their drive. The engagement of the community members in making lessons more engaging and their visits to the school further enhance the learners' excitement and enthusiasm for learning.

Support from various stakeholders such as teachers, parents, and community members are a big help in children's learning. This is evident in situations where teachers talk to parents when a student is not doing well in school, as well as when teachers express joy over students' achievements in the classroom by giving awards. It can also be seen in students who are given time and follow-up at home by their parents or family members, resulting in better academic performance. This also includes the school's initiative to invite community members such as parents to be mystery readers, police officers and firefighters for symposiums, and other community members, who bring joy to the students and help them learn more effectively. Based on the study of Piechurska-Kuciel (2017), students appreciate a full support network from their peers, teachers, parents, and other stakeholders and this positively affects their foreign language learning. The difficulty of the lessons is reduced with a good support system at hand.

Table 8.2

Perception of the Teacher Respondents on Educational Ecosystem as to Stakeholders

	Indicators	Mean	SD	VI
1.	I maintain regular communication with parents/family members regarding	4.75	0.458	НО
	learners' academic progress and behavior.			
2.	I encourage parents/family members to be actively involved in our school	4.77	0.446	НО
	activities and events.			
3.	I collaborate effectively with other educators (e.g., co-teachers, subject	4.72	0.473	НО
	coordinators) to enhance teaching practices.			

4.	I believe collaborating with stakeholders leads to better outcomes for learners'	4.69	0.486	НО	
	academic achievement and well-being.				
5.	I recognize that communication with stakeholders (students, parents, support	4.76	0.452	НО	
	staff, etc.) is effective in our school.				
	Overall	4.74	0.415	НО	

Table 8.2 shows the mean perception of teacher respondents on their current educational ecosystem specifically on the stakeholders. With the overall mean rated as "Highly Observed" suggests that teachers have positive perception that stakeholders' efforts are crucial for learners' success. Teachers place high value on cooperation and communication with various stakeholders, such as parents, family members, community, co-teachers and support staff.

Teachers consistently engage in regular communication with parents about their children's academic progress and behavior. They make sure to inform the parents about the learners' progress during card showing. Even outside of card showing, if the teacher needs to talk to the parent, they initiate communication. There are also school activities that involve parents, such as PLAC or Parents Learning Action Cell, which are seminars for parents to help them learn how to support their children at home. Examples of topics include "Developing the Learner's Comprehension Strategy" and "Strategies in Solving Problems." Other stakeholders, such as police officers, nurses, and firefighters, are also invited as guest speakers for symposiums.

Overall, the findings suggest that teachers in schools perceive that achievement by students is facilitated by stakeholder involvement. This observation is also observed by Bezzina & Bufalino (2022), where they stated that schools should be the first to teach collaboration with the community. Schools are expected to be a good example on building cooperative relationships and learning communities. Schools are learning communities, and learning transcends schoolwork, with an extremely strong focus on communication, collaboration, and empowerment. A close collaborative home-schools relationship and involvement by the wider community help to foster a well-balanced learning environment. The partnership not only enhances academic achievement but also enhances a culture of shared responsibility and support that serves all learners.

Table 9.1

Perception of the Learner Respondents on Learners' Engagement as to Behavioral Engagement

	Indicators	Mean	SD	VI
1.	I participate in class activities and discussions.	4.76	0.495	HE
2.	I complete my assignments and tasks on time.	4.61	0.650	HE
3.	I stay focused on my work and avoid distractions in the classroom.	4.65	0.539	HE
4.	I am engaged and involved in my classroom activities.	4.73	0.584	HE
5.	I am motivated to do my best in school.	4.82	0.435	HE
	Overall	4.71	0.427	HE

Legend: 1.0-1.49 Not Engaged (NE); 1.50-2.49 Slightly Engaged (SLE); 2.50-3.49 Moderately Engaged (ME); 3.50-4.49 Substantially Engaged (SE); 4.50-5.0 Highly Engaged (HE).

Table 9.1 presents the responses from learners regarding their perception on learners' engagement as to behavioral engagement. Learners overall result rated as "Highly Engaged," indicates a high level of engagement in classroom across all measured aspects including motivation, task completion, focus, participation in activities and involvement in class.

Although as a group the students reported high levels of engagement, some slight variation in response—namely in assignment completion and attention overall—means that although most are always attentive, there are sometimes difficulties which can encroach on their ability to remain focused. These can be caused by external factors such as homework, in-class distraction, or individual difficulties with learning. Overall motivation to do their best and remain engaged, though, suggests a good attitude towards learning.

The findings suggest an instructional environment in which the students are positive and engaged, and in which classroom routines and rules are firmly established. Behavioral engagement is a precursor to more meaningful learning and reflects learners' investment in active participation in their own attainment. When students are behaviorally engaged, they are more likely to benefit from instruction and survive academic adversity. And students who are behaviorally engaged perform better academically and have fewer behavior issues (Bear, 2020).

Table 9.2

Perception of the Teacher Respondents on Learners' Engagement as to Behavioral Engagement

	Indicators	Mean	SD	VI
1.	The learners participate actively in class discussions.	4.55	0.539	HE
2.	The learners attend class regularly.	4.49	0.595	SE
3.	The learners listen attentively when I and their peers are speaking.	4.51	0.577	HE
4.	The learners work well in group activities and projects.	4.51	0.611	HE
5.	The learners show enthusiasm and interest in class activities.	4.62	0.528	HE
	Overall	4.54	0.498	HE

Legend: 1.0-1.49 Not Engaged (NE); 1.50-2.49 Slightly Engaged (SLE); 2.50-3.49 Moderately Engaged (ME); 3.50-4.49 Substantially Engaged (SE); 4.50-5.0 Highly Engaged (HE).

Table 9.2 shows the mean perception of teacher respondents on the learners' engagement as to behavioral engagement in class. All measured

criteria and the overall result show a high level of learner engagement suggesting that learners are highly engaged. They demonstrate enthusiasm for class activities, listen attentively, collaborate well in groups, and actively participate in class discussion. These factors imply that learners regularly participate in class and show interest in what they are studying, indicating a lively learning environment. Although there are considerable differences, especially in attendance and group projects.

Despite the general positive image, the teachers indicated that learner attendance was marginally less consistent with other areas of behavior engagement. While most learners come to school on most days, others might have challenges like financial constraints, family commitments, or health issues that restrict their ability to be in school on a regular basis. Such factors may affect participation despite learners' high engagement and motivation when in school.

Overall, the findings suggest that the teachers view their students as being cooperative and behaviorally engaged with a high probability of being involved in learning activities. Absenteeism is a low problem, but overall classroom behavior suggests that there is an affirmative learning climate in which students are willing to participate and remain on task. The teachers' continued efforts to maintain classroom management and establish a positive learning climate appear to support this high level of behavioral engagement (Havik & Westergård, 2020).

Table 10.1

Perception of the Learner Respondents on Learners' Engagement as to Cognitive Engagement

	Indicators	Mean	SD	VI
1.	I try my best to understand new concepts taught by my teacher.	4.82	0.479	HE
2.	I ask questions when I do not understand something in class.	4.61	0.601	HE
3.	I am challenged and stimulated in my classroom activities.	4.69	0.581	HE
4.	I enjoy participating in class discussions and sharing my ideas with others.	4.72	0.552	HE
5.	I am engaged and interested from what I am learning in school.	4.79	0.478	HE
	Overall	4.73	0.397	HE

Legend: 1.0-1.49 Not Engaged (NE); 1.50-2.49 Slightly Engaged (SLE); 2.50-3.49 Moderately Engaged (ME); 3.50-4.49 Substantially Engaged (SE); 4.50-5.0 Highly Engaged (HE).

Table 10.1 shows the perception of the learners on learners' engagement in terms of cognitive engagement. Overall mean is rated as "Highly Engaged," indicating a positive perception of the learners to cognitive engagement in their learning process such as understanding new concepts, asking questions, and participating in class discussion. It is evident that learners are consistently engaged in understanding exploring, and reflecting on their learning. this signifies a strong willingness to learn and comprehend lessons. They also show interest in what they are learning and enjoying sharing thoughts during class discussion, all of which highlight a deep level of involvement and enthusiasm.

These findings are supported by classroom experiences where learners actively participate in discussions, ask clarifications through questions, and respond positively. For instance, learners' willingness to take initiative to clear up confusion is indicated by asking questions. Similarly, the fact the learners perceive the tasks in the classroom are challenging suggests that the learning environment provides appropriate cognitive stimulation. All things considered, the evidence suggests a learning environment that promoted critical thinking, curiosity, and a positive outlook on academic growth. According to Cents-Boonstra, et al. (2021), employment of motivating teaching behaviors by teachers, i.e., direction and relatedness support, is associated with greater student cognitive engagement.

Table 10.2

Perception of the Teacher Respondents on Learners' Engagement as to Cognitive Engagement

	Indicators	Mean	SD	VI
1.	The learners participate in discussions and asking questions during lessons.	4.47	0.594	SE
2.	The learners use variety of strategies to understand and remember information.	4.51	0.595	HE
3.	The learners collaborate and share ideas to enhance their understanding.	4.51	0.577	HE
4.	The learners demonstrate the ability to think independently and self-direct their	4.45	0.626	SE
	learning.			
5.	The learners are comfortable sharing their thoughts and ideas in class.	4.49	0.611	SE
	Overall	4.49	0.537	SE

Legend: 1.0-1.49 Not Engaged (NE); 1.50-2.49 Slightly Engaged (SLE); 2.50-3.49 Moderately Engaged (ME); 3.50-4.49 Substantially Engaged (SE); 4.50-5.0 Highly Engaged (HE).

Table 10.2 shows the perception of the teachers on learners' engagement particularly to cognitive engagement in class. Some measured criteria show a high level of learner engagement such as using variety of strategies in understanding and remembering information ang collaborating and sharing of ideas to enhance understanding. However, other criteria were rated as substantially engaged such as participating in discussions and asking questions during lessons, demonstrating the ability to think independently and sharing of thoughts and ideas to class. The overall result rated as "Substantially Engaged," indicates a level of learner engagement across all measured criteria. Learners listen attentively, participate actively in class discussions, work well in groups, and are enthusiastic about their assignments. These findings imply that the classroom setting is lively and encouraging, with motivated learners who regularly participate in their education.

For instance, during experiments, learners enthusiastically shared their thoughts, raised inquiries, and show interest demonstrating that they were truly involved in the process of learning rather than merely finishing assignments. Although there are some indications that some learners may not attend class as regularly and that some may struggle with group collaboration, overall involvement is remarkable. Nevertheless, the general perception is that learners are attentive, involved, and engaged, which reflects well on the instructional strategies and classroom management practices used.

Overall, the research suggests that while there are cognitive engagement aspects of a fundamental nature, there is still developmental work that needs to be done to promote learner autonomy and critical articulation. Teachers would do well to re-institute in-class practice that promotes students to think aloud, question, and take ownership of learning. With consistent reinforcement, students can be more likely to engage cognitively at more autonomous and more profound levels (Gover, et al., 2022).

Table 11.1

Perception of the Learner Respondents on Learners' Engagement as to Emotional Engagement

	Indicators	Mean	SD	VI
1.	I am comfortable expressing my feelings and emotions in class.	4.57	0.655	HE
2.	I have a sense of belonging and acceptance in my classroom.	4.69	0.581	HE
3.	I work with my classmates and feel a sense of camaraderie with them.	4.65	0.592	HE
4.	I am happy and satisfied with my overall school experience.	4.80	0.492	HE
5.	I enjoy the activities we do in class.	4.79	0.498	HE
•	Overall	4.70	0.431	HE

Legend: 1.0-1.49 Not Engaged (NE); 1.50-2.49 Slightly Engaged (SLE); 2.50-3.49 Moderately Engaged (ME); 3.50-4.49 Substantially Engaged (SE); 4.50-5.0 Highly Engaged (HE).

Table 11.1 shows how emotionally invested learners are in their school experience. Overall result is rated "Highly engaged" indicating that the learners have positive perception about their engagement emotionally. Most learners indicate contentment and satisfaction, enjoy classroom activities, and have positive feelings about their time in school. They also have a strong sense of belonging and connection in the classroom, which contributes to create a safe and encouraging learning environment. These satisfying emotional experiences are crucial in keeping learners engaged and connected to their learnings. According to Côté-Lussier & Fitzpatrick (2016), the feeling of safety experienced by learners is related to increased classroom participation, which is moderated by reduced depressive symptoms of learners. When students feel accepted and valued, they can participate in academic risks, share ideas, and continue to be interested in the learning process.

This is evident in daily classroom setting by the learners' eager engagement in activities, their readiness to work along with peers, and their overall comfort within the school environment. The general environment encourages emotional openness, even though some learners might be a little more reserved in expressing their feelings. Strong peer support and camaraderie are also evident, indicating that learners value their relationships with peers and teachers in addition to enjoying learning. Learners' dedication to learning is strengthened by this emotional engagement, which also improves their overall well-being.

Table 11.2

Perception of the Teacher Respondents on Learners' Engagement as to Emotional Engagement

	Indicators	Mean	SD	VI
1.	The learners show enthusiasm when starting a new topic.	4.58	0.535	HE
2.	The learners participate excitedly in classroom activities.	4.63	0.544	HE
3.	The learners feel a sense of achievement when they understand a new concept.	4.61	0.510	HE
4.	The learners show positive emotions when engaging with their peers in learning activities.	4.61	0.530	HE
5.	The learners display positive emotions, such as happiness or excitement, during learning activities.	4.64	0.503	HE
	Overall	4.61	0.469	HE

Legend: 1.0-1.49 Not Engaged (NE); 1.50-2.49 Slightly Engaged (SLE); 2.50-3.49 Moderately Engaged (ME); 3.50-4.49 Substantially Engaged (SE); 4.50-5.0 Highly Engaged (HE).

Table 11.2 shows the perception of teacher respondents on the learners' emotional engagement in class. With the overall mean rated as "Highly Engaged," teachers believe that learners are very emotionally engaged in the classroom. High means were obtained in every item, suggesting that learners constantly exhibit positive emotional responses to learning. Learners shows enthusiasm when they begin learning new concepts, during class activities, and a sense of accomplishments when they understand new concepts. These positive emotions foster a supportive and enjoyable learning environment that promotes motivation and active engagements.

Learners' enthusiasm when starting a new lesson is evident the moment they see the lesson title or even just an example, before the teacher even begins teaching. As soon as the teacher shows a picture or a word, they immediately start sharing their ideas or experiences. This is especially true for lessons they can relate to, such as those about family, friends, or even themselves. The learners display positive emotions, such as happiness and excitement, during learning activities. For example, while singing a song, they clap and dance along. Many of them have big smiles on their faces and sing loudly with enthusiasm. Their enjoyment is evident as they eagerly request to sing the song again, showing a strong emotional connection to the activity. There are also many instances when learners find lessons difficult for example, in math or other subjects. However, learners show a sense of pride when, despite the difficulty, they are able to answer the teacher's questions, get the correct answers in board work, or earn high scores on tests. They also feel proud when they are praised by their teachers and applauded by their classmates.

Students were also noted to display pleasure and excitement in interacting with their peers in class. The presence of positive emotional responses—smiling, laughing, and congratulating on success—creates a vibrant, hospitable classroom climate. Such emotional experiences strengthen

students' motivation and help build a strong sense of belongingness in the class (Gabryś-Barker, 2016).

As the result suggests that both learners and teachers agree that learners have high emotional engagement in class. The respondents agree that learners are comfortable expressing their emotions in class. They generally felt safe and accepted in their classroom by their peers and teachers. These results show that learners are happy and satisfied while attending their classes.

Table 12.1

Perception of the Learner Respondents on Academic Motivation as to Academic Decision

	Indicators	Mean	SD	VI
1.	I have a say in the activities we do in class.	4.67	0.587	HM
2.	I set my own learning goals.	4.70	0.628	HM
3.	I can decide how to use my time during free periods in school.	4.68	0.618	HM
4.	I plan my study time to make sure I finish my homework.	4.76	0.588	HM
5.	I decide to listen carefully in class so I can understand the lessons better.	4.78	0.504	HM
	Overall	4.72	0.483	HM

Legend: 1.0-1.49 Not Motivated (NM); 1.50-2.49 Slightly Motivated (SLM); 2.50-3.49 Moderately Motivated (MM); 3.50-4.49 Substantially Motivated (SM); 4.50-5.0 Highly Motivated (HM).

Table 12.1 suggests that students' academic motivation towards academic decision-making is highly motivated. The learners indicated they made many decisions regarding how they approach their schoolwork daily, such as achieving individual learning objectives, scheduling study time, and endeavoring to listen and focus in class. These responses reflect high autonomy and ownership in the learning process.

Learners also reported that they have some level of control over what they do with respect to class activities and how they manage time in school. This suggests that students acquire self-regulated habits, which are necessary for encouraging responsibility, time management, and intellectual autonomy. Since choices are offered to students in the learning process, they become more involved in learning. Human decisions influence the learning process by affecting engagement, motivation, information processing, and social interactions. Recognizing and leveraging the power of decision-making can improve teaching practices and allow students to be actively involved in their learning process (Viktor, 2024).

In general, the findings show a student autonomy and active learning culture that encourages learners to be proactive in the development of their own learning processes. By practicing choices based on their desired outcomes and learning patterns, students demonstrate more than compliance motivation and active involvement. Such a level of self-regulation is a good indicator of learners' readiness for higher-level academic processes and academic success in the long term.

Table 12.2

Perception of the Teacher Respondents on Academic Motivation as to Academic Decision

	Indicators	Mean	SD	VI
1.	The learners make their own academic decisions are more motivated to learn.	4.50	0.577	HM
2.	The learners understand the importance of their academic decisions on their overall learning outcomes.	4.49	0.541	SM
3.	The learners show improvement in their academic performance when learners are involved in decision-making processes.	4.55	0.520	НМ
4.	The learners involve themselves in decision-making, which prepares them for future academic and career challenges.	4.49	0.541	SM
5.	The learners make academic decisions that reflect a clear understanding of their learning needs.	4.50	0.541	НМ
	Overall	4.51	0.485	HM

Legend: 1.0-1.49 Not Motivated (NM); 1.50-2.49 Slightly Motivated (SLM); 2.50-3.49 Moderately Motivated (MM); 3.50-4.49 Substantially Motivated (SM); 4.50-5.0 Highly Motivated (HM).

Table 12.2 presents the perception of teacher respondents regarding learners' academic motivation in relation to academic decision. Learners are generally viewed by the teachers as highly motivated especially when given the freedom to choose their own academic path. They also believe that learners who accept responsibility for their choices are more engaged and perform better on their academic tasks. This reflects the positive impact of freedom on learners' motivation.

Teachers' observations that learners perform better academically when they participate in decision-making processes and make decisions that are in line with their understanding of their learning needs. The majority of indicators are rated as "Highly Motivated" despite having some indicators like learners' understanding of the impact of their decisions and their involvement in preparation for future challenges, fall under the "Substantially Motivated" level. These finding imply that teachers value learners' involvement in recognizing their academic paths, which supports learners' motivation, responsibility, and long-term academic growth. These are evident among learners when they are asked what course they plan to take in college or which school they will attend for high school. Many of them are still undecided about these matters. This shows that they may not yet be giving much importance to their academic decisions or are not yet fully involving themselves in making choices about their education.

There are instances when the teacher allows learners to make decisions about their learning. For example, they may be given options for their project output such as a journal, portfolio, reflections, compilation of lessons learned, or a performance-based task. Another example is when they are given the chance to choose what they want to read. After selecting a book that interests them the most, a noticeable increase in reading engagement is observed. One learner who previously showed little interest in reading now eagerly participates in group discussions because they were allowed to choose

a science fiction story they liked.

Nevertheless, both learners and teachers agree that learners have high motivation specifically on a learners' academic decision. This reflects that learners are seen to have gained enough independence in setting their personal learning goals, as well as to planning and plotting their academic activities inside and outside the classroom. This also shows that learners developed this firm internal motivation because their teachers involved them in decision-making processes inside the class. They are well-oriented on the importance of their academic decisions not only giving impact to their current academic year but also to their future endeavors in life. By empowering students in decision-making, teachers facilitate independent, self-directed learners who are better able to execute future academic tasks (Jang, et al., 2016).

Table 13.1

Perception of the Learner Respondents on Academic Motivation as to Participation

	Indicators	Mean	SD	VI
1.	I enjoy participating in class discussions.	4.81	0.486	HM
2.	I am being involved in classroom activities.	4.81	0.443	HM
3.	I pay attention during lessons because I find them interesting.	4.78	0.524	HM
4.	I am interested in what my classmates have to say during discussions.	4.69	0.581	HM
5.	I am motivated to learn new things in class.	4.90	0.302	HM
	Overall	4.80	0.365	HM

Legend: 1.0-1.49 Not Motivated (NM); 1.50-2.49 Slightly Motivated (SLM); 2.50-3.49 Moderately Motivated (MM); 3.50-4.49 Substantially Motivated (SM); 4.50-5.0 Highly Motivated (HM).

Table 13.1 shows that students' academic motivation as participation is rated as highly motivated. Learners frequently raise their hands, participate in group work, and volunteer to respond to questions or offer opinions. These are signs that the students are not only in class but are active and willing to contribute to class discussions and learning experiences.

Learners also said they enjoy being busy in class, an indication of a healthy emotional attachment to schoolwork. Their eagerness to become involved shows confidence in self and a desire to be seen as active members of the learning community. Being involved in this way promotes communication with teachers and other children, increasing understanding and motivation.

Overall, the findings suggest a student-friendly classroom environment. High participation levels suggest that the students are comfortable, respected, and interested in what they are learning. Such behavior is a key component of enhanced academic motivation and allows for the creation of an active, student-focused learning environment. Both students and teachers gain when teachers impose structure in autonomy-supportive ways (Cheon, et al., 2020).

Table 13.2

Perception of the Teacher Respondents on Academic Motivation as to Participation

	Indicators	Mean	SD	VI
1.	The learners engage actively in classroom discussions.	4.60	0.532	HM
2.	The learners collaborate effectively during group work activities.	4.56	0.519	HM
3.	The learners show interest and involvement in interactive activities.	4.60	0.550	HM
4.	The learners contribute their ideas during classroom discussions.	4.54	0.558	HM
5.	The learners have opportunities for all learners to participate in class.	4.66	0.497	HM
	Overall	4.59	0.477	HM

Legend: 1.0-1.49 Not Motivated (NM); 1.50-2.49 Slightly Motivated (SLM); 2.50-3.49 Moderately Motivated (MM); 3.50-4.49 Substantially Motivated (SM); 4.50-5.0 Highly Motivated (HM).

Table 13.2 shows that teachers perceive learners' academic motivation by class participation as highly motivated. Teachers observed that the students are usually eager to engage in class discussions, group work, and other interactive learning exercises. The majority of the learners are observed to offer answers, share their opinions, and engage in the lesson materials, which reflects high motivation to participate in the learning process.

Teachers have noted that this willingness to participate is also preceded by energy, enthusiasm, and confidence. Students do not simply acquiesce to what they are asked but do so with seeming enjoyment, presenting their thoughts and being part of the class community. While this active participation enables learning, it also constructs an interactive and collaborative class community where ideas are freely shared.

Overall, the study paints a picture of a classroom in which students are learning basic habits of responsibility and self-management. According to Reinders (2020), promoting learner autonomy and participation enables learners to take possession of their learning and succeed, to the benefit of teachers. Teachers recognize that schoolwork management is a concrete manifestation of motivation and that students who deliberately manage school work are most likely to succeed. Through ongoing guidance and mentoring, students can continue to strengthen such habits to facilitate lifelong learning.

Table 14.1

Perception of the Learner Respondents on Academic Motivation as to Persistence

	Indicators	Mean	SD	VI
1.	I keep trying even when schoolwork is difficult.	4.79	0.518	HM
2.	I am willing to spend extra time on tasks to understand them better.	4.73	0.510	HM
3.	I do not give up easily when I face challenges in my schoolwork.	4.74	0.543	HM

-	Overall	4.78	0.377	HM
5.	I feel good when I finish a difficult task.	4.85	0.411	HM
4.	I work hard to reach the goals I set for myself in school.	4.81	0.465	HM

Legend: 1.0-1.49 Not Motivated (NM); 1.50-2.49 Slightly Motivated (SLM); 2.50-3.49 Moderately Motivated (MM); 3.50-4.49 Substantially Motivated (SM); 4.50-5.0 Highly Motivated (HM).

Table 14.1 shows that learners' academic motivation as to persistence rated as highly motivated. The learners continue working hard even when things get difficult in school and do not easily quit when faced with academic difficulties. This shows high perseverance and determination in the achievement of learning goals.

Learners try to get work done even when they are struggling, and they will return to review something again or seek assistance if needed. These behaviors are not just effort, but also the ability to deal with frustration and maintain the focus on the long-term objectives. Their response shows that they are learning coping skills and resilience—two of the ingredients of academic persistence.

Overall, the findings suggest a culture of learning where students are encouraged to keep trying despite failures. Being motivated through persistence means that students will be able to keep being involved, recover from failures, and, with time, gain the confidence to address future academic challenges with a positive and determined mindset. According to Alajar & Paglinawan (2024), one of the easiest ways to induce persistence to learners is to give them more instructional time and longer deadlines.

Table 14.2

Perception of the Teacher Respondents on Academic Motivation as to Persistence

	Indicators	Mean	SD	VI
1.	The learners complete their assignments, even when they find them challenging.	4.33	0.682	SM
2.	The learners do not give up on tasks, even when they face difficulties.	4.43	0.607	SM
3.	The learners demonstrate persistence in both individual and group tasks.	4.52	0.577	HM
4.	The learners exhibit a positive attitude towards continuous improvement and	4.58	0.554	HM
	learning.			
5.	The learners demonstrate a high level of perseverance in mastering new skills.	4.44	0.608	SM
	Overall	4.46	0.552	SM

Legend: 1.0-1.49 Not Motivated (NM); 1.50-2.49 Slightly Motivated (SLM); 2.50-3.49 Moderately Motivated (MM); 3.50-4.49 Substantially Motivated (SM); 4.50-5.0 Highly Motivated (HM).

Table 14.2 shows that teachers perceive their learners as substantially motivated when it comes to persistence in their academic tasks. Learners are generally seen as persistent, completing assignments even when faced with difficulties, and they do not give up easily when encountering challenges. Teachers also observe that learners demonstrate determination in both individual and group projects, placing a high value on learning new skills and improving continuously. Although a high level of perseverance is evident, there is still opportunity for development in certain areas, such as finishing difficult assignments.

These are evident in how learners engage with their work. Teachers often observe learners staying after class to finish their schoolwork or asking for clarity when there was confusion or they encounter difficulties. When it comes to group works, many learners demonstrate persistence by contributing their ideas, disagree with other members when they are in doubt, and showing the ability to focus with their tasks. Additionally, when learners face challenging subjects or topics, those who show persistence often seek for extra guidance or help from their teacher, showing their commitment for improvement. These behaviors highlight that while most learners are motivated to persist, there are still areas where additional help, guidance, and encouragement could help them to fully engage with difficult task.

Because of these results, we can say that the learners perceived their persistence in class to be slightly higher than their teachers. The learners-respondents collectively agree that they are trying their best to learn difficult or complex lessons and they do not give up so easily when faced with difficulties. However, teachers believed that learners were exerting slightly less effort to learn difficult concepts and skills compared to how learners perceive their efforts. This slight inconsistency is seen by the teachers particularly as to the learners' persistence to complete their tasks despite it being difficult.

Table 15.1

Perception of the Learner Respondents on Academic Motivation as to Learning Environment

	Indicators	Mean	SD	VI
1.	I observe that the school buildings are clean and well-maintained which help me	4.71	0.556	HM
	focus on my schoolwork.			
2.	I am comfortable interacting with my classmates and making friends at school.	4.73	0.649	HM
3.	I am encouraged by my teachers to do better in school and offer their help when I	4.70	0.611	HM
	need it.			
4.	I believe that my school provides a good environment for me to succeed	4.83	0.451	HM
	academically.			
5.	I am safe when I am at school.	4.77	0.510	HM
	Overall	4.75	0.446	HM

Legend: 1.0-1.49 Not Motivated (NM); 1.50-2.49 Slightly Motivated (SLM); 2.50-3.49 Moderately Motivated (MM); 3.50-4.49 Substantially Motivated (SM); 4.50-5.0 Highly Motivated (HM).

Table 15.1 shows that the academic motivation of the students towards the learning environment is highly motivated. Learners keen to attend school and described their classrooms as welcoming and nice to be in. This shows that the overall learning environment's climate facilitates their motivation and involvement.

Learners indicated that peer relationships, teacher attitude, and classroom organization significantly influence their attitudes toward learning. When they are safe and comfortable, they are likely to work hard on the schoolwork, focus, and participate. The emotional safety and sense of belonging that they get eliminate anxiety and make them concentrate on fulfilling their academic requirements.

Overall, the findings suggest that an inspiring learning environment is a strong foundation of learner motivation. When the students feel that their environment is inspiring and well-structured, they are likely to remain engaged in learning. The physical and affective characteristics of the classroom environment reinforce one another to facilitate learners' interest, energy, and persistence in school (Berglund, et al., 2019).

Table 15.2

Perception of the Teacher Respondents on Academic Motivation as to Learning Environment

	Indicators	Mean	SD	VI
1.	The learners benefit from the school providing adequate resources and materials	4.56	0.538	HM
	for teaching.			
2.	The learners benefit from the school environment that is conducive for learning.	4.59	0.534	HM
3.	The learners feel safe in the school environment, which is welcoming for both	4.65	0.500	HM
	learners and staff.			
4.	The learners experience a positive learning atmosphere fostered by the school.	4.66	0.476	HM
5.	The learners enjoy a safe and comfortable classroom environment.	4.67	0.514	HM
	Overall	4.63	0.455	HM

Legend: 1.0-1.49 Not Motivated (NM); 1.50-2.49 Slightly Motivated (SLM); 2.50-3.49 Moderately Motivated (MM); 3.50-4.49 Substantially Motivated (SM); 4.50-5.0 Highly Motivated (HM).

Table 15.2 shows that teachers perceive learners as highly motivated when supported by a positive and well-resourced learning environment. They believe that learners benefit greatly from safe, comfortable, and welcoming school spaces that provide adequate materials and foster a positive atmosphere. These findings support the idea that improving learners' academic motivation requires a supportive school environment. This is demonstrated in everyday classroom settings when learners actively participate, ask questions with confidence, and pay more attention to their lessons, especially when they feel safe and encouraged.

Learners become more motivated when they have access to actual resources related to their lessons. These can include realia such as body parts, or real-life objects, especially in Science lessons. For instance, the teacher uses a projector to display a video about the lesson while learners follow along using their own materials. This access to hands-on resources and visual aids enhances both understanding and engagement. Learners also tend to learn more effectively when their school or classroom environment is comfortable. Examples include having enough space for group activities, proper lighting and ventilation, and clean, well-maintained facilities. These factors significantly affect students' learning. For example, during hot weather, students often become distracted due to the heat, so proper ventilation is essential. Likewise, they may struggle to focus if the classroom is located next to a busy road with frequent vehicle noise.

In summary, both learners and teachers generally agree that learners are highly motivated in terms of their learning environment. The teachers and learners collectively agree that their current learning environment is conducive to facilitating and sustaining learning activities while keeping the learners safe, healthy and secure. Because of this, learners are more likely to have positive learning experience through their environment together with their peers and teachers.

According to Vero & Puka (2017), educators realized the importance of offering a positive learning environment to encourage students. If the students feel safe, belonging to the class, and supported by the class, they will be more inclined to take part, participate, and persist. Teachers' efforts to establish an environment that encourages are proof that teachers understand students' feelings within the class are closely connected with their performance and academic success.

Table 16.1

Perception of the Learner Respondents on Academic Motivation as to Teacher's Behaviors

	Indicators	Mean	SD	VI
1.	I am encouraged by my teacher to ask questions when I do not understand something.	4.78	0.484	НМ
2.	I am heard when I share my thoughts during class discussions.	4.77	0.510	HM
3.	I receive help and support from my teacher when I need it in my schoolwork.	4.82	0.458	HM
4.	I find lessons easy to understand because my teacher explains things clearly.	4.83	0.428	HM
5.	I appreciate my teacher's kindness and respect toward all students.	4.90	0.362	HM
	Overall	4.82	0.351	HM

Legend: 1.0-1.49 Not Motivated (NM); 1.50-2.49 Slightly Motivated (SLM); 2.50-3.49 Moderately Motivated (MM); 3.50-4.49 Substantially Motivated (SM); 4.50-5.0 Highly Motivated (HM).

Table 16.1 shows that learners perceive their academic motivation to be strongly influenced by their teachers' behaviors, particularly in how they communicate, support, and respect their learners. Learners are highly motivated when their teachers support them in asking questions, listen to their thoughts, provide assistance when necessary, and properly explain teachings. Furthermore, teachers who treat every learner with love and respect have

the greatest motivational influence. All things considered, the consistently high ratings for every indication point to the importance of good teacher behaviors in creating an extremely inspiring learning environment for learners. As explained by Bolkan, et al. (2016), teachers' clarity in instruction will not be enough to enhance student performance as there needs to be high student motivation to work through their learning material. Positive teacher behaviors like these build confidence and students feel cared for. Even little things, like smiling or helping when someone is lost, build a better learning environment where students feel safe to engage.

The results are evident in classroom scenarios where learners are shy to tell their opinion and the teacher is patiently waiting and respond with encouragement, boosting the learners' confidence to speak up more often. Another instance is when learner struggles with their subjects like Mathematics or even in reading, the teacher provides remedial or intervention to assists the learners, ensuring that the learner fully understand the topic. Another evidence is when the learners feel more motivated when the teacher greet them warmly, show concern for their welfare, and celebrate even small academic improvements.

Table 16.2

Perception of the Teacher Respondents on Academic Motivation as to Teacher's Behaviors

	Indicators	Mean	SD	VI
1.	The learners are encouraged to ask questions during the lesson.	4.66	0.476	HM
2.	The learners benefit when I move around the classroom to interact with learners.	4.69	0.465	HM
3.	The learners understand the clear rules and expectations I establish for classroom	4.66	0.497	HM
	behavior.			
4.	The learners are involved in active learning through discussions and activities.	4.67	0.514	HM
5.	The learners have opportunities to collaborate with peers.	4.67	0.493	HM
	Overall	4.67	0.445	HM

Legend: 1.0-1.49 Not Motivated (NM); 1.50-2.49 Slightly Motivated (SLM); 2.50-3.49 Moderately Motivated (MM); 3.50-4.49 Substantially Motivated (SM); 4.50-5.0 Highly Motivated (HM).

Table 16.2 reveals that teachers perceive their own behaviors as highly motivating for learners, particularly in fostering an interactive and supportive classroom environment. Teachers believe that learners' academic motivation is greatly increased by encouraging them to ask questions, interacting with them by moving around, and establishing clear expectations and norms. They stress the value of peer collaboration possibilities and active learning through activities. The consistently high ratings for every indication point to teachers' awareness of and deliberate use of strategies that foster an inspiring environment that supports learning and learners' engagement. Positive school climate with positive relationships between teachers and students promotes student learning and well-being. (Darling-Hammond & DePaoli, 2020).

These can be observed in different classroom practices such as during discussion, a teacher encourages the learners to ask questions. This allows them to actively engage with the lesson. Another scenario is when the teacher walks around the classroom while the learners work individually or in group, offering help for those who are struggling with the activities, which help learners feel more connected to the teacher and be motivated.

Nevertheless, both learners and teachers generally agree that learners are highly motivated in terms of their teacher's behavior while teaching them in class. The teachers and learners both agree that the teachers are exerting their effort to encourage the learners to participate and be heard in the class. Learners also appreciate the extent that their teachers are supporting and guiding them even outside their official class schedules. These became possible as the teachers generally perceive that they are giving each learner a chance to be heard with kindness and respect while still upholding proper classroom decorum.

Table 17.1

Relationship Between the Observed Educational Ecosystem and Learners' Engagement of Learners

Educational Ecosystem	Learners' Engagement				
(Learners)	Behavioral	Cognitive	Emotional		
Personal Educational Beliefs	0.780**	0.735**	0.706**		
Diversity of Student Needs	0.753**	0.769**	0.726**		
Assessment	0.722**	0.796**	0.661**		
Classroom Structures	0.702**	0.701**	0.647**		
Instructional Strategies	0.765**	0.812**	0.709**		
Discipline Knowledge	0.752**	0745**	0.812**		
Collaborative Practice	0.770**	0.793**	0.771**		
Stakeholders	0.739**	0.777**	0.719**		

<sup>\*\*</sup>Correlation is significant at the 0.01 level (2-tailed). \*Correlation is significant at the 0.05 level (2-tailed). Verbal Interpretation of r-value: +1.0 Perfect positive +/- association +0.8 to +1.0 Very strong +/- association +0.6 to +0.8 Strong +/- association +0.4 to +0.6 Moderate +/- association +0.2 to +0.4 Weak +/- association 0.0 to +0.2 Very weak +/- or no association

Table 17.1 shows the test of relationship between learners' perception on their educational ecosystem to the learner's engagement. The r-value obtained across sub-variables ranged from 0.647 to 0.812, showing that for the students, there is a strong to a very strong positive correlation that is observed from their perceived educational ecosystem to their perceived behavioral, cognitive and emotional engagement in class.

As per learnersz' personal educational beliefs, students who believe that education is valuable for their future will most likely be intrinsically

motivated to attend class and participate, have a growth mindset that will help them stay focused and disciplined, and thus will be emotionally invested in their full learning experience with their peers and teachers. On a similar study made by Hidayatullah, et. al. (2023), it was found that learners' personal belief and utility value of learning mathematics is directly associated with the learners' emotional and behavioral engagement in class. This is through the mediating concept of self-efficacy among students towards mathematics.

With regards to the diversity of student needs, when students feel that their needs inside the classroom are recognized and provided upon, they are more willing and comfortable to participate in class. As they feel a sense of belonging and inclusiveness, the learners will most certainly feel that they are capable of learning and accomplishing tasks, making them feel satisfied with learning at school. On the study made by Sorbet & Notar (2022), there is a direct relationship found between students who met their social-emotional needs inside the classroom and the tendency to create a positive learning environment filled with highly engaged learners.

For the assessment, when students fully understand the purpose of their assessments and receive timely constructive feedback, they will likely be eager to learn more and seek improvement. As Mandernach (2015) has suggested, schools, particularly with adolescent and young adult learners, should have a multi-faceted approach to student assessment. It should also specifically define the scope of engagement the teachers are expecting to the class as they participate in-class.

Regarding the classroom structures, a well-organized and well-maintained classroom will help the students to focus on learning itself as they are less distracted inside the class. The layout of a classroom can foster different learning setups which encourage more various cognitive engagement with the class. Aside from the classroom setup, students who have experienced a calm and peaceful learning environment could give emotional comfort and engagement from the class. According to Nainggolan (2024), Students who hold a high perception on their current learning environment are expected to have higher academic performance, behavior and assessment. It was also emphasized that factors such as classroom design, quality of teacher-student interactions, teaching methods and the current physical condition of the facilities should be valued and assessed regularly.

With regards to instructional strategies, as learners experience various active learning techniques such as hands-on activities and problemsolving tasks, it enhances the cognitive engagement of the learners. In connection with these, giving clear explanations for the activities and good multimedia use as well as gamification of lessons will help in enhancing behavioral and emotional engagement of the students as this provides interactivity and enjoyment inside the class. On the quasi-experimental study of Poondej and Lerdpornkulrat (2016), using active learning experiences such as gamification caused significant difference on students' overall engagement as they feel more connected and required to participate to understand the whole session compared to traditional delivery of learning.

For discipline knowledge, students participate more in a class with a very knowledgeable teacher as they see credibility in all that their teacher say and do in class, which builds trust and in turn, makes them more engaged. Having a high discipline knowledge in class gives the learners a positive role model that they can look upon which gives them the feeling that the students need to listen more, freely ask questions and take their learning seriously. And as students have clarity and confidence that their teacher is teaching them properly and correctly, smooth delivery will help the students stay focused for more time and not get lost in the lesson. As seen also in the study of Maryani, et. Al. (2025), teacher's competence in delivering content and the curriculum for the students greatly influences student engagement. This shows that students greatly value and respect teachers who have not only attained higher educational level but also have the capacity to reach out to them and make the learning more enjoyable and bearable than before.

As for Collaborative Practice, students engaging with collaborative activities given by their teachers develop their social and collaborative skills, engaging them behaviorally. As students are given time to talk with each other and do brainstorming, they are exercising cognitive engagement. And as per Vega-Abarzua (2022), the most effected domain of engagement for learners, in the context of English as Foreign Language (EFL) courses, is the behavioral engagement. The researchers found out that there is a direct quantitative relationship between the said variables which shows that as learners interact, they have, in a way, help their peers to be more engaged in different reasons such as competitiveness, the possible rewards, and other positive outcomes.

Also, as students observe regular involvement of different stakeholders, they will likely see the stakeholders as community role models, making them also aspire to become more engaged in school activities. This also reinforces the learner's intrinsic motivation and thus will engage more academically to strive for educational success. In a study conducted by Satar, Ullah & Ahmad (2022), it revealed through regression analysis that stakeholder participation has a significant direct effect on learners' academic performance, where student engagement was found to be the primary mediator of this relationship. This result suggests that policymakers, stakeholders and schools should foster more collaborative activities for the learners.

Table 17.2.

Relationship Between the Observed Educational Ecosystem and Learners' Engagement of Teachers

Educational Ecosystem	Learners' Engagement				
(Teachers)	Behavioral	Cognitive	Emotional		
Personal Educational Beliefs	0.426**	0.327**	0.515**		
Diversity of Student Needs	0.441**	0.368**	0.551**		
Assessment	0.544**	0.427**	0.601**		
Classroom Structures	0.505**	0.447**	0.524**		
Instructional Strategies	0.587**	0.497**	0.601**		
Discipline Knowledge	0.499**	0.423**	0.572**		
Collaborative Practice	0.482**	0.481**	0.552**		
Stakeholders	0.482**	0.438**	0.555**		

\*\*Correlation is significant at the 0.01 level (2-tailed). \*Correlation is significant at the 0.05 level (2-tailed). Verbal Interpretation of r-value: +1.0 Perfect positive +/- association +0.8 to +1.0 Very strong +/- association +0.6 to +0.8 Strong +/- association +0.4 to +0.6 Moderate +/- association +0.2 to +0.4 Weak +/- association 0.0 to +0.2 Very weak +/- or no association

For the teachers, however, the range of the correlation coefficient r between sub-variables was found to only be around 0.327 to 0.601 which shows a weak to moderate association. But this is still a considerable amount of positive correlation level as these are correlated subfactors that work hand in hand in the real teaching setting. Besides, all the correlations tested got a p-value lower than 0.01, which further emphasized that the learner's and teachers perceived educational ecosystem and the perceived level of student engagement in class were found to be significantly related.

For teachers' educational beliefs, it shows the need for the teachers to give prior importance on setting up their learners' mindset as to why they are doing school and attending classes. As suggested by Boushey & Behne (2024), teachers should establish clear classroom rules, routines and instructions every lesson to ensure that students are properly guided in setting their learning expectations and outcomes. This setup will build a good habit on the learners on handling new lessons and concepts later on, giving them the best initial intrinsic engagement.

As for the diversity of student needs, teachers that were found to be emphatic, inclusive, and clearly aware of the needs of the learners have the capability to plan and make different activities and assessments that will captivate the class but also encourage them to participate. This observation has also been seen even with university student-respondents onducted by Mohyuddin, et. al. (2024). In their study, they found out that understanding the diverse learning environment of the learners greatly helps in optimizing student participation and engagement.

And on Classroom Structures, teachers need to properly plan and ensure that the learning environment is in good condition to maximize learning engagement in class. This result is also reflected with the mixed-method study of Solis & Flores (2024) wherein school climate, a component of classroom structures, has a significant correlation to learners. It was revealed on the qualitative results that existing infrastructures, peer relationships, teacher's expectations and pedagogical approaches shape the learners' overall engagement inside the class.

Teachers need to diversify their teaching strategies to cater all the learners' different needs and abilities. In the multilevel analysis study conducted by Buric and Frenzel (2021), it revealed that teachers' emotional labor and varied instructional strategies correlated to students' self-report of academic engagement. Based on the study, teachers fake their emotions to amplify the effect on their students while undergoing instructional strategies so that learners may become more involved and engaged in the lesson.

For discipline knowledge, when teachers possess deep subject knowledge, students will feel confident in what their teacher is sharing inside the classroom, boosting their cognitive and behavioral engagement. As learners see the connections of the lessons to real-life situations, they get to be emotionally invested in the lesson. These results were also seen in the study of Li & Villanueva (2024), where there is found to have a strong positive correlation between teacher's self-efficacy and competence to the student's learning engagement. Results show that a teacher's expertise in the subject and ability to relate and integrate it to other disciplines is highly regarded by the learners, boosting their overall engagement in class.

And as teachers designed activities that foster positive peer interactions, it can emotionally engage the students and build camaraderie. According to the study of Anwar, et. al. (2021), collaborative team teaching, wherein teachers take active collaborative roles with the class, was found to have positive correlations with the learning engagement of high school students from a remote area. This study also added that teachers should also collaborate with fellow teachers and lecturers to fit in learner's expectancy, further amplifying their overall engagement.

For the Stakeholders, when teachers, parents and community stakeholders support the learners by all possible means, they will feel valued and in turn be emotionally engaged with their learning journey. According to Haule & Lyamauaya (2024), effective collaboration between stakeholders will give better resource mobilization around stakeholders, support heightened discipline control not only in schools but also in the community, and assure the full implementation of any plans created by the concerned stakeholders.

Table 18.1

Relationship Between the Observed Educational Ecosystem and Academic Motivation of Learners

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Educational Ecosystem (Learners)		Academic Motivation				
	AD	Par	Per	LE	ТВ	
Personal Educational Beliefs	0.804**	0.723**	0.696**	0.759**	0.714**	
Diversity of Student Needs	0.717**	0.695**	0.673**	0.736**	0.726**	
Assessment	0.739**	0.785**	0.585**	0.677**	0.645**	
Classroom Structures	0.724**	0.642**	0.592**	0.688**	0.668**	
Instructional Strategies	0.818**	0.799**	0.677**	0.728**	0.693**	
Discipline Knowledge	0.755**	0.689**	0.702**	0.700**	0.760**	
Collaborative Practice	0.753**	0.698**	0.701**	0.759**	0.789**	
Stakeholders	0.757**	0.755**	0.648**	0.710**	0.815**	

<sup>\*\*</sup>Correlation is significant at the 0.01 level (2-tailed). \*Correlation is significant at the 0.05 level (2-tailed). Verbal Interpretation of r-value: +1.0 Perfect positive +/- association +0.8 to +1.0 Very strong +/- association +0.6 to +0.8 Strong +/- association +0.4 to +0.6 Moderate +/- association +0.2 to +0.4 Weak +/- association 0.0 to +0.2 Very weak +/- or no association

On the learners' side, the r-value obtained across sub-variables ranged from 0.592 to 0.818, showing that for the students, there is a strong to a very strong positive correlation that is observed from their perceived educational ecosystem to their perceived academics in class. This result implies that for the students, having a good educational ecosystem set by their teachers and other stakeholders is important to attain high academic motivation from the class.

For the Personal Educational Beliefs, as students form a strong underpinning that their education has a meaning and purpose for achieving

success in life, they typically are more autonomous or independent learners. Students are more interested in the lessons presented to them and will be more persistent in learning new concepts or challenging activities. Also, as teachers provide a safe and inclusive learning environment for the class, students will be more motivated to learn without major hindrances or distractions at all. Thus, the learners will appreciate their teacher's effort and support in their learning journey. The same results are observed with the study of Bong (2004) where the author discussed that learner's self-efficacy, task value and orientations towards achieving their academic goals are associated with academic motivation. This study is done with consideration of having different specific subjects for comparison.

As for the Diversity of Student Needs, as the learners' needs are noticed and dealt with properly by their teachers, they feel that they are important and included in the class. This, in turn, generates student participation and environment satisfaction for each learner. They will appreciate their teachers and peers more, strengthening their motivation to attend class and learn with them. As this progresses, students will feel that they have a strong support system inside their classroom, appreciating each other. This is also reflected with the study conducted by Daguplo (2015) which revealed that satisfying the needs of the education students, specifically on their autonomy and relatedness needs, shows a positive correlation with their internal motivations. This stresses the importance of initiating different activities in the school that will cater such diverse needs of the students.

On Assessment, as students were given assessments with clear learning outcomes and offers specific feedback, they truly will understand what they are working for and how can they attain that goal. This will give them more focus and confidence and handling assessments. Also, as students receive constructive feedback about their progress, they will not feel sad or fully negative when they fail but sees it as an avenue for eventual growth, driving their motivation to continue learning. As per Aftab and Tariq (2018), continuous assessment can help the students monitor their learning progress as they handle difficult lessons or concepts, which also boosts their motivation.

As for the Classroom Structures, having good classroom structures help the students create a habit of clear routines every learning session. It also set realistic expectations from teachers to students, which gives the learners less reasons to incur chaos inside the classroom and more motivation and focus to engage on the tasks given to them. Also, a conducive learning environment also foster autonomy in class through structured choices. This is also revealed on the study of Evans & Boucher (2015) that students who are given choices are more motivated to work as they have a choice on what they want to accomplish by giving them choices or decision-making, further boosting their intrinsic motivation

For the Instructional Strategies, as the varied instructional strategies have engaging and interactive elements with it, students are more empowered to make decisions and will likely hook the students to participate in class. This also will require students to put more effort and persistence in their class while making it enjoyable and not repetitive or bland. This also gave the students a good impression of their teachers to be more hands-on and dedicated in helping them learn, giving them more motivation to push through in learning. This is also the same sentiment from the study conducted by Dufitumukiza & Mugiraneza (2024) wherein the efficient use of varied instructional strategies in class has strong positive correlations to students' academic motivation in learning chemistry. Therefore, it stresses the importance on the part of the teachers to master these different strategies and use them optimally based on the learning context.

For Discipline Knowledge, when students recognize their teacher's expertise on the subject matter, it builds trust, respect and admiration to them, which can be an intrinsic motivation for them to impress their teacher or to rise from the increasing difficulty of the lesson as time goes by. A confident teacher can add much positive energetic atmosphere to the class, which boosts self-efficacy. Also, students are also exercising their minds to see things as their teachers see things from theory to action, from content to real-world impact. The same sentiment was shared by Vančíková (2020) that teacher's expertise motivates students positively. However, teachers should still be careful on adapting teaching methods based on their students' needs as there is no "one-size-fits-all" approach on relaying knowledge to the whole class due to their diversity.

For Collaborative Practice, when students work together on a same situation, they feel more connected with their peers. This gives them a sense of community and belonging that gives them motivation to learn and contribute to the whole group. And as they contribute, learners will feel that they own the learning that they got through the process instead of just spoon-fed to them. Also, students will get more motivated as they see that what they do now is a simulation of what they would do in their homes, and jobs later in life, further emphasizing its importance to the learners. According to Loes (2022), employing collaborative learning even at the undergraduate level was found to still have positive correlation with academic motivation.

And for Stakeholders, students need the emotional support coming from their parents, value reinforcement from their teachers, and sense of real-world relevance from the community they belong to. According to Mičić (2021), as learners see the school as a caring community composed of collaborating community stakeholders, students were found to be more autonomously motivated to attend school and participate.

Table 18.2

Relationship Between the Observed Educational Ecosystem and Academic Motivation of Teachers

Educational Ecosystem (Teachers)		Academic Motivation				
	AD	Par	Per	LE	TB	
Personal Educational Beliefs	0.412**	0.493**	0.334**	0.545**	0.551**	
Diversity of Student Needs	0.410**	0.509**	0.367**	0.597**	0.599**	
Assessment	0.485**	0.544**	0.347**	0.563**	0.570**	
Classroom Structures	0.446**	0.468**	0.378**	0.552**	0.567**	
Instructional Strategies	0.542**	0.616**	0.408**	0.577**	0.597**	
Discipline Knowledge	0.442**	0.529**	0.405**	0.568**	0.561**	
Collaborative Practice	0.578**	0.618**	0.415**	0.581**	0.632**	
Stakeholders	0.485**	0.565**	0.375**	0.503**	0.591**	

<sup>\*\*</sup>Correlation is significant at the 0.01 level (2-tailed). \*Correlation is significant at the 0.05 level (2-tailed). Verbal Interpretation of r-value: +1.0

 $Perfect \ positive \ +/- \ association \ +0.8 \ to \ +1.0 \ Very \ strong \ +/- \ association \ +0.6 \ to \ +0.8 \ Strong \ +/- \ association \ +0.4 \ to \ +0.6 \ Moderate \ +/- \ association \ +0.2 \ to \ +0.4 \ Weak \ +/- \ association \ 0.0 \ to \ +0.2 \ Very \ weak \ +/- \ or \ no \ association$ 

For the teachers, the range of the correlation coefficient r between sub-variables was found to only be around 0.334 to 0.632 which shows a weak to moderate association of the same variables. But this is still a substantial positive correlation level across all variables as these are correlated subfactors that work together in the real classroom setting. Adding to the fact all the correlations tested got a p-value lower than 0.01, which further emphasized that the learner's and teachers perceived educational ecosystem and the perceived level of students' academic motivation in class were found to be significantly related.

For the Personal Educational Beliefs, if teachers believe that all students can learn and improve, they will be more likely to view their learners' low motivation at the beginning to be temporary, meaning that it can be nurtured. This shows the encouraging and supporting function of teachers inside the class. Also, teachers' educational beliefs shape their way of delivering instructions to the class. The modern teachers who now support student-centered learning tend to create a more engaging and enjoyable classroom environment. This also influences how they see and treat their students. This result was also observed with the study of Tampubolon (2018) where teacher-student and student-student collaboration improved students' motivation and performance overall.

As for the Diversity of Student Needs, as teachers met the needs of most, it not all, of the students, they can freely focus on the learning process with the class instead of teachers always thinking about students' safety, care and support all the time. It also emphasizes teachers' relevance to each of the students. Considering this will help the teachers in building rapport to each student, making them more relevant and meaningful for their learning journey. It also gives the teachers the proper lens on preparing academic activities and assessments that will challenge and motivate the class further. In the study of Sa'adan, et. al. (2023), satisfying students' needs like receiving fair grades and assessments, and course content understanding, have a positive effect on student motivation. On the other hand, exhaustion and emotional drain can decrease motivation from the class.

With regards to Assessment, as the teacher properly relay the purpose and instructions for the learners' activities and give timely feedback, the learners will be motivated to set personal goals and be engaged while staying on track and improving through time. These positive assessment strategies will build trust between teachers and students and thus, create a fair environment that will motivate everyone to pursue individual growth in learning. According to Gan, He & Liu (2021), using varied assessment practices like teacher-student interactive-informal assessments and students' self-assessment are the best assessment strategies to elicit intrinsic motivation. This result reveals that teachers must be aware that not all assessment strategies will work on all cases and on all students. Aside from this, Turda, et. al. (2021) suggests that assessments with clear and consistent feedback loop between students and teachers has positive correlation to students' self-efficacy and intrinsic motivation.

As to the Classroom Structures, as teachers prepare a comfortable and organized learning environment, this allows the students to feel safe and focused. A good learning environment also enables the learners to manage tasks better and more efficiently as they can clearly see and hear each other in class. This unlocks more opportunities for the class to engage more with different kinds of activities while not being limited by their classroom space and conditions. This is also seen in the cross-sectional study conducted by Mouratidis, et. al (2024) students were shown to have strong positive correlations between all 4 aspects of classroom structure (contingency, support, monitoring and clear expectations) to their autonomous academic motivation.

For the Instructional Strategies, as the varied instructional strategies have engaging and interactive elements with it, students are more empowered to make decisions and will likely hook the students to participate in class. This also will require students to put more effort and persistence in their class while making it enjoyable and not repetitive or bland. This also gave the students a good impression of their teachers to be more hands-on and dedicated in helping them learn, giving them more motivation to push through in learning. This is also the same sentiment from the study conducted by Dufitumukiza & Mugiraneza (2024) wherein the efficient use of varied instructional strategies in class has strong positive correlations to students' academic motivation in learning chemistry. Therefore, it stresses the importance on the part of the teachers to master these different strategies and use them optimally based on the learning context.

As for Discipline Knowledge, well-prepared and well-versed teachers help the students get more motivated as they have more confidence with their teachers and what they share in class. The learners will also persist through different learning challenges as they know their teacher is knowledgeable and is able to guide them if they ever need help in class. This also cultivates respect and positive image from the students to their teachers as their expertise fosters trust and support. Kusuma (2021) have also shared the same results albeit conducted with learner-respondents undergoing online classes. Their study shows that students' perception of teacher competence and experience has a significant relationship to how much their learners are motivated academically to attain academic achievement.

On Collaborative Practice, teachers giving different group works induce learners' academic motivation as they are more involved in the learning process, giving them the ownership of their work and experience decision-making. Having also their peers as they work together makes them more persistent, believing that supporting each other will make the whole activity more manageable. It also simulates positive peer dynamics which is helpful for them to become more motivated in doing such activities. As this was also observed with the research conducted by Ahmed Khan (2024), the author also explained that implementing these collaborative activities by teachers also poses some challenges specifically with individual accountability and differing group dynamics.

And for the Stakeholders, as the teachers, parents and other stakeholders extend their support for the learners, this will help the students feel cared and properly guided. This also gives the learners the impression that what they do in school is highly important for them for their eventual success in life, which will further motivate them to pursue learning. Students also are motivated to become the positive role models that they see in their parents, teachers and the community they belong to. Several studies also supported these results and implications. For Raboca & Carbunarean (2024), faculty support, specifically on the psychological and functional aspect, have positive associations to several academic motivation factors as they are the primary stakeholder to support the learners' academic growth. As for Mabao & Valle (2023), parental involvement, specifically on communication and authoritative parenting style shown to have positive correlation to learners' academic motivation based on their 136 samples from an integrated school.

# 6. Findings

The study reveals the following findings:

- 1. Both the learners and the teachers perceived their educational ecosystem in terms of personal educational beliefs, diversity of student needs, assessment, classroom structures, instructional strategies, discipline knowledge, collaborative practice, and stakeholders as "Highly Observed".
- 2. The learners' engagement in terms of behavioral engagement as for both the learners and the teachers is described as "Highly Engaged". The result also revealed that the learners' engagement as to cognitive engagement described as "Highly Engaged' while teachers described the learners' engagement in terms of cognitive engagement as "Substantially Engaged". It is also revealed in the result that both the learners and teachers described the learners' engagement in terms of emotional engagement as "Highly Engaged".
- 3. The result reveals that the learners and teachers described academic motivation in terms of academic decision, participation, learning, environment and teachers' behaviors as "Highly motivated". The academic motivation in terms of persistence is described by the learners as "Highly Motivated" however the teachers described the academic motivation in terms of persistence as "Substantially Motivated".
- 4. There is a significant relationship between educational ecosystem and the learners' engagement in terms of behavioral engagement, cognitive engagement, and emotional engagement.
- 5. A significant relationship exists between the observed educational ecosystem and academic motivation as to academic decision, participation, persistence, learning environment and teachers' behaviors.

#### 7. Conclusions

Based on the findings of the study, the following conclusion was formulated:

The hypothesis stating that there is no significant relationship between educational ecosystem and learners' engagement as to behavioral engagement, cognitive engagement and emotional engagement was not supported by the findings of the study when the test of correlation was made.

Likewise, the test of correlation between the observed educational ecosystem and academic motivation as to academic decision, participation, persistence, learning environment and teachers' behaviors shows a significant relationship therefore the null hypothesis was not sustained in the study.

## 8. Recommendations

Based on the findings and conclusions presented, the researcher has arrived at the following recommendations:

- 1. Curriculum maker may consider including components that promote group works, active discussion and hands-on activities to further improve student engagement. Integrating opportunities for self-directed learning and decision making in the curriculum may help learners' enthusiasm and take responsibility over their education.
- 2. School administrators may plan for more school activities that promote learners' involvement in decision making for their academic goal. Conduct LAC sessions or seminars for teachers about promoting persistence and cognitive engagement that may create school environment that supports long-term learners' success.
- 3. Teachers may continue using differentiated activities that promotes engagement and inclusivity among learners. They may also encourage learners in decision-making and provide constructive feedback to support persistence and academic growth.
- 4. Future researchers may use this study as a reference in conducting parallel studies with additional participants and consider studying other aspects of the variables that were not included in the study to continue to validate the relationship of educational ecosystem in learners' engagement and academic motivation in public school settings

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