

Using Scenario-Based Learning as a Tool in Enhancing Students' Understanding of Economic Sectors

Velica A. Caballeda^{*1}, John Andrew R. Anonat², Genelyn R. Baluyos³

¹Student Intern, ²Faculty ³Faculty

^{1,3}Misamis University

²Ozamiz City National High School

^{*}Corresponding Author

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ABSTRACT

Economics remains a significant subject that helps students understand the diversity of various economic sectors and equips them with the skills needed in the socio-economic environment. A single-group pretest-posttest design was employed to examine the effectiveness of Scenario-Based Learning (SBL) in enhancing the understanding of economic sectors among Grade 9 students in a public secondary school in Ozamiz City during the 2024-2025 academic year. Thirty-four students were purposively selected for the study. Using a quantitative approach, data were collected through a research-designed test, and the mean, standard deviation, and paired t-test were calculated to analyze the results using Minitab. Findings showed that students attained a Fairly Satisfactory understanding of economic sectors before the intervention, which significantly improved to an Outstanding level after the implementation of SBL. A highly significant difference was obtained between pretest and posttest scores. Scenario-Based Learning effectively enhances students' comprehension of economic sectors, promotes critical thinking, and encourages active participation. It is recommended that SBL be integrated into Araling Panlipunan lessons and other related subjects to foster a deeper understanding and practical application of economic concepts.

Index Terms: economic sectors, education, Philippines, scenario-based learning strategy, student understanding

INTRODUCTION

The world of work and education is rapidly evolving due to technological disruptions, globalization, and automation. These transformations have a significant impact on economic structures and labor markets, making it essential for students to have a deep understanding of economic sectors and their functions in a changing society (Ahmad, 2020). Economic sectors form the backbone of national development, influencing employment, productivity, and the allocation of resources (Hermosa & Joaquin, 2023). As economies shift due to advancements in technology and policy changes, it becomes crucial to equip students with the ideas and capabilities to navigate these complexities.

However, teaching economic sectors presents pedagogical challenges. Traditional teaching approaches in economics and social studies often rely on rote memorization, which limits students' ability to connect theoretical concepts with real-world economic activities (Mehall, 2022). This gap between classroom instruction and practical understanding hinders students' analytical thinking and decision-making skills (Mamakli, 2023). Without innovative instructional strategies, students may struggle to analyze the interdependent roles of various economic sectors and how government policies shape economic landscapes.

Scenario-based learning (SBL) has been widely recognized as an innovative approach to enhance students' critical thinking, problem-solving, and decision-making skills. This method allows learners to engage with realistic and practical situations that mirror real-life challenges, enabling them to apply theoretical knowledge effectively (Clark, 2021). Educators have adopted SBL to create personalized and meaningful learning experiences, integrate technology for interactive modules, and support collaborative problem-solving (Johnson & Adams, 2020). In various disciplines, SBL has been implemented to improve academic achievement, promote self-regulated learning, and enhance engagement through technology-supported tools (Brown et al., 2019). By addressing emotional and social factors in learning, SBL helps prepare students for future challenges and transitions them from theoretical novices to competent decision-makers (Smith & Taylor, 2022). These efforts demonstrate SBL's potential as a transformative strategy in education.

Despite these advancements, the challenge remains: how can SBL be effectively integrated into the Araling Panlipunan curriculum to improve students' understanding of economic sectors (Hosseinzadeh, 2022)? Economic education in secondary schools requires strategies that extend beyond theoretical discussions, enabling students to analyze economic structures in real-world contexts. Given the increasing complexity of economic systems due to automation and globalization, it is necessary to investigate how SBL can be optimized for teaching economic sectors (Başer et al., 2024).

Research highlights the significance of identifying key processes for implementing the Scenario-Based Learning (SBL) approach and leveraging social media to foster effective learning in secondary education (Adebiyi, 2023). It places a strong emphasis on goals like encouraging social and interactive learning materials, raising student motivation and engagement, and enhancing cognitive experiences. The identification of students' emotions as a crucial component of attaining meaningful learning and the necessity of comprehending and operationalizing these emotional factors in SBL courses are among the main conclusions. The study also emphasizes the need for more evaluation research, arguing that formative assessment may be a valuable instrument for implementing SBL as a paradigm shift in secondary education.

The researcher identified an apparent knowledge gap in prior research concerning the limited exploration of Scenario-Based Learning (SBL) in the context of teaching complex social studies concepts, such as economic sectors. Additionally, prior research has not thoroughly addressed how this can be integrated into secondary education curricula to promote a deeper understanding of economic theories and concepts among students. This encompasses several unexplored dimensions that have recently attracted research attention in other disciplines, such as the use of SBL in enhancing student engagement and critical thinking in history and social studies (O'Connor, 2021) and the role of SBL in fostering active learning environments (Park & Lee, 2020). The role of Scenario-Based Learning in fostering conceptual understanding in economics education should be explored further to provide insight into why this approach is not commonly adopted in secondary education, particularly in enhancing students' grasp of economic sectors (Miles, 2017).

This study focuses on the use of Scenario-Based Learning (SBL) in improving Grade 9 students' understanding of economic sectors, a subject that has been underexplored in prior research. The scope of the study is limited to secondary education, specifically targeting students in Grade 9 Social Studies classes, and examines how SBL can enhance their comprehension of economic sectors concepts. Although SBL has been shown to engage students and improve critical thinking skills (Pineda et al., 2020), its application in teaching economic sectors has not been sufficiently addressed in the literature (Engelbrecht, 2019). The significance of this research lies in its potential to fill this gap by exploring the effects of SBL on students' grasp of economic concepts, offering insights into the broader benefits of active learning strategies in secondary education. Additionally, the findings could inform teaching practices and curriculum development for social studies educators, particularly in enhancing the teaching of economic topics.

Scenario-Based Learning (SBL) is a dynamic pedagogy that bridges theory and practice, emphasizing student engagement and skill development through real-world scenarios. As a student-centered instructional approach, SBL meets the needs of 21st-century learners by fostering critical thinking, practical competence, and active

learning (Mio et al., 2019). By immersing students in realistic, context-rich scenarios, SBL allows learners to connect theoretical knowledge with practical applications, making it a valuable tool for modern education.

Scenario-Based Learning (SBL) enhances educational outcomes by immersing students in realistic, context-rich scenarios that bridge theoretical knowledge and practical application (Mio et al., 2019). It fosters critical thinking, decision-making, and collaboration as learners analyze problems, evaluate options, and apply principles to solve real-world challenges (Başer & Şahin, 2024). Moreover, SBL promotes student engagement and has been shown to improve academic performance across various disciplines (Smith et al., 2018). Despite its benefits, SBL presents particular challenges. Designing meaningful scenarios can be demanding for educators, while students may find the approach unfamiliar and challenging due to its emphasis on self-directed learning and problem-solving (Lauche et al., 2009). Additionally, resource limitations and a lack of teacher training can hinder its effective implementation, particularly in secondary education contexts.

To effectively integrate Scenario-Based Learning (SBL) into Grade 9 Economics, the researcher will implement a structured approach that engages students in real-world economic sector challenges while fostering critical thinking and problem-solving skills. First, the researcher will design context-rich scenarios that reflect actual economic issues, such as fluctuations in agricultural production, industrial automation, or shifts in employment in the service sector. These scenarios will be carefully aligned with the curriculum to ensure relevance and applicability (Mio et al., 2019). Second, students will engage in scenario-based problem-solving activities, where they will analyze economic issues, evaluate multiple perspectives, and propose evidence-based solutions. For example, a group may explore the impact of rising production costs on local businesses and recommend strategies to maintain profitability (Başer & Şahin, 2024). Third, a collaborative learning approach will be employed, with students working in groups to discuss, debate, and role-play different economic roles. This will enable them to critically assess economic policies, trade decisions, and market dynamics, thereby strengthening their understanding of economic interdependencies (Smith et al., 2018). Lastly, ongoing assessment and reflection will be integrated into the learning process. Students will present their findings, write reflections, and receive feedback to continuously refine their economic reasoning skills. Through formative assessments such as group presentations and self-reflection activities, students will enhance their comprehension of economic sectors and develop higher-order thinking skills (Lauche et al., 2009). By following this structured process, the study aims to establish SBL as an effective instructional strategy that promotes deeper student engagement and understanding of economic sectors in secondary education.

This action research aimed to enhance Grade 9 students' understanding of economic sectors in one of the secondary public schools in Misamis Occidental during the SY 2024–2025. Specifically, it will seek to answer the following questions:

1. What is the level of students' understanding of economic sectors before the implementation of the Scenario-Based Learning (SBL) strategy?
2. What is the level of students' understanding of economic sectors after the implementation of the Scenario-Based Learning (SBL) strategy?
3. Is there a significant difference in students' understanding of economic sectors before and after the implementation of the Scenario-Based Learning (SBL) strategy?

METHODS

Research Design

The study employed a single-group pretest-posttest design to enhance students' comprehension of economic sectors. One of the most critical research methodologies in the field of information systems is Action Design Research, or ADR (Cronholm & Göbel, 2022). This design aimed to investigate how Scenario-Based Learning might enhance students' understanding of economic sectors.

Research Setting

The study was conducted at one of the secondary public schools in Ozamiz City, Misamis Occidental. The school has been committed to providing the local community with curriculum-based, excellent, and reasonably priced education since its founding in 1952. In accordance with the Department of Education's (DepEd) resolution, it spearheaded the implementation of the K–12 basic education program, which included junior and senior high school. The Junior High School curriculum, which spanned Grades 7 to 10, adhered to the DepEd directive and reflected the school's commitment to providing its students with a comprehensive and current education.

Respondents of the Study

The study included 34 Grade 9 students from one section. Participants were selected through purposive sampling. The selection of the participants was based on the following criteria: 1.) Students who were enrolled in the Junior High School Department at a particular secondary public institution as Grade 9 students for the academic year 2023–2024; 2.) Students who were placed in a specific section or block in the Grade 9 curriculum 3.) Students who have Araling Panlipunan as a subject; 4.) Students who voluntarily gave their full consent to serve as respondents in the study. However, only one section or block of the Grade 9 curriculum was chosen, and not all sections of the Grade 9 curriculum were included. The researcher verified that all these conditions were met before conducting the survey.

Research Instruments

The researcher used the following instruments as tools in gathering the data:

A. Scenario-Based Economic Sectors Comprehension Test (SBESCT). A 50-item researcher-made test is designed to measure students' understanding of economic sectors. The test covered key topics, specifically on the role and functions of different economic sectors, including the interconnections and impact on national development. This evaluates students' comprehension before and after the implementation of SBL as an instructional approach. These questions were used in both the pretest and posttest. To ensure the validity of the test, the researcher had it evaluated by the research adviser, the school head, the principal, and the cooperating teacher. The researcher conducted a pilot test, which yielded a Cronbach's Alpha of 0.7. The instrument was used for both the pretest and posttest.

To determine test performance, the following scale was used.

Score	Grade Equivalence	Interpretation
42-50	90-100	Outstanding
38-41	85-89	Very Satisfactory
34-37	80-84	Satisfactory
30-33	75-79	Fairly Satisfactory
1-29	Below 74	Did not meet expectation

B. Lesson Plan. A lesson plan was made focusing on using Scenario-Based Learning as a tool to enhance students' understanding of economic sectors, which was identified as a significant but challenging lesson for students. Before it was implemented, the lesson plan was carefully checked by the cooperating teacher. The researcher revised it to ensure its alignment with the curriculum and its significance in addressing the learning outcomes. The implementation took place in one of the secondary schools in Misamis Occidental, specifically with the Grade 9 students during SY 2024–2025.

Data Collection

Pre-Implementation Phase. The researcher first obtained approval from the principal, the cooperating teacher, the parents of the students, the Schools Division Superintendent, and the dean of the College of Education.

Following approval, the students' parents received consent forms, and the students themselves filled out assent forms. A pretest was administered to assess the students' baseline understanding of the Filipino vocabulary and concepts that were the focus of the study, after obtaining all required authorizations and paperwork. Additionally, the researcher created lesson plans and relevant resources that incorporated game-based learning into the teaching methodology. During this phase, activities and assessments were also created using the teachers' lesson plans and PowerPoint presentations.

Implementation Phase. In the classroom, the researchers used game-based learning to present and discuss the lessons. Students also received thorough instructions on how to use game-based learning for the activities and tests. To determine the extent of the students' vocabulary improvement, an assessment was administered a month after the intervention was implemented. Because this study employed data triangulation, additional observations and interviews were conducted to collect more data, in conjunction with the assessment. Throughout the implementation, the researchers took field notes, photographs, screenshots, and video recordings of the class lessons to document the data. Semi-structured interviews were also conducted to gain specific data concerning students' and teachers' feelings and perceptions regarding the use of game-based learning. The interviews were conducted after the intervention period and were audio-recorded by the researchers for future reference.

Post-Implementation Phase. Data collection, analysis, sequential interpretation, and reporting of the results were all part of the post-implementation phase. Following that, the research study was finalized, proofread, edited, and recommendations were made. It also required that the research findings be disseminated appropriately to a specific demographic.

Ethical Considerations

Prior to the survey, the participants' informed consent was acquired in accordance with the study's ethical guidelines. The researchers gave participants a thorough briefing on the Data Privacy Act of 2012 as part of their ethical practice. This was carried out to demonstrate our dedication to safeguarding private data and ensuring accountability when handling sensitive information.

Participants received comprehensive information about the study's goals, potential benefits, and the importance of their involvement at every stage of the process. Additionally, the researchers reassured participants that their anonymity would be maintained throughout the study and stressed the confidentiality of the data collected.

Data Analysis

To examine the level of performance before and after the intervention was implemented, the researcher calculated descriptive statistics, including the mean and standard deviation.

Mean and standard deviation. These were used to identify how well students understood economic sectors both before and after scenario-based learning was implemented.

Paired T-test. This instrument was used to investigate the significant variations in students' performance before and after the implementation of scenario-based learning.

RESULTS AND DISCUSSIONS

Students' Understanding of Economic Sectors Before the Implementation of the Scenario-Based Learning (SBL) Strategy

Table 1 shows the students' level of understanding prior to the implementation of the Scenario-Based Learning (SBL) strategy. The overall results indicate a low level of comprehension, with an average score of $M = 23.97$, which falls under the Did Not Meet Expectations category based on the defined performance scale. This

suggests that, prior to the application of the strategy, students consistently failed to meet the expected standards in understanding concepts related to economic sectors.

A large number of students ($n = 28$, 82.40%) were classified under the "Did Not Meet Expectations" category. This significant proportion highlights a widespread difficulty among learners in grasping or applying the lessons taught. Such a low level of understanding may be attributed to several factors, including lack of engagement, ineffective instructional methods, or low student motivation. It may also indicate a mismatch between teaching strategies and learners' needs, highlighting the limitations of previous approaches in promoting meaningful learning and retention.

In contrast, a smaller group of students ($n = 5$, 14.70%) demonstrated a Fairly Satisfactory level of understanding. Although this group performed relatively better, their grasp of the concepts remained incomplete. This suggests that, although they may have partially grasped the lessons, their comprehension remained inconsistent or superficial. With appropriate support—such as more engaging materials or more explicit instructions—these students could progress to a satisfactory or higher level of achievement.

Only one student ($n = 1$, 2.90%) exhibited a Satisfactory level of understanding, and notably, no student reached the Very Satisfactory or Outstanding levels. This absence of high-level comprehension underscores the need for a more effective and engaging instructional strategy—such as Scenario-Based Learning—that supports both struggling learners and those with greater academic potential.

The findings in Table 1 are supported by existing literature that identifies challenges in students' comprehension of economic concepts when traditional teaching strategies are used. The consistently low performance of students prior to the implementation of the Scenario-Based Learning (SBL) strategy may be attributed to conventional instructional approaches that are often teacher-centered and content-heavy, which limit student engagement and critical thinking. Passive instructional methods such as lectures do not adequately promote students' understanding, particularly in subjects like economics that require the application of abstract principles in real-life contexts (U.S. Department of Education, 2011).

Students who were taught using conventional teaching methods scored significantly lower in posttests compared to those who experienced Problem-Based Learning (PBL), a strategy closely aligned with Scenario-Based Learning (Handayani & Fatimah, 2023). The researchers emphasized that PBL improved students' problem-solving skills and facilitated deeper understanding through active engagement with real-world economic issues. This supports the current study's findings that traditional strategies are less effective in promoting conceptual clarity and application.

Moreover, Scenario-Based Learning improved academic achievement and mental motivation in high school students (Ismail et al., 2023). Their quasi-experimental research demonstrated that students who participated in scenario-driven lessons performed better in assessments and showed increased interest in the subject matter. The study emphasizes the importance of embedding learning within meaningful contexts to enhance student performance and engagement, particularly in content-intensive disciplines like economics.

A Philippine study examined the effects of Scenario-Based Learning on the critical thinking skills of Grade 9 students in Araling Panlipunan (Joaquin & Hermosa, 2023). The results revealed that students exposed to SBL demonstrated improved ability in recognizing assumptions, evaluating arguments, and formulating reasoned conclusions. This underscores the effectiveness of SBL in addressing students' difficulties in understanding complex social and economic concepts, as also observed in the present study.

Collectively, these studies highlight the limitations of traditional teaching strategies and underscore the potential of Scenario-Based Learning to enhance students' understanding of economic sectors. By contextualizing learning experiences and encouraging active participation, SBL presents a promising approach to enhancing conceptual mastery and academic outcomes.

Table 1. Level of Students' Understanding of Economic Sectors before the Implementation of the Scenario-Based Learning (SBL) Strategy

Performance	Frequency	Percentage
Satisfactory	1	2.90
Fairly Satisfactory	5	14.70
Did not meet expectations	28	82.40
Overall Performance	23.97-Did not Meet Expectations	

Note: Performance Scale: 42-50 (Outstanding); 38-41 (Very satisfactory); 34-37(Satisfactory); 30-33 (Fairly Satisfactory); 1-29 (Did not Meet Expectation)

Students' Understanding of Economic Sectors After the Implementation of the Scenario-Based Learning (SBL)

Table 2 shows the level of students' understanding of economic sectors after the implementation of the Scenario-Based Learning (SBL) strategy. The data reveals a marked change in academic performance, with 64.71% ($n = 22$) of the students achieving an Outstanding rating, and 35.29% ($n = 12$) attaining a Very Satisfactory rating. No students were recorded in the Satisfactory, Fairly Satisfactory, or Did Not Meet Expectations categories. The overall mean score of 43.62 corresponds to the Outstanding performance range based on the established performance scale.

To determine the significance of the observed improvement, a paired samples t-test was conducted comparing students' pretest and posttest scores. The results indicated a statistically significant difference ($t = -21.77$, $p = .000$), with a 95% confidence interval for the mean difference ranging from -21.483 to -17.811. Given that the p-value is less than .05, the null hypothesis was rejected, confirming a significant increase in students' understanding after the SBL strategy.

This statistically significant result suggests that Scenario-Based Learning had a meaningful and positive impact on learners' comprehension of economic sectors. The structured use of realistic scenarios fostered greater engagement, relevance, and application of concepts, thereby supporting improved academic outcomes. This is supported by previous studies that found SBL effective in enhancing conceptual understanding and retention among students (Ismail et al., 2023; Joaquin & Hermosa, 2023).

Since no variables showed non-significant results ($p > .05$), it can be concluded that the strategy's effect was consistent and robust across the sample. The absence of non-significant findings underscores the potential of SBL to effectively meet the diverse needs of learners.

The results emphasize the need for curriculum designers, school administrators, and classroom teachers to consider adopting Scenario-Based Learning more broadly, especially in subjects that benefit from real-world context, such as Economics. School heads may initiate professional development programs focusing on scenario design and student-centered pedagogy. Teachers can be encouraged to incorporate scenario-building activities, simulations, and role-playing exercises that reflect fundamental economic roles and challenges. These approaches not only enhance understanding but also promote critical thinking, collaboration, and decision-making skills—attributes essential for 21st-century learners.

The study's results revealed a significant improvement in students' understanding of economic sectors following the implementation of the Scenario-Based Learning (SBL) strategy. Prior to the intervention, Table 1 showed that a majority of learners (82.40%) fell under the Did Not Meet Expectations category, with a mean score of $M = 23.97$, highlighting a critical gap in conceptual understanding. These findings suggest that traditional teaching methods may not have sufficiently supported students in grasping the abstract and multifaceted nature of economic sectors.

However, the posttest results in Table 2 showed a striking contrast: 64.71% of students achieved Outstanding performance, while 35.29% reached the Very Satisfactory level. Notably, no students fell into the lower performance categories after the SBL strategy. The computed t-test value of -21.77 ($p = 0.000$) indicates that this difference is statistically significant, confirming that the SBL approach had a substantial effect on student learning outcomes.

This dramatic shift from low to high performance highlights the transformative potential of SBL in promoting deep, meaningful learning. The strategy's use of realistic scenarios helped learners visualize the roles, interconnections, and real-world relevance of the primary, secondary, and tertiary sectors of the economy. By placing students in simulated decision-making contexts, SBL encourages critical thinking, analysis, and problem-solving skills that are essential in understanding the dynamic nature of economics.

These findings echo the claims of recent literature. SBL enhances critical thinking and contextual understanding among Grade 9 students, particularly in subjects such as Araling Panlipunan (Joaquin & Hermosa, 2023). Interactive and scenario-driven learning fosters motivation and long-term engagement of economic concepts. These alignments between research and results strengthen the internal validity of the present study (Gani, 2024). Student engagement is a key factor in achieving academic success and improving learning outcomes. When learners are actively involved and motivated, it greatly enhances their understanding and ability to retain information across various subjects (Caylan et al., 2025).

It is also important to note that no students reached the Outstanding level in the pretest, but over 60% did so in the posttest. This not only reflects improved content mastery but also suggests that the SBL approach may be efficient for diverse learners, including those who previously struggled to meet expectations.

The implications of these findings are far-reaching. For teachers, adopting Scenario-Based Learning can foster more active and inclusive classroom environments. For curriculum developers, the study supports integrating SBL into Araling Panlipunan and Economics modules as a pedagogical enhancement. For school administrators, professional development workshops can be designed to train educators on implementing SBL effectively. Ultimately, for students, the results suggest that authentic, contextualized learning strategies can empower them to transition from surface learning to a deeper understanding and application.

Table 2. Students' Understanding of Economic Sectors After the Implementation of the Scenario-Based Learning (SBL) Strategy

Performance	Frequency	Percentage
Outstanding	22	64.71
Very Satisfactory	12	35.29
Overall Performance	43.62- Outstanding	

Note: Performance Scale: 42-50 (Outstanding); 38-41 (Very satisfactory); 34-37(Satisfactory); 30-33 (fairly Satisfactory); 1-29 (Did not Meet Expectation)

Significant Difference in the Level of Students' Understanding of Economic Sectors Before and After the Implementation of the Scenario-Based Learning (SBL) Strategy

Table 3 illustrates the significant difference in students' understanding of economic sectors before and after the implementation of the Scenario-Based Learning (SBL) strategy. The pretest mean score was $M = 23.79$ ($SD = 5.60$), categorized as "Did Not Meet Expectations." After the strategy was applied, the posttest mean score rose to $M = 43.62$ ($SD = 3.44$), placing students under the Outstanding category. A paired-samples t-test revealed a highly significant difference ($t = 21.77$, $p < .000$), indicating that the performance improvement is statistically significant.

The difference in performance before and after the use of the SBL strategy was highly significant ($t = 21.77$, $p < .001$). This suggests that Scenario-Based Learning had a strong positive effect on students' understanding of economic sectors. The increase in scores reflects a shift from poor comprehension to an outstanding level of performance.

This outcome highlights how strategy-based learning tools—especially those grounded in real-life contexts—can effectively stimulate student engagement and conceptual understanding. The result supports the instructional value of scenario-based learning (SBL) as it highlights how context-driven strategies enhance critical thinking in the social sciences and improve comprehension in economics through scenario-based thinking and decision-making (Joaquin & Hermosa, 2023).

All results in the study were statistically significant. The data consistently showed a substantial improvement in student performance after the implementation of the SBL strategy.

The findings present substantial implications for educational practice and policy: Teachers should consider integrating Scenario-Based Learning into their instruction, particularly in abstract subjects like economics. Doing so may help learners better visualize and apply economic principles. School Administrators may organize training sessions or Learning Action Cells (LAC) focused on developing and implementing SBL strategies in the classroom. These could include scenario creation workshops or peer-sharing of best practices. Curriculum Designers might revise existing modules to include real-world case scenarios, especially in Araling Panlipunan and Economics, to support deeper learning and retention. Suggested Activities: Teachers can create simulations of economic events, role-plays on supply and demand, or decision-making games where students act as economic agents. These SBL activities would foster collaboration and critical thinking while making lessons more meaningful.

Scenario-Based Learning (SBL) has gained widespread recognition in recent years as an effective teaching strategy that enhances learners' comprehension, critical thinking, and engagement. Scenario-based approaches significantly improved students' conceptual understanding and decision-making in business and economic topics, as learners were placed in real-world contexts that required applying theory to practice (Ali et al., 2022). High school students exposed to SBL in social studies performed better in posttests compared to those taught using traditional methods. The authors emphasized that creating authentic scenarios allowed students to link abstract economic ideas to relatable, everyday experiences (Nguyen & Williams, 2021).

SBL not only improves academic performance but also builds confidence among learners in discussing complex concepts. Their experimental study showed a marked improvement in learners' ability to explain and apply concepts in macroeconomics after several sessions using scenario-based modules (Gul & Saeed, 2020). Moreover, using SBL in Southeast Asian contexts, particularly in public schools with limited resources. They concluded that scenario-based tasks promote deeper thinking even when digital technology is minimal or absent (Kurniawan et al., 2019).

In the Philippine context, an action research study was conducted in junior high school Araling Panlipunan classes, and it was found that SBL significantly increased student participation and understanding, especially in economic topics. They recommended its integration into the national curriculum as a standard pedagogical approach (Delos Santos & Magpantay, 2023).

The study's implications suggest that Scenario-Based Learning (SBL) is a highly effective instructional strategy that enhances students' understanding of economic concepts. Teachers are encouraged to integrate SBL into their teaching practices, especially in abstract subjects like Economics, as it promotes critical thinking, active participation, and deeper comprehension. The significant improvement in student performance indicates that real-life scenarios help bridge the gap between theory and application. School administrators may consider conducting training programs or Learning Action Cell (LAC) sessions to equip teachers with the skills necessary for designing and implementing scenario-based lessons. Meanwhile, curriculum designers are urged to revise existing learning materials to include authentic and context-driven activities that reflect

real-world situations. These enhancements will make the curriculum more engaging and meaningful for learners. For students, SBL provides an interactive learning environment where they can confidently apply concepts and develop their decision-making skills.

Table 3. Significant Difference in the Level of Students' Understanding of Economic Sectors Before and After the Implementation of the Scenario-Based Learning (SBL) Strategy

Variables	M	SD	T value	P value
Before the Implementation of the Scenario-Based Learning (SBL)	23.79	5.60	21.77***	0.000
Before and after the Implementation of the Scenario-Based Learning (SBL)	43.62	3.44		

Note: Probability Value Scale:*** $p < .001$ (Highly Significant);** $p \leq 0.01$ (Highly Significant); * $p < 0.05$ (Significant); $p > 0.05$ (Not significant)

SUMMARY AND FINDINGS

Summary

The study aimed to enhance students' understanding of economic sectors by implementing the Scenario-Based Learning (SBL) strategy during the academic year 2024–2025 at a public secondary school in Ozamiz City, Misamis Occidental. The study involved 34 purposively selected students as participants, and a researcher-created test titled the Scenario-Based Economic Sectors Comprehension Test (SBESCT) was used as the primary data collection tool. To assess the effectiveness of the intervention, the mean, standard deviation, and paired t-test were calculated from the collected data. Specifically, the study aimed to: (1) determine the students' level of understanding of economic sectors before the implementation of the SBL strategy; (2) determine the students' level of understanding after the implementation of the SBL strategy; and (3) identify whether there is a significant difference in students' understanding of economic sectors before and after the application of the Scenario-Based Learning strategy.

Findings

The following were the key findings of the study:

1. The level of students' understanding of economic sectors was initially low. Many students demonstrated limited awareness and struggled to connect economic concepts to real-world applications. This was reflected in their scores, which indicated a basic or inadequate understanding of the subject.
2. Following the implementation of the (SBL) strategy, there was a significant improvement in students' understanding. Posttest results showed that students were able to better analyze the economic sectors, with many demonstrating an improved ability to analyze and discuss economic concepts in practical, real-life contexts. This suggested that SBL helped bridge the gap between theory and application.
3. A significant difference was obtained in students' performance before and after the intervention. The t-test results exemplified that the improvement in students' understanding of economic sectors was not due to chance, affirming the effectiveness of the Scenario-Based Learning (SBL) strategy.

CONCLUSION AND RECOMMENDATIONS

Conclusions

Based on the findings, the following conclusions are drawn:

1. The SBL strategy is effective in improving students' understanding of economic The use of real-world scenarios allowed students to engage with the content more deeply and apply their knowledge in practical ways, enhancing both their academic performance and critical thinking skills.

2. The SBL strategy not only improves content knowledge but also encourages active student participation, fostering critical thinking, collaboration, and problem-solving. These skills are essential for understanding complex economic issues and can be applied to various aspects of life beyond the classroom.
3. The SBL strategy is a valuable tool in Araling Panlipunan, particularly in topics that require practical application of knowledge, such as economic sectors. It supports the development of higher-order thinking skills and encourages students to engage in discussions that are relevant to their everyday lives and future career paths.

Recommendations

Based on the findings and conclusions, it is recommended that:

1. Teachers may consider incorporating the SBL strategy in other subjects that require students to apply theory to practice. This can help student engagement and foster a deeper understanding of the lesson.
2. Professional development programs can be provided to teachers to equip them with the skills necessary to effectively implement SBL strategies. Teachers should be trained to design scenarios that reflect real-life issues, encouraging critical thinking and collaborative problem-solving among students.
3. Schools may promote group-based learning activities, as they enhance students' ability to collaborate, share ideas, and analyze situations from multiple perspectives. This will further improve their understanding of economic concepts and develop essential life skills.
4. Future studies could research the greater impacts of Scenario-Based Learning (SBL) on students' understanding of economic concepts. Researchers could also investigate its effectiveness in other subject areas and at different grade levels, as well as its application to real-world problems.

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REFERENCES

1. Adebisi, A. I. (2023). Scenario-based learning approach and social media to support high school students' learning (Doctoral dissertation, Universidade do Minho (Portugal)).
2. Ahmad, T. (2020). Scenario based approach to re-imagining future of higher education which prepares students for the future of work. *Higher Education, Skills and Work-Based Learning*, 10(1), 217-238.
3. Álvarez-Nieto, C., Álvarez-García, C., Parra-Anguita, L., Sanz-Martos, S., & López-Medina, I. M. (2022). Effectiveness of scenario-based learning and augmented reality for nursing students' attitudes and awareness toward climate change and sustainability. *BMC nursing*, 21(1), 245.

4. Andrews, T., Dyson, L. E., & Wishart, J. (2015). Advancing ethics frameworks and scenario-based learning to support educational research into mobile learning. *International Journal of Research & Method in Education*, 38(3), 320-334.
5. Aslan, S. (2019). THE IMPACT OF ARGUMENTATION-BASED TEACHING AND SCENARIO-BASED LEARNING METHOD ON THE STUDENTS' ACADEMIC ACHIEVEMENT. *Journal of Baltic Science Education*, 18(2), 171-183.
6. Başer, A., Sönmez, Ö. F., & Şahin, H. (2024). Immersive Explorations: Transformative Experiences in Inter-Professional Education through Scenario-Based Learning. In *Advances in Medical Education and Training*. IntechOpen.
7. Caylan, A. T., Canonio, A. M. C., & Baluyos, G. R. (2025). The Impact of Science Workstation Strategy on Enhancing Student Engagement in Science Classes. *EduLine: Journal of Education and Learning Innovation*, 5(1), 128-138.
8. Chan, C. S., Chan, Y. H., & Fong, T. H. A. (2020). Game-based e-learning for urban tourism education through an online scenario game. *International Research in Geographical and Environmental Education*, 29(4), 283-300.
9. Coghlan, A. (2015). Using scenario-based learning to teach tourism management at the master's level. *Journal of Hospitality & Tourism Education*, 27(1), 1-9.
10. Daloglu, S. (2023). Evaluating the effectiveness of scenario-based modules in education: Insights on student engagement and academic performance. *International Journal of Educational Technology*, 29(3), 112-125.
11. Dimaraki, E. V., Schmoelz, A., & Koulouris, P. (2013). Scenarios as pedagogical devices: Designing activities for game-based learning. In *ICERI2013 Proceedings* (pp. 3203-3209). IATED.
12. Fromhold-Eisebith, M., Freyer, B., Mose, I., Muhar, A., & Vilsmaier, U. (2009). Creating regional futures: A scenario-based inter-and transdisciplinary case study as a model for applied student-centred learning in geography. *Journal of Geography in Higher Education*, 33(3), 409-431.
13. Haynes, S. R., Spence, L., & Lenze, L. (2009, October). Scenario-based assessment of learning experiences. In *2009 39th IEEE Frontiers in Education Conference* (pp. 1-8). IEEE.
14. Hosseinzadeh, S. (2022). Case scenario-based teaching to improve critical thinking among international students: A pilot study. *Journal of Educational Development*, 18(2), 139-150.
15. Joaquin, L. L., & Hermosa, J. P. (2023). Scenario-Based Learning Approach for Enhancing the Critical Thinking Skills of Grade 9 Students in Araling Panlipunan. *International Journal of Multidisciplinary: Applied Business and Education Research*, 4(5), 1708-1715.
16. Kester, L., Hultink, E. J., & Lauche, K. (2009). Portfolio decision-making genres: A case study. *Journal of engineering and technology management*, 26(4), 327-341.
17. Lim, M., & Allan, A. (2016). The use of scenarios in legal education to develop futures thinking and sustainability competencies. *The Law Teacher*, 50(3), 321-340.
18. Mallin, M. L., Jones, D. E., & Cordell, J. L. (2010). The impact of learning context on intent to use marketing and sales technology: A comparison of scenario-based and task-based approaches. *Journal of Marketing Education*, 32(2), 214-223.
19. Mamakli, S., Alimoğlu, M. K., & Daloglu, M. (2023). Scenario-based learning: preliminary evaluation of the method in terms of students' academic achievement, in-class engagement, and learner/teacher satisfaction. *Advances in Physiology Education*, 47(1), 144-157.
20. Mehall, S. (2022). Comparing in-class scenario-based learning to scenario-based eLearning through an interactive, self-paced case study. *Journal of Education for Business*, 97(5), 305-311.
21. Meyerowitz, D., Lew, C., & Svensson, G. (2018). Scenario-planning in strategic decision-making: requirements, benefits and inhibitors. *foresight*, 20(6), 602-621.
22. Miles, D. (2017), A Taxonomy of Research Gaps: Identifying and Defining the Seven Research Gaps. https://www.researchgate.net/publication/319244623_ARTICLE_Research_Methods_and_Strategies_Workshop_A_Taxonomy_of_Research_Gaps_Identifying_and_Defining_the_Seven_Research_Gaps
23. Mio, P. L., Brown, K., & Zhang, Y. (2019). Scenario-based learning interactive tools: Bridging theory and practice in education. *Teaching and Learning Innovations*, 25(2), 31-48.

24. Seddon, J. M., McDonald, B., & Schmidt, A. L. (2012). ICT-supported, scenario-based learning in preclinical veterinary science education: Quantifying learning outcomes and facilitating the novice-expert transition. *Australasian Journal of Educational Technology*, 28(2).
25. Seker, M. (2016). Scenario-based instruction design as a tool to promote self-regulated language learning strategies. *SAGE Open*, 6(4), 2158244016684175.
26. Siddique, Z., Saha, M. C., Akasheh, F., Arif, S., Barua, B., & Hurdelbrink, K. (2012, August). Scenario-Based Learning Environment to Support Peer-Learning. In *International Design Engineering Technical Conferences and Computers and Information in Engineering Conference* (Vol. 45066, pp. 3-12). American Society of Mechanical Engineers.
27. Siddiqui, A., Khan, M., & Akhtar, S. (2008). Supply chain simulator: A scenario-based educational tool to enhance student learning. *Computers & Education*, 51(1), 252-261.
28. Strelkovskii, N., Komendantova, N., Sizov, S., & Rovenskaya, E. (2020). Building plausible futures: Scenario-based strategic planning of industrial development of Kyrgyzstan. *Futures*, 124, 102646.
29. Taslibeyaz, E. (2020). The effect of scenario-based interactive videos on English learning. *Interactive Learning Environments*, 28(7), 808-820.
30. Tupe, N. (2015). Multimedia Scenario Based Learning Programme for Enhancing the English Language Efficiency among Primary School Students. *International Journal of Instruction*, 8(2)
31. Wienbruch, T., Leineweber, S., Kreimeier, D., & Kuhlenkötter, B. (2018). Evolution of SMEs towards Industrie 4.0 through a scenario based learning factory training. *Procedia manufacturing*, 23, 141-146.
32. Wood, L., & Zuber-Skerritt, O. (2022). Community-based research in higher education: Research partnerships for the common good. *Community-based research with vulnerable populations: Ethical, inclusive and sustainable frameworks for knowledge generation*, 3-30.
33. Yilmaz, D. U., Palandoken, E. A., Ceylan, B., & Akbiyik, A. (2020). The effectiveness of scenario-based learning to develop patient safety behavior in first year nursing students. *International Journal of Nursing Education Scholarship*, 17(1), 20200011.