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Students' Assessment Engagement and Satisfaction Level of Noveleta Senior High School as a Learning Institution

¹ Punzalan Mike Jeizy P, ² Moneva Jean Rose C, ³ Primero Princess Jasmine P, ⁴ Panganiban Bea Camille P, ⁵ Catubao John Neil G, ⁶ Buena John Mark B, ⁷ Lazaro Bryan Louis G
^{1, 2, 3, 4, 5, 6, 7} Noveleta Senior High School, Noveleta, Cavite, Philippines

Corresponding Author: **Punzalan Mike Jeizy P**

Abstract

This study employs quantitative and correlational methodology to investigate student engagement and satisfaction levels at Noveleta Senior High School. One hundred participants were sampled using convenience sampling, and a Google Forms survey questionnaire was administered to efficiently collect data. Likert scales were employed to assess satisfaction and engagement levels, with Weighted Mean providing nuanced averages. Descriptive statistics, encompassing measures of variability and central tendency, presented a comprehensive overview of the data. Correlation Analysis was employed to identify significant relationships between satisfaction and engagement variables. The results indicate high levels of satisfaction and

engagement among students at Noveleta Senior High School. Likert scale responses revealed positive perceptions, with Weighted Mean values reflecting an overall favorable experience. Correlation Analysis unveiled a strong positive correlation between students' satisfaction and engagement levels, emphasizing the interconnectedness of these aspects. These findings contribute valuable insights into the school environment, suggesting a harmonious relationship between student satisfaction and engagement. Recommendations for program enhancements and further research are discussed, underscoring the significance of addressing both satisfaction and engagement for a holistic understanding of students' experiences at Noveleta Senior High School.

Keywords: Student Engagement, MOOCs, Philippines

Introduction

The current educational milieu, characterized by a constant influx of information and distractions, presents additional challenges for language learners. In practical terms, conventional concepts like motivation may prove inadequate in explaining students' performance. Notably, experts across various educational sectors have demonstrated heightened interest in the concept of engagement due to its apparent significance. This interest is evident in comprehensive papers within educational psychology over recent years, addressing both theoretical and practical aspects of engagement (Fredricks *et al.*, 2019) [22]. Wong and Chapman (2022) assert that student satisfaction in higher education is pivotal for both institutional and individual student achievement, particularly in the contemporary world. Recent technological advancements have intensified competition in the higher learning market, with universities and colleges now vying not only with satellite campuses of foreign educational institutions established in Singapore and other countries but with as well electronic mediums offering massively open online courses (MOOCs), enabling learners will study without being tethered to any particular institution.

Within learning institutions, the assessment of students and their satisfaction becomes essential for the benefit of both learners and instructors. Y. Rajabalee and M. Santally (2020) [56] underscore the importance of assessing learner satisfaction to identify ongoing support programs relevant to educational institutions. Li *et al.* (2023) [39] highlight that tools for information access are now available anytime and anywhere with an internet connection, facilitated by the rise of communication devices such as mobile phones and laptops. This evolving data ecosystem presents numerous opportunities for learning in both formal and informal educational settings.

Noveleta Senior High School has implemented various programs, including OK-Ka-Ba Noveletaño and Project SITE. OK-Ka-Ba Noveletaño provides online updates to assist students with challenging lessons during class discussions, facilitating tracking of academic progress through worksheets and activity updates. Pimmer and Rambe (2018) [54] explored dialectical conflicts associated with using mobile messaging applications for instructional tasks, highlighting the complexity and time-consuming

nature of employing instant messaging in teaching. Instances where learners use smartphones or tablets for non-academic activities are excluded, with the focus solely on their academic use. The second program, Project SITE, aims to provide quick access to online learning resources, offering video instructions on website sign-in and resource access. This initiative equips teachers with diverse pedagogical techniques and teaching methods suitable for modern education. As Matzavela and Alepis (2021)^[44] note, digital classrooms and online learning methods are evolving rapidly, influencing all levels of education.

The use of electronic gadgets in educational settings is one approach employed to enhance student participation and topic involvement (Klette *et al.*, 2018)^[33]. In general, traditional instructional methods are no longer sufficient to address accelerated technological and environmental changes (Ayçiçek, 2018)^[6]. Dinmore (2019)^[17] reports that the widespread use of online multimedia, particularly digital video, in higher education has evolved due to technical breakthroughs and new pedagogical methodologies.

As indicated by Kahu and Nelson (2018)^[30], four aspects of the student experience-self-efficacy, feelings of belonging, and well-being-operate as mediating factors within the educational interface, influencing involvement. Mckellar *et al.* (2020)^[48] stress the requirement for additional study to understand the connections between various forms of involvement and the CLASS categories of educational assistance and classroom organization. These studies collectively suggest that the CLASS's Emotional Support domain predicts students' emotional and behavioral engagement. Teachers may employ various strategies in the classroom to engage students, with specific strategies favoring particular forms of student participation (Mckellar *et al.*, 2020)^[48].

Recognizing that measuring engagement and satisfaction isn't a one-size-fits-all endeavor is crucial. The diverse experiences, educational preferences, and learning styles of students can influence their perspectives on education. Therefore, researchers must adopt a comprehensive strategy that considers various elements, including classroom dynamics, curriculum relevance, extracurricular opportunities, and the overall school environment. The primary goal of this research is to analyze students' participation and satisfaction in their learning environment.

Objective of the Study

The primary purpose of this research is to explore and analyze the levels of engagement and satisfaction among students within their school environment. The study aims to acquire insights regarding connections among these factors. More precisely, the research seeks to achieve the following goals:

Firstly, it aims to assess the level of students' engagement, providing a comprehensive understanding of how actively students participate in various aspects of their educational experience. Secondly, the research aims to evaluate the level of students' contentment, focusing on their contentment and fulfillment within the school setting.

Additionally, the research endeavors to establish the significance of the relation between students' satisfaction and engagement levels. This involves examining whether a meaningful relationship exists between the two aspects, shedding light on how student engagement may impact their overall satisfaction.

Lastly, the study aspires to contribute to the enhancement of school programs by deriving insightful conclusions. These conclusions will be drawn from the findings related to engagement and satisfaction, providing valuable recommendations for optimizing the school environment and improving the overall educational experience for students.

Methods and Materials

To ascertain the levels of learners' satisfaction and engagement at an educational institution and explore potential correlations between these variables, this study employs a quantitative and correlational research approach. Quantitative research, as explained by Pritha Bhandari (2023)^[9], involves gathering and analyzing of numerical data to reveal patterns, averages, and relationships between variables. Ahmad. S *et al.* (2019)^[1] further elaborate on the extensive nature of quantitative research, emphasizing the collection of substantial numerical data. Unlike qualitative research, which relies on methods such as experiments and observations, quantitative research utilizes statistical and numerical data analyses. This study, focusing on Noveleta Senior High School, involves 100 students as participants. Google Forms survey questionnaire, as recommended by Mondal *et al.* (2019)^[47], is employed to collect data efficiently. Online surveys are increasingly popular due to digital media usage, offering advantages such as global accessibility and streamlined data processing (H. Taherdoost, 2022; Krosnick, 2018)^[71, 34].

Convenience sampling, a non-random technique, is used to select 100 students randomly from Noveleta Senior High School, considering accessibility and availability (K. Nikolopoulou, 2023)^[49]. The researchers emphasize that non-probability methods are readily available, efficient, and cost-effective for their target population. The Likert scaling is employed to rank variables, assessing levels of satisfaction and engagement. Likert-type questions, commonly used for ranking approval levels on a scale, offer a versatile approach to measure frequency, effectiveness, importance, and satisfaction (Elliot R., 2021)^[19].

Descriptive statistics, specifically Weighted Mean, are utilized to provide an overview of the data. Weighted Mean considers the probability or weight of each event, offering a more precise depiction of the average when certain data points have a greater impact (Taylor, S, 2023)^[72]. Descriptive values, encompassing measurements of variability (spread) and central tendency (mean, median, mode), offer a comprehensive overview of the data gathering process (Hayes A., 2023)^[27]. Correlation Analysis, a statistical tool, is employed to determine relationships between variables. This analysis, as highlighted by James E. (2022)^[29] and Gell T. (2023), is crucial for identifying significant connections and influences between variables.

In conclusion, this research utilizes a robust methodology involving quantitative data collection, statistical analysis, and correlation examination to comprehensively assess and understands the level of learners' satisfaction and engagement at Noveleta Senior High School.

Results and Discussion

The following part presented the study's findings and analysis. It is divided into two sections: evaluation and discussion depending on the descriptive and correlational

approaches, with quantitative data acquired and processed first, then correlation data. The quantitative data findings are generated using "Jamovi" and divided into two parts for the aim of explaining descriptive and correlation results and offering responses to the research question. The quantitative data is gathered and examined thematically to better explain and support the results. Throughout the quantitative data collection, supporters asked questions based on the highest and lowest ranking mean in each table to support and explain the correlation data.

Problem 1. What is the level of learners' engagement in terms of affective, cognitive, behavioral, social engagement?

Table 1.1: The Level of Engagement in Terms of Cognitive Engagement

Questions	Mean	Rank	Interpretation
1. Whenever I make a mistake, I strive to recognize my error.	3.71	1	High
2. I make an effort to connect what I have learned to the new one.	3.58	2	High
3. When things get busy at work, I just read the simple portion.	3.40	3	High
Total Average	3.56		High

Legend:

- 0.01– 1.00 = Very Low
- 1.01– 2.00 = Low
- 2.01 - 3.00 = Average
- 3.01 – 4.00 = High
- 4.01 – 5.00 = Very High

The index reveals that students exhibit high levels of cognitive participation (mean = 3.56). This sharply contrasts with the results of Schnitzler's (2020) [68] study, which depicted a disconcerting portrayal of students' cognitive capacities. The disparity suggests that variables specific to the current study's context, such as the nature of the tasks or the learning environment, might have fostered more profound participation and critical thinking.

It is noteworthy that the present findings align with Lane S. et al.'s (2021) [37] report, where an investigation explored the correlation between learners' satisfaction and cognitive engagement subscales. In their research, they identified a high level of cognitive involvement among their student sample. The combined impact of these findings supports the notion that, under the right conditions, students can make a substantial cognitive investment in their education.

Table 1.2: The Level of Engagement in Terms of Behavioral Engagement

Questions	Mean	Rank	Interpretation
1. I pay attention in class	3.69	3	High
2. While I'm learning, I give it my all.	3.86	2	High
3. Despite the difficulty, I never give up.	3.89	1	High
Total Average	3.81		High

Studies indicate that student engagement is characterized by a high level (M = 3.81) of behavioral engagement. This aligns with the findings of Mckellar's (2020) [48] study, which demonstrated positive patterns of behavioral engagement. Consistent with prior research, this result underscores the notion that learners are increasingly

embracing active participation and taking initiative in their educational environments.

Notably, the focus on behavioral challenges suggests not only passive involvement but also an active approach to learning and problem-solving. This shift toward positive and productive challenges in the classroom represents an encouraging development, implying that students can attain a deeper understanding and engage in more dynamic learning experiences.

Table 1.3: The Level of Engagement in Terms of Affective Engagement

Question	Mean	Rank	Interpretation
1. Going to school excites me.	3.50	2	High
2. Being in class makes me feel good.	3.61	1	High
3. During class, I frequently get frustrated.	3.01	3	High
Total Average	3.37		High

According to the findings, students at Noveleta Senior High School exhibit a high level of affective engagement (M = 3.37). This contrasts with the more moderate levels identified in earlier research by Bae (2019) [7] and Peck and Wang (2013). Interestingly, the current conclusion aligns with the high level of involvement reported by Kucuk et al. (2019) [35], even though their research utilized a different affective indicator.

This collection of data suggests that, in contrast to earlier studies, students at Noveleta Senior High School demonstrate an exceptionally high level of affective engagement in their learning. This heightened involvement underscores the potential for creating supportive and emotionally charged learning environments in educational settings. Such findings are encouraging for the students' future academic achievement and overall well-being.

Table 1.4: The level of Engagement in Terms of Social Engagement

Question	Mean	Rank	Interpretation
1. I attempt to collaborate with those who can assist me.	3.69	2	High
2. I make an effort to assist those struggling difficulties.	3.77	1	High
3. Dealing with classmates is not something I enjoy.	2.69	3	Average
Total Average	3.38		High

The research reveals a remarkably high level of social engagement among students (M = 3.38). This finding stands in stark contrast to McKellar's (2020) [48] study, which reported low social interaction in school environments. The discrepancy suggests that factors unique to the previous study's context, such as the school environment or the collaborative nature of activities, may have contributed to the promotion of increased social involvement and interaction.

Furthermore, this conclusion aligns with a expand body of study that underscores the important of social connection in enhancing learning outcomes and promoting student well-being. Actively participating in group tasks and communicating with peers allows learners to develop analytical ability, enhance communication abilities, and foster a sense of connection within the learning community.

Problem 2: What is the students' satisfaction level regarding the following features of Noveleta Senior High School in terms of reliability, tangible, responsiveness, assurance, and empathy?

Table 2.1: Students' Satisfaction Level on Noveleta Senior High School Tangible Features

Question	Mean	Rank	Interpretation
1. I believe the available classrooms are tidy and welcoming.	4.54	4	High
2. Discover that the library's services and facilities are good and simple to use.	5.02	1	Very High
3. The bus services that are offered are pleasant and comfortable.	4.48	5	High
4. Some additional facilities, sports facilities, clinic facilities, and laboratory equipment seem satisfactory to me.	4.94	2	High
5. I find that the internet service is excellent and easy to use.	4.67	3	High
Total Average	4.73		High

Legend:

- 0.01– 1.00 = Extremely Low
- 1.01– 2.00 = Very Low
- 2.01- 3.00 = Low
- 3.01 – 4.00 = Average
- 4.01 – 5.00 = High
- 5.01 – 6.00 = Very High
- 6.01 - 7.00 = Extremely High

The results suggest that students at Noveleta Senior High School express a high level of satisfaction (M = 4.73) in terms of material components of their school. This affirmation aligns with the result of Osman A *et al.* (2019) [52], who, in their investigation, also observed correspondingly high levels of satisfaction with tangible elements. The researchers' claim that learners at Noveleta Senior High School have a highly positive experience with the resources and learning tools available to them is substantially supported by this data.

Such elevated levels of satisfaction imply that the school excels in providing high-quality external resources and facilities, contributing to the establishment of a positive and effective learning environment.

Table 2.2: Students' Satisfaction Level on Noveleta Senior High School Reliability Features

Question	Mean	Rank	Interpretation
1. The services provided by the institution are exactly as advertised.	4.64	4	High
2. The class schedules offered are trustworthy.	5.00	2	High
3. The lecturers arrive on time for class.	4.81	3	High
4. The programs of study offered meet the requirements.	5.03	1	Very High
Total Average	4.87		High

According to the table, students at Noveleta Senior High School demonstrate a fairly high level of trust (M = 4.87) in their educational setting. This result aligns with the research conducted by Nurmamudah E. (2020) [50], which reported that learners exhibited a high degree of faith in tangible variables. The consistent findings collectively suggest that Noveleta Senior High School serves as a platform that fosters a sense of security and dependability among students, providing them with confidence and encouragement as they pursue their education.

Table 2.3: Students' Satisfaction Level on Noveleta Senior High School Responsiveness Features

Question	Mean	Rank	Interpretation
1. Residential instructors are eager to assist students in times of difficulty.	4.95	4	High
2. Staff will quickly assign all issues concerning the residential schools.	4.90	5	High
3. Most teachers are eager to assist students in dealing with academic difficulties.	5.44	1	Very High
4. It is simple to interact with office staff.	5.14	2	Very High
5. The majority of the personnel is responsive.	5.06	3	Very High
Total Average	5.09		Very High

The results show that students at Noveleta Senior High School go above and beyond in demonstrating appreciation for their high level ($\bar{x} = 5.09$) of response to their school. This confirms Osman A. *et al.*, (2019) [52] findings, indicating that in both schools, pupils should consistently feel heard and receive support on time. This high responsiveness score, which indicates a culture of attentive listening and quick response and surely promotes a positive learning environment, provides solid evidence in favor of the researcher's claim that Noveleta Senior High School has high level of students' satisfaction.

Table 2.4: Students' Satisfaction Level on Noveleta Senior High School Assurance Features

Question	Mean	Rank	Interpretation
1. Lecturers have a thorough awareness and comprehension of the course they are teaching.	5.20	2	Very High
2. The way instructors communicate during instruction is simple to understand.	5.20	2	Very High
3. The institution offers courses that are related to the topic of study.	5.20	2	Very High
4. As a learners, I am confident that I will be capable to find work after graduation.	5.19	3	Very High
5. The administrative staff's information is trustworthy.	5.28	1	Very High
Total Average	5.21		Very High

The findings from the table highlight the notable comfort and confidence exhibited by students at Noveleta Senior High School within their school setting, as evidenced by a very high level of satisfaction (M = 5.21) for assurance aspects. This outcome aligns with the results of Nurmahmudah's (2019) research, reinforcing the notion of a high degree of confidence and safety experienced by students at Noveleta Senior High School.

This elevated assurance level lends support to the researcher's conclusion that students express satisfaction, suggesting that a secure and comforting environment enables students to develop their skills without fear.

Table 2.5: Students' Satisfaction Level on Noveleta Senior High School Empathy Features

Question	Mean	Rank	Interpretation
1. Lecturers are eager to repeat classes to verify the understanding of students.	5.18	5	Very High
2. Students are always motivated and supported by their professors.	5.31	3	Very High

3. It is simple to communicate privately with appropriate lecturers.	5.19	4	Very High
4. Faculty members treat students' satisfaction with respect.	5.36	1	Very High
5. The institution offers excellent student care.	5.35	2	Very High
Total Average	5.27		Very High

Findings indicate that Noveleta Senior High School students are highly satisfied (x = 5.27) with the empathy shown in their school environment, with an impressive average on

empathy features. This finding confirms Osman A. *et al.* (2019) [52] found an even emphasis on support and comprehension in both schools. The researcher's assertion of student satisfaction is certainly supported by a high empathy score, which indicates a compassionate and caring culture that responds to students' emotional requirements.

Problem 3: Is there a significant correlation between students' satisfaction and engagement level?

Table 3.1: The Correlation of Student Engagement and Satisfaction

	1	2	3	4	5	6	7	8	9								
Cognitive	—																
Behavioral	0.651	***															
Affective	0.555	***	0.493	***	—												
Social	0.491	***	0.450	***	0.588	***	—										
Tangible	0.380	***	0.420	***	0.454	***	0.372	***	—								
Reliability	0.458	***	0.536	***	0.497	***	0.390	***	0.686	***							
Responsiveness	0.577	***	0.542	***	0.524	***	0.358	***	0.560	***	0.773	***	—				
Assurance	0.536	***	0.612	***	0.553	***	0.376	***	0.605	***	0.847	***	0.833	***	—		
Empathy	0.569	***	0.533	***	0.547	***	0.354	***	0.547	***	0.779	***	0.879	***	0.853	***	—

Note: * p < .05, ** p < .01, *** p < .001

Table 3.1 exhibits the correlation matrix illustrating the correlations between various dimensions of students' satisfaction and engagement. Each cell in the table contains a correlation coefficient (r) that quantifies the stability and order of the relationship between the respective pairs of variables.

Behavioral engagement is positively and significantly related to Cognitive engagement (r = 0.651, p < .001). This indicates a strong positive correlation between learners' behavioral and cognitive engagement. Affective engagement demonstrates positive and significant correlations with Behavioral (r = 0.555, p < .001) and Cognitive engagement (r = 0.493, p < .001). These findings suggest that students who are sentimentally involved are also likely to be behaviorally and cognitively engaged. Social engagement shows positive and significant correlations with all other dimensions: Behavioral (r = 0.491, p < .001), Cognitive (r = 0.450, p < .001), Affective (r = 0.588, p < .001), and Tangible engagement (r = 0.372, p < .001). This indicates that learners who are socially partake tend to be engaged across various aspects of their academic experience.

All the satisfaction-related variables (Tangible, Responsiveness, Reliability, Assurance, and Empathy) exhibit positive and significant correlations with each other, suggesting a strong interconnection. Additionally, they are positively correlated with the various dimensions of involvement, indicating that learners who perceive great levels of assurance from their educational environment tend to be additionally engaged.

The table showed there is a strong relation between students' engagement and their satisfaction level based on their sub factors results. This shows that the more equipped facilities, reliability of programs in school, responsiveness of teachers to their students, assurance to give confidence to students, and empathy to students, students become more effective to school, easily understand the lesson, increased their social engagement to collaborate with their classmates, and increased of their attention in class. In general, students that are highly engaged are more satisfied with their learning institution. This study supports the claim of Howson C. and

Matos F. (2021) [31] indicates there is a strong relationship between students' satisfaction and engagement levels.

Conclusion

This research set out with the primary objective of exploring and analyzing the levels of engagement and satisfaction among students within their school environment. Through a comprehensive examination of these variables, the study aimed to provide high insights into their dynamics and the potential interplay between them. The following key conclusions can be pulled out based on the study's objectives:

Firstly, the assessment of students' engagement revealed notable findings. Students at Noveleta Senior High School demonstrated high levels of cognitive, behavioral, affective, and social engagement. This suggests a positive and active involvement of students across various dimensions of their educational experience. These findings align with contemporary educational trends that emphasize the importance of holistic engagement for effective learning.

Secondly, the evaluation of students' satisfaction within the school setting indicated consistently high levels across multiple facets, including material components, trust, responsiveness, assurance, and empathy. These findings underscore the overall positive perception of students regarding the school environment and its various elements. The emphasis on satisfaction extends beyond tangible resources to encompass the crucial aspects of trust, responsiveness, and emotional support, contributing to a positive and fulfilling educational experience.

Moreover, the research successfully established a strong relationship between students' satisfaction and engagement levels. The positive relationships observed between behavioral, cognitive, affective, and social engagement with various satisfaction indicators highlight the interconnectedness of these aspects. This emphasizes the central role of engagement in influencing overall satisfaction, indicating that actively engaged students tend to experience a higher level of contentment within their school setting.

In essence, this research contributes valuable insights to the educational landscape by affirming the importance of fostering multifaceted engagement among students. The positive correlation between engagement and satisfaction underscores the need for educational institutions to prioritize strategies that enhance student involvement in cognitive, behavioral, affective, and social dimensions. By doing so, universities can cultivate an environment that not only promotes effective teaching but also nurtures the overall satisfaction and well-being of learners. These findings serve as a foundation for future research and practical initiatives aimed at optimizing the educational experience for students in similar contexts.

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