

Igniting Performance Through Student-Led Presentations Among Bachelor of Elementary Education Students

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ABSTRACT

When students take the lead in teaching, learning becomes a transformative experience. This study examined the effectiveness of Student-Led Presentations (SLP) in enhancing academic performance among 18 Bachelor of Elementary Education (BEED) students at a higher education institution in Ozamiz City during the 2024–2025 academic year. Utilizing a one-group pretest-posttest design, the intervention included eight sessions integrating SLP activities. Data were analyzed using frequency, percentage, mean, standard deviation, and paired t-tests. Results showed that before the intervention, students performed at a very poor level, but after eight sessions of SLP, their performance improved remarkably, with most reaching outstanding and very satisfactory levels. A paired t-test revealed a very significant difference between pretest and posttest scores ($t = 11.69$, $p < 0.001$), confirming that SLP had a strong positive effect on learning. The study concludes that SLP is an effective learner-centered strategy that builds confidence, strengthens communication skills, and raises achievement. It is recommended that schools adopt SLP as part of their regular practice, supported by structured rubrics, peer feedback, and communication workshops to ensure equitable benefits for all learners.

Keywords: academic performance, future educators, intervention, pre-test- post-test, student-led presentations.

INTRODUCTION

Educational practices centered around the learner have ruled over modern pedagogy, aiming to get students excited about learning through relevant experiences. Education traditionally used teacher-centric pedagogies that emphasized information transfer by rote. However, conventional approaches are quickly being rendered useless by new ways of teaching that emphasize active and interactive learning (Tractenberg, 2021). It shows how traditional rote learning methods are becoming ineffective, reinforcing the need for more engaging, student-driven instructional strategies. To increase student engagement and learning results, assessments and teaching methods must genuinely align with learner-focused concepts, such as digital information and creative teaching methods.

Additionally, research highlights the growing role of digital technologies, such as virtual and augmented reality, in enhancing interactive learning and fostering a student-centered approach (Suh & Ahn, 2022). Learner-centered instructional design allows for flexible, ubiquitous, and adaptive learning approaches, making education more accessible and tailored to individual student needs (AIOkaily, 2023). It highlights how personalized learning environments can cater to diverse student needs, making education more accessible and practical.

Not demanding that the design of assessments match our specific teaching aims to a reasonable degree is the single most significant problem in higher education. Traditional grading schemes can be overly focused on grades rather than real learning (Butler et al., 2021), which in turn restricts students' opportunities to think critically and collaborate effectively. This leads students to drop out, where a good memory must override deep understanding. As the online and hybrid learning environments expand and evolve with the help of the COVID-19 pandemic, our need for more student-centered teaching, or an inclusive 'Student-Centered Flexible Teaching

Approach' (Dayagbil et al., 2021), has never been greater. When students are provided with innovative and interactive teaching methods, their engagement and motivation significantly improve (Eli, 2021), which will improve their academic performance. It provides empirical evidence that engaging students through active learning increases motivation and overall academic success. Furthermore, in addition to flexible teaching, the integration of artificial intelligence in personalized learning could significantly enhance students' comprehension and engagement in online settings (Ouyang et al., 2022). Moreover, formative assessments tailored to individual learning progress enhance student agency and motivation, further supporting the shift toward adaptive instruction (Headden & McKay, 2015).

Many methods have been proposed and deployed to solve these issues. Assessment Evaluation Rubric was created to guarantee that assessments align with learning goals by appraising the clarity, complexity, and quality of exam feedback (Tractenberg, 2021). Another interesting area of research has been exploring the extent to which interactive learning materials can be used to create virtual learning environments that can enhance student readiness and engagement (Suh & Ahn, 2022). It supports the integration of technology to enhance engagement and make learning more immersive, aligning with student-centered teaching practices. Moreover, blended learning methods and artificial intelligence were being embraced to improve motivation and comprehension at a time of crisis for learners (Ouyang et al., 2022). The emergence of the metaverse as an educational tool further supports immersive learning experiences, helping students connect with content in a more meaningful way (Jang & Kim, 2022). Similarly, empowering students to take control of their learning fosters self-directed learning and deeper engagement (Weimer, 2013).

However, despite all this, learner-centered assessment and instructional methodologies remain challenging to implement. Among those variables that affect how effective digital tools and interactive techniques are, we find student adaptation, instructor preparedness, and institutional support (Wekerle et al., 2020). There is also a need for more research into different formats of learning, for example, synchronous (live) vs asynchronous (recorded) classes, and their impact on student engagement and learning outcomes in learner-centered environments (Fabrizz, 2021). A study on higher education settings found that students in synchronous online learning reported greater engagement and satisfaction due to increased social interaction and feedback opportunities (Fabrizz et al., 2021). Additionally, research on social constructivism suggests that collaboration and peer interaction significantly enhance student engagement and knowledge construction (Vygotsky, 1978).

The integration of evaluation techniques with learner-centered teaching plays an essential role in creating an effective learning process. Research indicates that student engagement and comprehension are notably enhanced when active learning techniques are employed and expectations on evaluations are clearly outlined (Schmitt et al., 2008). Building learning communities among educators also helps to ask about applied learner-centered teaching strategies (Pan et al., 2023). Additionally, the use of technology-enhanced assessment tools, such as online rubrics and digital feedback systems, has been shown to improve transparency and student performance (Lai & Bower, 2022).

While numerous studies emphasize learner-centered and active learning strategies in teacher education (Koşar, 2021; Montalbano & Benedetti, 2013; Salar, 2021), few have specifically investigated the impact of student-led presentations on pre-service teachers. Almost all current investigations involve students within general higher education or alternative academic areas, resulting in a population gap in the impact of student-led presentations in relation to the academic achievement and engagement of future primary educators (Miles, 2017). Bridging this gap is essential for developing more specialized teaching strategies to address the specific needs of BEED individuals in a learner-centered approach. Research on learner-centered methodologies suggests that when students take ownership of their learning, such as through presentations and peer-teaching, their engagement and retention of knowledge significantly increase (Ryan & Deci, 2020).

The purpose of this study is to investigate how student-led presentations could play a role in improving the academic performance of BEED students. It investigates how this approach contributes to student engagement, communication skills, and overall success in a learner-centered environment. This study aims to shed valuable insight into nurturing capable and empowered future educators by exploring the specific impact of student-led presentations. Further, the use of metacognitive strategies, such as student reflection on their presentations, has been shown to enhance critical thinking and self-regulated learning skills (Schraw & Moshman, 1995).

This study is significant to Bachelor of Elementary Education (BEEd) students as it examines the impact of student presentations on their academic achievement and motivation in a student-centered setting. As future teachers, BEEd students benefit from developing essential communication skills and critical thinking, which are crucial for applying effective teaching strategies in elementary education. This research highlights how student presentations help foster these skills, leading to improved academic performance and increased motivation to actively engage in their learning process.

THEORETICAL FRAMEWORK

This study was anchored on Constructivist Learning Theory (Piaget, 1950), Social Learning Theory (Bandura, 1977), Self-Determination Theory (Deci & Ryan, 1985), and Cognitive Load Theory (Sweller, 1988).

The Constructivist Learning Theory (Piaget, 1950; Vygotsky, 1978) suggests that learning is an active process in which individuals construct knowledge through experiences, interactions, and problem-solving. Piaget (1950) emphasized that learners develop understanding by engaging with their environment, manipulating concepts, and making sense of ideas. Vygotsky (1978) expanded on this by introducing the Zone of Proximal Development (ZPD) and scaffolding, which emphasize the role of social interaction and guided learning in cognitive development.

This theory is important in the study as it supports the idea that student-led presentations enhance active engagement and learning. Through these presentations, students articulate their thoughts, scaffold their understanding, and engage in mutual learning, fostering critical thinking. Research has shown that active participation increases comprehension and engagement, making student-led presentations an effective instructional strategy.

The Social Learning Theory (Bandura, 1977) states that individuals learn by observing, imitating, and modeling others. Bandura argued that social interactions and role models play a crucial role in cognitive and behavioral development. According to this theory, learning occurs through direct experience as well as through the observation of others, reinforcing the idea that individuals develop new skills by watching and replicating behaviors. The role of social interaction in learning proposes that cognitive development is shaped by cultural and social influences through guided participation and scaffolding (Vygotsky, 1978).

In this study, Social Learning Theory is essential in explaining how student-led presentations contribute to learning. When students observe their peers presenting, they gain insights into effective communication strategies and develop social competence. The performances of their classmates serve as models, encouraging them to refine their skills. This process fosters self-efficacy and enhances their ability to present and communicate effectively, ultimately contributing to improved academic performance. The Self-Determination Theory (Deci & Ryan, 1985) focuses on three fundamental psychological needs: autonomy, competence, and relatedness. Autonomy refers to the ability to make choices and control one's learning process, competence is the feeling of mastery over a subject, and relatedness is the need to feel connected to others. When these needs are satisfied, students become intrinsically motivated, leading to greater engagement, persistence, and academic success. Fulfilling psychological and self-fulfillment needs to achieve personal growth and motivation (Maslow, 1943).

This theory is relevant to the study as it highlights how student-led presentations promote intrinsic motivation. By allowing students to take charge of their presentations, they develop a sense of ownership over their learning. This autonomy leads to higher engagement and participation, while the development of competence builds confidence in public speaking and knowledge retention. Additionally, the collaborative nature of presentations fosters relatedness, creating a supportive learning environment where students feel encouraged and motivated to perform well.

The Cognitive Load Theory (Sweller, 1988) explains how the human brain processes and retains information. It categorizes cognitive load into three types: intrinsic (complexity of the material), extraneous (unnecessary distractions), and germane (effort to create meaningful learning connections). Effective learning occurs when extraneous cognitive load is minimized, and germane cognitive load is optimized to enhance retention and

understanding.

This theory is significant in the study as it supports the idea that student-led presentations help manage cognitive load. By organizing their presentations in a structured manner, students reduce extraneous cognitive load and focus on meaningful learning. This structured approach improves information retention and a deeper understanding of the material. As a result, student-led presentations serve as a strategy to enhance learning efficiency and optimize cognitive processing.

By anchoring this study on Constructivist Learning Theory, Social Learning Theory, Self-Determination Theory, and Cognitive Load Theory, the research aims to examine how student-led presentations enhance engagement, motivation, and comprehension. Through active participation, observational learning, intrinsic motivation, and cognitive load management, student-led presentations create a dynamic learning environment that fosters more profound understanding and academic success.

CONCEPTUAL FRAMEWORK

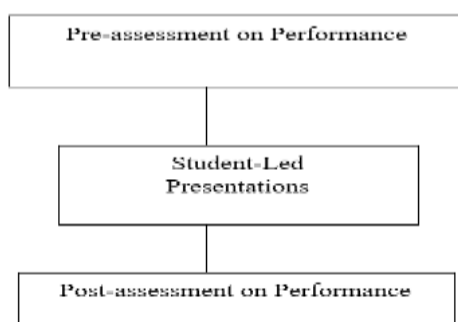
The effect of Student-Led Presentations (SLP) as an independent variable on academic performance and student engagement is explored in this study. Student-led presentations are an active learning methodology that allows students to take ownership of their learning process, fostering communication skills, critical thinking, and deeper comprehension of subject matter. Student-led presentations enhance academic performance by promoting student interaction and engagement. (Lucas et al., 2019) and (Freeman et al., 2014),

This study defines academic performance as the ability of students to understand, retain, and apply concepts discussed during student-led presentations. Academic performance is measured through observations, student outputs, and teacher feedback. These measures provide a comprehensive assessment of the students' learning outcomes related to the presentations. Enhancing students' academic performance involves providing opportunities for active engagement through Student-Led Presentations (SLP). These presentations require students to prepare, organize, and deliver content to their peers, fostering deeper engagement and reinforcing their learning. With SLP, students develop better communication and critical thinking skills while actively participating in their learning. The interactive nature of these presentations allows for greater peer collaboration, which enhances motivation and subject mastery.

This study examines student engagement as a crucial link between Student-Led Presentations (SLP) and improvements in academic performance. Engaged students are more likely to participate actively, persevere through challenges, and achieve better learning outcomes. High engagement leads to deeper learning experiences and improved academic success. (Kuh, 2009) and (Chi & Wylie, 2014).

In this study, researchers observed an existing class (Assessment in Learning 2 and Strategy 3 course) where Student-Led Presentations (SLP) are naturally integrated into lessons. Data were gathered through pre-assessments to measure students' initial academic performance, followed by systematic observations of their participation, engagement, and improvement throughout the study. The findings were analyzed using teacher feedback, student reflections, and post-assessment evaluations to determine any improvements in academic performance and engagement.

Figure 1. Schematic Diagram of the Study



Research Questions

This study aimed to explore the impact of student-led presentations in igniting and improving academic performance among Bachelor of Elementary Education (BEEd) students in one of the higher institutions in Ozamiz City during the school year 2024–2025. Specifically, the study sought to achieve the following objectives:

1. What is the level of performance among students before engaging in student-led presentation?
2. What is the level of performance among students after engaging in student-led presentations?
3. Is there a significant difference in students' level of performance before and after the implementation of student-led presentations?

RESEARCH METHODOLOGY

Research Design

This quantitative approach used a pretest-posttest study focuses on students' performance utilizing a Student-Led Presentation. This pre-experimental approach introduces an intervention or manipulation of the independent variable, analyzes a single group of respondents by means of a pretest, and subsequently evaluates the outcomes by means of a posttest (Marcos et al., 2024). In this study, a one-group pretest-posttest design explored the impact of Student-Led Presentation on the students' performance. Given the limited class size, this design enables analysis within the same group without needing a control group.

Research Setting

The study was conducted in one of the higher institutions of Ozamiz City, Misamis Occidental. This institution is one of the leading universities in the region, recognized for its academic excellence and accreditation achievements. The university offers a diverse range of programs, including undergraduate and graduate courses, as well as complete basic education programs. The students enrolled in the school are pursuing the Bachelor of Elementary Education (BEED) major in General Education at the College of Education, which is designed to equip future educators with the necessary skills and knowledge. From the 1st year until the 4th year, it provides instruction at different levels, making it a vital institution for the educational requirements of the surrounding community.

Respondents of the Study

This study included Bachelor of Elementary Education (BEEd) students enrolled in strategy 7 and assessment courses at one of the higher education institutions in Ozamiz City, Misamis Occidental, Philippines, for the 2024–2025 academic year. They were chosen using criterion purposive sampling. The following criteria were considered in choosing the respondents: (1) Students who are enrolled in Strategy 7 and Assessment courses in the second semester of SY 2024–2025; and (2) students who consented to participate, aiming to fill a gap in the research on SLP's effectiveness in this setting.

Research Instrument

The research instruments used in the study are the following:

A. General Self-Efficacy Scale (GSES) (Appendix A). The researcher-designed General Self-Efficacy Scale, integrated within the teacher's lesson plan, assesses 2nd-year students' understanding of the different cultures and traditions of various regions, and 3rd-year students' understanding of the parent-teacher conference over eight sessions spanning two weeks. Each 90-minute session includes a 15-minute pretest, a 60-minute student-led presentation, and concludes with a 15-minute post-test. Focusing on essential concepts aligned with the respective lessons, the General Self-Efficacy Scale covers topics such as recognizing regional practices, comparing cultural traits, interpreting customs (for 2nd-year students), and understanding the purpose, flow, and communication strategies used in a parent-teacher conference (for 3rd-year students). Each test session includes a single situational or scenario-based question, scored using a 28-point scale.

The content validity, construct validity, and reliability of the researcher-made Confidence Growth Assessment were evaluated through expert consultations, a pilot study, and statistical analysis, including Cronbach's alpha. Test items were reviewed to ensure alignment with learning competencies, and the instrument will be validated through student and educator feedback to confirm its relevance and clarity.

To determine the learners' performance in implementing student-led presentations, the hypothetical mean range and its adjectival equivalent are based on DepEd Order No. 8, s. 2015 is used.

Scale	Interpretation
24-28	Outstanding
22-23	Very Satisfactory
20-21	Satisfactory
17-19	Fairly Satisfactory
1-16	Did Not Meet Expectations

Content validity was verified by subject matter experts, construct validity was assessed through a pilot study, and feedback from students and educators confirmed its relevance and clarity. The reliability of the test was determined using statistical analysis, including Cronbach's alpha, to measure internal consistency. A pilot study was conducted to examine the stability of students' performance across test administrations, ensuring that the instrument produces reliable results over time. Additionally, standardized scoring was implemented to maintain objectivity. To interpret learners' performance in relation to student-led presentations, the test results were evaluated using a hypothetical mean range and its adjectival equivalent, based on **DepEd Order No. 8, s. 2015**.

Lesson Plan (Appendix B). In this study, Student-Led Presentations (SLP) were integrated into the curriculum, with 2nd-year students focusing on topics such as comparing the cultures and traditions of different regions, and 3rd-year students exploring the roles, processes, and importance of parent-teacher conferences. Each of the eight sessions began with a pretest to gauge students' initial understanding, followed by a student-led presentation, where students explained key concepts, shared examples, and engaged their peers in discussions. For example, students might compare regional customs and traditions through visual aids and storytelling, or simulate a parent-teacher conference to demonstrate appropriate communication and participation. These interactive presentations aimed to deepen comprehension and build student confidence.

After the student-led presentation, a posttest assessed learning gains and measured the impact of SLP on students' conceptual understanding and critical thinking skills. Through the comparison of pretest and posttest scores, the study evaluated the effectiveness of SLP over the two-week period.

Data Gathering Procedure

Prior to data collection, the researcher sought formal approval to conduct the study by submitting a request to the Dean of the College of Education at Misamis University. The approval process included letters: a request for permission to conduct the study, a letter detailing the research objectives and methodology, and informed consent forms for participants. With the Dean's endorsement, the study proceeded to data collection. Once all approvals were in place, informed consent forms were distributed and collected for each student participant. The study focused on BEEd students, who were chosen as respondents to explore specific concepts in Annuity. These concepts were integrated into student-led discussions conducted four times per week over a two-week period, for a total of eight sessions. Each session began with a single-item pretest and concluded with a posttest to evaluate immediate learning outcomes. Although the format of the pretests and posttests was consistent, the content varied to reflect the objectives of each session. Following the final session, the researcher analyzed mean scores from the pretests and posttests, interpreting these results to assess performance changes over the course of the study. In addition to session-based assessments, a 50-item pre-assessment was administered before the first session to measure students' academic performance. This was followed by a post-assessment after the last

session to evaluate overall growth in performance as a result of the student-led presentation intervention. The use of a consistent rubric for scoring pretests and posttests provided a clear measure of improvement, enabling an effective comparison of skills before and after the intervention.

Ethical Considerations

Before conducting the study, it was paramount to establish a framework of ethical considerations that prioritized the well-being of the respondents. Approval to conduct the study was sought from the Misamis University Research Ethics Board (MUREB) to ensure compliance with ethical standards. This study followed the ethical guidelines outlined by Kang (2021), which emphasized safeguarding participants' well-being and preventing potential harm. Adherence to these ethical standards ensures protection against physical, psychological, social, or legal risks, upholds participant welfare, and reinforces the integrity and credibility of the research.

Informed consent procedures were strictly followed before data collection. All participating students and teachers were thoroughly informed about the study's objectives, procedures, potential risks, and benefits. Participation was entirely voluntary, and respondents were given the option to withdraw at any time without facing any repercussions.

To ensure confidentiality and anonymity, the researcher collected and analyzed data without any personally identifiable information. Participants were assigned coded identifiers to maintain privacy, and no sensitive personal details were disclosed in any reports or publications. All data management protocols complied with Republic Act No. 10173 (Data Privacy Act of 2012), ensuring that participants' privacy and dignity were upheld.

Regarding the right to withdraw, voluntary participation, and potential risks, participants were explicitly informed that they could discontinue their involvement in the study at any point without any negative consequences. The study was designed to minimize any potential risks, ensuring that participants did not experience physical, psychological, or emotional distress as a result of their involvement.

For data protection measures, strict security protocols were implemented. All digital data was stored in an encrypted format, and physical copies of research materials were kept in a secure, locked storage accessible only to the researchers. These measures ensured that all collected information remained confidential and protected from unauthorized access.

Data Analysis

This study used the following tools in analyzing the data gathered with the use of MINITAB Software.

Mean and standard deviation were used to determine the overall level of performance among students before and after engaging in student-led presentations.

Frequency and percentage were used to determine the level of performance among students before and after engaging in student-led presentations.

A paired t-test was used to determine the significant difference in students' level of performance before and after engaging in student-led presentations.

RESULTS AND DISCUSSION

Level of Performance Among Students Before Engaging in Student-Led Presentations

Table 1 presents the level of performance among students before engaging in student-led presentations. The overall performance of students was very poor ($M = 27.39$). This overall result indicates that, as a group, the students were significantly underperforming prior to the implementation of the student-led teaching strategy. The score is not only below average but alarmingly low, revealing an urgent need for pedagogical intervention.

A closer look at the specific performance categories shows that all students ($n = 18$, 100.00%) performed very

poorly in the pre-test. The lack of distribution across other categories is particularly concerning, as it suggests a total absence of adequate performance, which is uncommon in a typical class scenario and may point to deeper instructional or motivational challenges.

The findings imply several nuisance factors that may have contributed to this low performance. First, traditional teacher-centered instruction may not have effectively engaged students or addressed diverse learning styles. Second, students may have lacked opportunities to practice skills actively, especially those related to oral communication, collaboration, and problem-solving—skills commonly enhanced through student-led activities. Third, the consistent “Very Poor” rating across all students could reflect low self-confidence, limited support at home, or prior learning gaps that were not addressed early in the instructional process.

Given the gravity of the findings, there are strong implications for both teaching staff and school administrators. Teachers are encouraged to adopt active learning strategies, particularly student-led presentations, which allow learners to take ownership of their learning, increase participation, and enhance their understanding through peer interaction. Additionally, professional development activities focused on effective classroom strategies should be provided to educators. These may include training on differentiated instruction, formative assessments, and inclusive teaching practices. The results also highlight the necessity of moving toward more responsive and student-centered pedagogies that can uplift the performance of all learners.

The results reveal that student performance prior to implementing student-led presentations was at a moderate level. Among the indicators, students showed relatively better performance in "Participation during discussions" while struggling most with "Confidence in speaking before the class." This suggests that while learners are somewhat comfortable engaging in group discussions, they experience apprehension when it comes to taking on visible leadership or speaking roles. This performance pattern aligns with the idea that teacher-centered approaches often lead to passive learning and decreased confidence in public speaking (Nguyen et al., 2022).

Student-led presentations can address these issues by encouraging learners to take ownership of their learning, thereby enhancing engagement, communication skills, and confidence. Supporting this, recent findings suggest that student-centered activities promote greater learner autonomy and improve overall classroom participation (Alzahrani, 2021). Likewise, a study on the impact of peer-led learning showed marked improvements in students’ academic performance, self-expression, and collaboration skills (Kim & Thapa, 2023). Therefore, integrating student-led presentations into classroom instruction is a proactive approach to strengthen the areas where students initially showed low performance, particularly in boosting confidence and active involvement in learning tasks.

The findings imply that instructional practices must shift toward student-centered approaches to address the uniformly low performance. The dominance of teacher-centered methods likely limited student engagement and confidence (Nguyen et al., 2022). Integrating student-led presentations can foster autonomy, collaboration, and communication skills, leading to improved outcomes (Alzahrani, 2021; Kim & Thapa, 2023). By adopting such strategies, schools can transform underperformance into opportunities for learner growth and resilience.

Table 1 Level of Performance Among Students Before Engaging in Student-Led Presentations

Performance	Frequency	Percentage
Very Poor	18	100.00
Overall Performance	27.39	

Scale: 47-50 (Outstanding); 44-46 (Very Satisfactory);42-43(Satisfactory); 40-41(Fair);38-39 (Poor); 37 and below (Very Poor)

Level of Performance Among Students Before Engaging in Student Led-Presentations

Table 1 presents the level of performance among students after engaging in student-led presentations. The overall mean performance was rated as Outstanding ($M = 45.56$). This suggests that, in general, students demonstrated exemplary skills in content mastery, delivery, organization, and communication when tasked with presenting

their work independently. The distribution of performance levels further emphasizes the generally high achievement of the group, with notable differences across three levels of performance.

The majority of students achieved an Outstanding level of performance ($n = 12$, 66.66%), indicating that more than two-thirds of the participants significantly exceeded the criteria set for student-led presentations. These students likely exhibited strong organization, clarity, audience engagement, and mastery of content. Their success may also point to the effectiveness of instructional support, scaffolding, and the opportunities provided for preparation and rehearsal. The data suggest that student-led presentations can be a highly effective means of enhancing student performance when appropriate resources and expectations are in place.

The next group of students achieved a Very Satisfactory performance level ($n = 3$, 16.67%). These students were able to meet most of the performance indicators, demonstrating a solid grasp of content and presentation delivery, though with minor lapses in cohesion, depth, or confidence. Their placement in this category may indicate varying levels of readiness or presentation experience. While their outcomes were still commendable, they highlight the need for enhanced differentiation in instructional support or feedback during the preparatory phase.

Another three students ($n = 3$, 16.67%) were rated as Satisfactory, indicating that while these students met the minimum expectations, their presentations likely lacked polish, depth of understanding, or audience connection. This could be attributed to a range of factors such as limited preparation, anxiety, unfamiliarity with presentation skills, or challenges in organizing ideas. This distribution signals that while most students benefited from the activity, a small subset struggled to reach higher performance levels and may require targeted intervention.

Given these findings, educators and curriculum developers should continue incorporating student-led presentations as part of the learning process, while providing additional support to ensure equity in student performance. Activities such as structured modeling of presentations, peer mentoring, feedback checkpoints, and public speaking workshops could enhance students' preparedness and confidence. Furthermore, implementing clear rubrics, encouraging reflective self-assessment, and scaffolding tasks for diverse learner needs will help ensure that all students—not just the majority—can achieve outstanding performance.

The outstanding level of performance demonstrated by the majority of students in Table 4 resonates with the learner-centered approach to teaching, which empowers students to take responsibility for their own learning through active participation and reflection. According to Koohang et al. (2014), learner engagement in authentic tasks such as presentations enhances motivation, encourages deep learning, and leads to improved academic performance. Similarly, Cullen et al. (2020) emphasize that learner-centered syllabi and clear assessment expectations positively impact student achievement and promote a sense of agency. This aligns with Dabbagh et al. (2023), who argue that the effectiveness of performance-based tasks depends heavily on the alignment of learning objectives, instructional strategies, and evaluative tools, all of which appear to be reflected in the structure of the student-led presentations analyzed.

However, the presence of students rated only at the Very Satisfactory and Satisfactory levels suggests disparities in performance, which may stem from unequal preparation or differences in learning preferences and support. These variations highlight the need for differentiated instruction, as advocated by Sun et al. (2021), whose study revealed that younger learners prefer communicative and scaffolded assessment formats that build their confidence. Lee et al. (2023) support this by illustrating how student-centered digital environments, such as those using metaverse technologies, can improve performance by accommodating individual learning needs. Furthermore, Alharthi et al. (2022) stress that learner-centered instructional design should not only challenge high achievers but also provide structured opportunities for improvement among less confident students, thereby promoting equitable learning outcomes.

The findings imply that student-led presentations significantly enhance learners' academic performance, validating the effectiveness of learner-centered approaches (Koohang et al., 2014; Cullen et al., 2020). However, varied performance levels highlight the need for differentiated support to ensure all students benefit equally (Sun et al., 2021). With proper scaffolding and feedback, this strategy can maximize learning outcomes for diverse learners.

Table 2 Level of Performance Among Students After Engaging in Student-Led Presentations

Performance	Frequency	Percentage
Outstanding	12	66.66
Very Satisfactory	3	16.67
Satisfactory	3	16.67
Overall Performance	45.56 – Very Satisfactory	

Scale: 47-50 (Outstanding); 44-46 (Very Satisfactory); 42-43 (Satisfactory); 40-41 (Fair); 38-39 (Poor); 37 and below (Very Poor)

Significant Difference in Students' Performance Before and

After the Use of Student-Led Presentations

Table 3 presents a statistical comparison of students' academic performance before and after participating in student-led presentations. The results show a considerable improvement, with a highly significant difference ($p = 0.00$), indicating that the implementation of student-led presentations had a strong and positive effect on student learning outcomes.

Prior to the integration of student-led presentations, students demonstrated relatively very poor academic performance ($M = 27.39$). This lower mean score suggests potential issues in the traditional learning model, such as passive learning, limited student engagement, or a lack of opportunities to apply knowledge independently. The relatively high standard deviation ($SD = 5.73$) further indicates that students' performances were more varied, implying inconsistency in their grasp of the material or learning effectiveness under conventional methods.

In contrast, after students engaged in student-led presentations, their performance improved significantly ($M = 46.56$). The notable increase in the mean score implies that the students not only learned better but also more uniformly, as shown by the lower standard deviation. This suggests that the student-led approach may have provided a more equitable and effective learning environment, where learners took active roles, collaborated, and practiced critical thinking, contributing to more consistent academic outcomes.

The difference in mean scores before and after the intervention confirms a statistically significant improvement in student performance. These findings highlight the potential of student-led presentations to enhance academic achievement through increased engagement, accountability, and deeper understanding of content. Given these results, academic leaders and instructors are encouraged to adopt and refine student-led approaches. To maximize impact, it is recommended to include preparatory training in public speaking, peer evaluation mechanisms, and integration with performance-based assessments. These activities can help ensure that the pedagogical gains observed are sustained and expanded to diverse learning contexts.

The significant improvement in students' performance after implementing student-led presentations aligns with learner-centered teaching models that emphasize student engagement, autonomy, and active learning. According to Koochang et al. (2014), student engagement particularly in interactive and constructive activities predicts stronger learning outcomes in online and hybrid contexts. This aligns with the findings, where student performance improved from "very poor" to "outstanding" before and after the intervention. Similarly, Cullen et al. (as cited in the Learner-Centered Syllabus Scale study) argue that effective learner-centered instruction requires accessible, flexible, and collaborative strategies that place students at the heart of the learning process. Young et al. (2021) further reinforce this idea, showing that students prefer communicative and diagnostic assessments such as presentations that offer a deeper, more enjoyable learning experience.

Theoretically, these improvements can be anchored in constructivist learning theories, which support the notion that learners build knowledge through experience and interaction. Park et al. (2022) demonstrated that digital and immersive environments like the metaverse foster higher engagement by making students active participants in their learning, similar to the dynamics of student-led presentations. Likewise, Walton and Cohen (2011)

emphasized the importance of social belonging and self-determination, both of which are enhanced when students lead and participate in presentations. In the context of formative assessment, Smith et al. (2020) argue that when learners are given agency in their learning process—such as through peer-led tasks—they tend to demonstrate greater motivation and cognitive growth. These perspectives support the observed academic gains and suggest that student-led presentations not only reinforce content mastery but also nurture critical soft skills such as communication, problem-solving, and collaboration.

The findings imply that student-led presentations significantly improve both the quality and consistency of student performance, addressing gaps in traditional teacher-centered instruction. By fostering engagement, collaboration, and reflection, this approach supports deeper learning and essential skill development (Zitha, I. et al., 2023). Thus, integrating student-led strategies can be a sustainable way to enhance academic achievement and learner confidence.

Table 3 Significant Difference in Students' Performance Before and After the Implementation of Student-Led Presentations

Variables	M	SD	T-value	p-value
Before Engaging in Student-Led Presentations	27.39	5.73	11.69***	0.00
After Engaging in Student-Led Presentations	46.56	2.28		

Scale: *** $p < .001$ (Highly Significant); ** $p < 0.01$ (Highly Significant); * $p < 0.05$ (Significant); $p > 0.05$ (Not significant)

SUMMARY, FINDINGS, CONCLUSION, AND RECOMMENDATIONS

Summary

This study investigated the impact of student-led presentations on the academic performance of Bachelor of Elementary Education (BEED) students in a higher education institution in Ozamiz City during the school year 2024–2025. Specifically, it aimed to determine the students' level of confidence and academic performance before and after participating in student-led presentations and whether a significant difference exists between the pretest and posttest results.

The research utilized a one-group pretest-posttest design, involving 18 BEED students. Data were gathered through a confidence scale questionnaire and a performance rubric was evaluated before and after the intervention. Student-led presentations were conducted over a structured period, allowing participants to organize, present, and reflect on content topics.

Statistical tools such as means, standard deviations, frequencies, and paired t-tests were applied to analyze the quantitative data gathered.

FINDINGS

Based on the analysis of the collected data, the following findings were obtained:

1. All students performed very poorly before the implementation of SLP, indicating a significant deficiency in understanding or applying course content before student-led presentations were introduced.
2. Student performance significantly improved to “Outstanding” after the implementation of SLP. Mean scores reflected noticeable gains in content comprehension, clarity, and engagement.
3. Results revealed a statistically significant difference between students' academic performance before and after the implementation of student-led presentations. This confirms that the intervention had a positive effect on both variables.

CONCLUSIONS

Based on the findings, the following conclusions were drawn:

1. Traditional learning approaches alone were not sufficient in helping the students fully grasp and apply the course content.
2. Student-Led Presentation is an effective tool for enhancing students' overall academic achievement.
3. Student-Led Presentations positively influenced learning outcomes, proving the intervention to be a reliable and impactful method of instruction.

RECOMMENDATIONS

Based on the conclusions, the following recommendations are offered:

1. The integration of Student-Led Presentations (SLP) is encouraged to be systematically included across the BEd curriculum to enhance engagement, critical thinking, and overall academic performance.
2. Structured Rubrics and Peer Feedback Mechanisms is encouraged to accompany every presentation to guide reflection and promote continuous improvement.
3. Faculty are encouraged to adopt learner-centered strategies, including problem-based and peer-teaching models, to sustain academic motivation and performance.
4. Future researchers are encouraged to expand the sample size or conduct comparative studies across multiple programs or institutions to further validate the effectiveness of student-led presentations.

REFERENCES

1. Adedoyin, O. B., et al. (2023). Covid-19 pandemic and online learning: The challenges and opportunities. *Interactive Learning Environments*, 31(2), 863–875. <https://doi.org/10.1080/10494820.2021.1952967>
2. AlOkaily, R. (2023). *Learner-centered instructional design and evaluation: Principles for flexible, ubiquitous, agnostic learning in higher education* (1st ed.). Routledge.
3. An, Y. J., et al. (2021). Examining K-12 teachers' feelings, experiences, and perspectives regarding online teaching during the early stage of the COVID-19 pandemic. *Educational Technology Research and Development*, 69, 2589–2613. <https://doi.org/10.1007/s11423-21-10020-0>
4. Aslan, S., & Reigeluth, C. M. (2015). Examining the challenges of learner-centered education. *Phi Delta Kappan*, 97(4), 63–68. <https://doi.org/10.1177/0031721715593886>
5. Butler, Y. G., et al. (2021). Young learners' voices: Towards a learner-centered approach to understanding language assessment literacy. *Language Testing*, 38(3), 429–455. <https://doi.org/10.1177/0265532220959636>
6. Cole, A., et al. (2021). Student perceptions of online active learning practices and online learning climate predict online course engagement. *Interactive Learning Environments*, 29(5), 866–880. <https://doi.org/10.1080/10494820.2020.1789063>
7. Dayagbil, F. T., et al. (2021, July). Teaching and learning continuity amid and beyond the pandemic. In *Frontiers in Education* (Vol. 6, p. 678692). Frontiers Media SA. <https://doi.org/10.3389/feduc.2021.678692>
8. Eli, T. (2021). Students' perspectives on the use of innovative and interactive teaching methods at the University of Nouakchott Al Aasriya, Mauritania: English department as a case study. *International Journal of Technology, Innovation and Management (IJTIM)*, 1(2), 90–104.
9. Fabriz, S., et al. (2021). Impact of synchronous and asynchronous settings of online teaching and learning in higher education on students' learning experience during COVID-19. *Frontiers in Psychology*, 12, 733554. <https://doi.org/10.3389/fpsyg.2021.733554>
10. Francom, G. M., et al. (2021). Technologies, challenges and needs of K-12 teachers in the transition to distance learning during the COVID-19 pandemic. *TechTrends*, 65(4), 589–601. <https://doi.org/10.1007/s11528-021-00609-3>
11. Gros, B., et al. (2023). Future trends in the design strategies and technological affordances of e-learning. In *Learning, design, and technology: An international compendium of theory, research, practice, and policy* (pp. 345–367). Springer International Publishing. https://doi.org/10.1007/978-3-031-20965-4_20

12. Gupta, A., et al. (2021). To study the impact of Google Classroom as a platform of learning and collaboration at the teacher education level. *Education and Information Technologies*, 26(1), 843–857. <https://doi.org/10.1007/s10639-020-10313-3>
13. McCombs, B. L., et al. (2005). A learner-centered framework for e-learning. *Teachers College Record*, 107(8), 1582–1600.
14. Mystakidis, S., et al. (2021). Deep and meaningful e-learning with social virtual reality environments in higher education: A systematic literature review. *Applied Sciences*, 11(5), 2412. <https://doi.org/10.3390/app11052412>
15. Ouyang, F., et al. (2022). Artificial intelligence in online higher education: A systematic review of empirical research from 2011 to 2020. *Education and Information Technologies*, 27(6), 7893–7925. <https://doi.org/10.1007/s10639-021-10803-1>
16. Pan, H., et al. (2023). Learner-centered teaching catalyzed by teacher learning communities: The mediating role of teacher self-efficacy and collaborative professional learning. *Sustainability*, 15(6), 4850. <https://doi.org/10.3390/su15064850>
17. Richmond, A. S. (2021). Initial evidence for the Learner-Centered Syllabus Scale: A focus on reliability and concurrent and predictive validity. *College Teaching*, 70(1), 33–42. <https://doi.org/10.1080/87567555.2021.1873726>
18. Sablić, M., Miroslavljević, A., & Škugor, A. (2021). Video-based learning (VBL)—Past, present and future: An overview of the research published from 2008 to 2019. *Technology, Knowledge and Learning*, 26(4), 1061–1077. <https://doi.org/10.1007/s10758-021-09522-z>
19. Schmitt, E. M., Hu, A. C., & Bachrach, P. S. (2008). Course evaluation and assessment: Examples of a learner-centered approach. *Gerontology & Geriatrics Education*, 29(3), 290–300. <https://doi.org/10.1080/02701960802397077>
20. Suh, W., & Ahn, S. (2022). Utilizing the metaverse for learner-centered constructivist education in the post-pandemic era: An analysis of elementary school students. *Journal of Intelligence*, 10(1), 17. <https://doi.org/10.3390/jintelligence10010017>
21. Tai, J., et al. (2022). The impact of a virtual reality app on adolescent EFL learners' vocabulary learning. *Computer Assisted Language Learning*, 35(4), 892–917. <https://doi.org/10.1080/09588221.2020.1825205>
22. Toncelli, R., & Rosa, L. (2023). On becoming online educators: Developing hybrid learning-centered pedagogy. *Journal on Empowering Teaching Excellence*, 7(1), Article 4. <https://doi.org/10.26077/c6f6-5fdf>
23. Tractenberg, R. E. (2020, April 21). The assessment evaluation rubric: Promoting learning and learner-centered teaching in higher education. <https://doi.org/10.31235/osf.io/bvwhn>
24. Tsai, Y. C. (2023). Empowering learner-centered instruction: Integrating ChatGPT Python API and Tinker Learning for enhanced creativity and problem-solving skills. In Y. M. Huang & T. Rocha (Eds.), *Innovative technologies and learning. ICITL 2023. Lecture notes in computer science* (Vol. 14099, pp. 538–551). Springer, Cham. https://doi.org/10.1007/978-3-031-40113-8_52
25. Vlachogianni, P., & Tselios, N. (2021). Perceived usability evaluation of educational technology using the System Usability Scale (SUS): A systematic review. *Journal of Research on Technology in Education*, 54(3), 392–409. <https://doi.org/10.1080/15391523.2020.1867938>
26. Wang, Y., et al. (2019). Blended learning for Chinese university EFL learners: Learning environment and learner perceptions. *Computer Assisted Language Learning*, 34(3), 297–323. <https://doi.org/10.1080/09588221.2019.1607881>
27. Wekerle, C., Daumiller, M., & Kollar, I. (2020). Using digital technology to promote higher education learning: The importance of different learning activities and their relations to learning outcomes. *Journal of Research on Technology in Education*, 54(1), 1–17. <https://doi.org/10.1080/15391523.2020.1799455>
28. Xu, Y., et al. (2023). Spontaneous visual database for detecting learning-centered emotions during online learning. *Image and Vision Computing*, 136, 104739. <https://doi.org/10.1016/j.imavis.2023.104739>
29. Zintgraff, T., et al. (2023). Aligning learner-centered design philosophy, theory, research, and practice. In J. M. Spector, B. B. Lockee, & M. D. Childress (Eds.), *Learning, design, and technology*. Springer, Cham. <https://doi.org/10.1007/978-3-031-23653-9>
30. Zitha, I. et al., (2023). Innovative strategies for fostering student engagement and collaborative learning among extended curriculum programme students. *Education Sciences*, 13(12), 1196. <https://doi.org/10.3390/educsci13121196>