ACQUIRING knowledge through play: Integrating Sustainable Development Goals and Lasallian Service Learning within a role-play gamification initiative for sixth grade social science and values education

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Abstract

This educational initiative engages Grade 6 students at De La Salle University Integrated School in an interdisciplinary learning experience that combines Sustainable Development Goals (SDGs) with Lasallian Service Learning (LSL) through a Role-Play Gamification Design Project. Students investigate developmental topics concerning Philippine presidents from 1946 to now, integrating Social Science with Christian Living and Values Education (CLVE). The initiative promotes critical analysis and ethical reasoning while students create educational role-playing games that incorporate strategic choices and situations grounded in values. It culminates in a Reach-in Program, where DLSU Integrated School students collaborate with Lumaniag Elementary School in Brgy. Lumaniag, Lian, Batangas, to engage in games and address real-world challenges. This program encourages critical thinking and education based on core values, offering students an understanding of socio-economic challenges and historical contexts while nurturing social consciousness and a worldwide viewpoint in line with Lasallian ideals.

Keywords: Sustainable Development Goals, Lasallian Service Learning, social science, values education, role-play gamification

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1. Introduction

Education shapes young minds, nurtures values, and helps students become engaged global citizens. To nurture these kids, modern education must integrate creative teaching approaches that combine significant learning experiences with essential life skills (UNESCO, 2017). One is gamification, which uses game elements in non-game settings to improve student engagement and teamwork (Deterding et al., 2011). Particularly in Social Science and Christian Living & Values Education, role-play gamification provides a dynamic avenue for students to explore complex topics while fostering empathy and real-world problem-solving. This approach is meaningful when aligned with the Sustainable Development Goals (SDGs) and Lasallian Service Learning principles, forming an interdisciplinary platform beyond traditional classrooms. The Sustainable Development Goals (SDGs) by the United Nations aim to solve worldwide problems such as inequality, poverty, and environmental sustainability (United Nations, 2015). Integrating these 17 SDGs into the curriculum will help the students develop an awareness of pressing international issues and an understanding of their roles in contributing to a better world by providing practical solutions to real-world challenges. Through role-play scenarios, students can assume active roles as change-makers, allowing them to connect classroom content with the lived experiences of marginalized communities. In addition, integrating the SDGs with Lasallian values emphasizes compassion, social justice, and active service, cultivating learners' intellectual growth and moral and spiritual development (Lasallian Reflection, 2021). Additionally, this interactive approach transforms traditional classrooms into dynamic spaces where students actively engage with real-world problems while internalizing moral and ethical values in a practical context (UNESCO, 2017).

Background and Context - At De La Salle University Integrated School (DLSU IS), the Grade 6 curricula for Social Science and Christian Living and Values Education (CLVE) are designed to offer students a holistic education that integrates academic knowledge, ethical values, and a deep sense of social responsibility. These subjects aim to prepare students for academic success and becoming active, compassionate, and responsible citizens. The Social Science 6 Curriculum focuses on Philippine history, from the events that led to American colonization to the establishment of a self-governing nation to the present socio-political condition of the country. The curriculum begins by deepening students' understanding of the events that led to American colonization and the country's socio-cultural, economic, and political situations during that period. Then, the lesson will unfold by allowing learners to understand how the Filipinos struggled for self-governance from America, the establishment of the Commonwealth Government, and the events in the Philippines during the Japanese occupation. Finally, it will assist learners to understand the events that took place in the country, from the establishment of the 3rd Philippine Republic to the current political administration.

Lessons are presented in a learner-centered, constructivist, experiential, collaborative, and reflective manner to understand better important knowledge, skills, and attitudes for this level. Thus, it envisions that learners exhibit the Expected Lasallian Graduate Attributes (ELGAs) of critical and creative thinking, effective communication, reflective lifelong learning, service-driven citizenship, and environmental stewardship at the end of the lesson. The Grade 6 program is anchored on the K to 12 Curriculum. The Christian Living and Values Education 6 course assists students in grasping the foundation of the Church instituted by Jesus Christ and its purpose in the divine plan of God, learning compassion within the Church, proclaiming the Good News, and walking in the footsteps of Christ. The course includes fostering spiritual development, the practice of daily Christianity, and sustaining faith during difficulties.

The curriculum fosters practical and reflective thought processes and problem-solving applications from different fields, which nurture students' scientific reasoning and capacity to use the acquired knowledge for self-enhancement. Teaching young learners' abstract concepts like ethical reasoning, sustainable development goals (SDGs), and historical analysis poses several challenges. Young learners, particularly sixth graders, still develop critical thinking skills and often struggle to connect these teachings and concepts to their daily dynamic sources like the Christian Living Education 6 (CLVE) and Social Science at De La Salle University Integrated School provide a framework to address this by integrating ethical reasoning, global citizenship, and historical context into relatable scenarios.

Times Higher Education mentioned, "Educators can make these abstract concepts more tangible by linking ethical dilemmas to real-life situations, using role-play to engage with SDGs, and drawing parallels between historical events and contemporary issues." The comprehensive approach enhances students' grasp of the context understanding and appreciation. It empowers them to see their role in addressing global challenges, fostering a sense of agency and engagement in their learning process. Students can meaningfully appreciate and apply their understanding of these complex topics through interdisciplinary learning and practical applications rooted in Christian values (Saunders & Wong, 2020).

Objectives of the Initiative - The objectives of this initiative are the following

➢ To enhance students' critical thinking, ethical reasoning, and collaboration, and having them do tasks that require role-playing providing real-life scenarios.

➢ To connect theory with practice by designing and implementing role-play games, which comprise historical events, ethical issues, and real-world SDGs

➢ To nourish the spirit of Lasallian values in students by integrating programs like the Reach-In Program, wherein students use their knowledge to solve community problems to develop empathy, social equity, and globalization

Significance of the Study - This research study develops interdisciplinary learning models by integrating Social Science, Christian Living and Values Education, and frameworks such as the United Nations's 17 Sustainable Development Goals (SDGs). Linking gamification with these two subjects and Lasallian Service-Learning principles is a development in research that provides a holistic framework that bridges learning's cognitive, affective, and ethical dimensions. Drake and Reid (2018) found that interdisciplinary approaches enhance student engagement and understanding by highlighting connections across different fields. This study emphasizes how interconnected subject areas can prepare students for real-world challenges through their understanding of complex societal issues. Integrating Lasallian values with the SDGs highlights the importance of moral and spiritual development alongside academic growth. Lasallian education focuses on forming individuals committed to faith, service, and communion, while the SDGs address global challenges like inequality, environmental sustainability, and poverty (Lasallian Reflection, 2021; United Nations, 2015).

This research shows that basic education can help young students develop a sense of ethical responsibility and global citizenship. It prepares them to be more socially aware and empathetic individuals. It demonstrates how basic education corresponds with both regional and international objectives through this integration. This research introduces an innovative approach to teaching by utilizing role-play gamification, which enhances engagement, critical thinking, and collaborative learning (Hamari et al., 2014). Thus, gamification with service learning motivates students to solve real-world issues while enjoying engaging in such an experiential educational platform. This study emphasizes using gamified approaches to integrate the Sustainable Development Goals (SDGs) and Lasallian values, presenting a new model for reimagining traditional teaching methods. It positions gamification as a motivational tool and a transformative pedagogical strategy that bridges academic content with life skills and moral development.

Contribution to Interdisciplinary Learning Models - This study contributes to interdisciplinary learning models by creating a new and integrated framework spanning diverse concepts and Christian Values, focusing on the ethical and social-emotional dimensions of development, applying creative pedagogies such as gamification and service learning, proving the model to have real-world impact and positive student outcomes, and valuing diverse thinking that encourage students to share their unique and creative ideas and perspectives through creating gamified output. This study can also demonstrate using this integrated approach as a model for educators and researchers to implement more effective and engaging interdisciplinary learning experiences for basic education, particularly for grade school.

Emphasis on Lasallian values and global SDG priorities in basic education - The study strongly emphasized that despite its universal and needs-driven character, Christian values and the international focus of the SDGs should remain an integral part of a holistic framework of basic education—the alignment with Christian values. The Lasallian education focuses on forming young minds committed to faith, service, and communion in mission. It stresses the importance of moral and spiritual growth, academics, and a holistic approach to education. The study notes that the SDGs address critical global challenges—such as inequality, environmental sustainability, and poverty. The transformative power of this initiative is evident. By embedding SDGs in the curriculum and Lasallian Service Learning, students can be taught how to become active participants with a sense of ethical obligation to understand global citizenship. It also marks a significant contribution to understanding how these national educational imperatives can coexist, with the study demonstrating how the intersection of both Lasallian Service Learning, Christian Values, and the SDGs could represent a framework for ensuring that students engage with global challenges through an ethical and compassionate mindset. It also begins to help them think about engaging active members in helping to build a more just and sustainable world [Rafelle Pitrini, 2020].

Innovation in Educational Strategies Through Gamification - The study is innovative in pedagogical approaches via its novel application of gamification. It innovatively combines gamification and interdisciplinary learning, especially with Social Science, Christian Living and Values Education, the SDGs, and Lasallian service-learning principles. This unique blend distinguishes it from conventional teaching. Gamification of learning environments may be a powerful tool for acquiring knowledge and enhancing essential skills such as problem-solving, collaboration, and communication (Rabah et al., 2015). It utilizes the power of gamification to enhance engagement and motivation. Interactive learning through gamification elements such as role-playing involves students more and makes them more interested in learning. As per the study, gamification can aid in bringing out critical thinking, problem-solving, and teamwork skills. These are fundamental 21st-century skills necessary for a globalized, complicated world [Z. Zainuddin, et.al].

The primary approach of combining gamification with service learning will bridge the gap between academic content and real-world application. Through project-based learning, students can apply their classroom learning to solve real-world problems, which makes the lessons more relevant and impactful. The study defines gamification as a construct of education and design. Moreover, that gamification can transcend play and become a catalyst for transformative learning, particularly for grade school learners. Overall, the study is innovative as the approach to gamification is seen as the main element of the interdisciplinary learning model, and this innovative method not only positively contributes to the literature but also demonstrates how such models are implemented. This new development can genuinely transform how we educate and educate.

2. Conceptual Framework

The study's conceptual framework integrates three foundational components: Gamification in Education, Sustainable Development Goals (SDGs), and Lasallian Service Learning (LSL). These components collaborate effectively to develop a pioneering method that promotes interdisciplinary education, ethical decision-making, and social awareness among sixth-grade students.
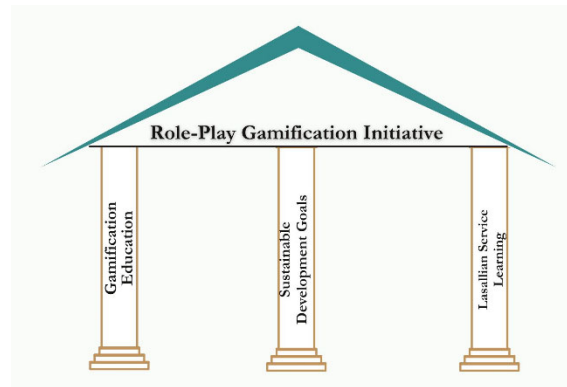
Figure 1. Conceptual framework illustrating the integration of Gamification in Education, Sustainable Development Goals (SDGs), and Lasallian Service Learning (LSL) in the Role-Play Gamification Initiative. *The framework highlights the interplay of these components to foster critical thinking, ethical reasoning, and social consciousness among students.*

The first pillar of the framework is **Gamification in Education**, which emphasizes active learning and engagement through role-play and decision-making. Gamification transforms traditional educational methods by incorporating game design elements that motivate students to participate actively and think critically. Students understand key concepts and develop strategic problem-solving skills by taking on roles connected to historical figures and events studied in Social Science 6 topics. This study examined two key periods: the Third Republic of the Philippines and the contemporary era. The second pillar, **Sustainable Development Goals (SDGs)**, provides a dimension to the learning process globally in context. This component motivates students to investigate and solve real-world problems. Using historical analysis and linking to the SDGs, this framework allows students to understand different socio-economic issues better while developing a sense of global citizenship. The elements are derived from the United Nations' 2030 Agenda for Sustainable Development. Finally, De La Salle University's **Lasallian Service Learning (LSL)** is this initiative's philosophical and pedagogical foundation. This component emphasizes community engagement and ethical development inspired by the Lasallian principles of faith, service, and communion in mission. In a Lasallian environment, young Lasallians learn to work with partner schools to implement their knowledge in a service-focused context, connecting academic concepts with significant real-world effects. The intersection of these three pillars represents the **Role-Play Gamification Initiative**, which integrates Social Science and Christian Living and Values Education (CLVE). This initiative promotes critical thinking, ethical reasoning, and social awareness, empowering students to address local and global challenges while embodying Lasallian values.

2.1 Theoretical Basis

Gamification in Education: Principles and Effectiveness - To improve engagement, motivation, and hands-on learning, gamification in education uses game elements (Deterding et al., 2011). Gamification helps keep learners engaged and interested. It does this by using rewards, competition, and role-playing activities. Gamified methods improve teamwork and critical thinking and deepen understanding of concepts in younger learners (Hamari et al., 2014). These principles are essential in social science and Christian living, emphasizing how interactive education can improve understanding of complex concepts.

Role of SDGs in shaping 21st-century educational priorities - The SDGs emphasize preparing the 21st century students to address world problems like poverty, inequality, and environmental sustainability (United Nations, 2015). Embedding these in the curriculum allows educators to link academic learning to real-world issues, enabling students to create actionable solutions. This method promotes education and global citizenship, helping students evaluate their roles in a sustainable future. The SDGs offer an interdisciplinary educational framework that aligns with current priorities.

Lasallian Service Learning: Philosophical and pedagogical foundation - Lasallian service-learning integrates community engagement with academic reflection, emphasizing the values of faith, service, and social justice (Lasallian Reflection, 2021). This approach connects classroom learning with the experiences of marginalized communities, deepening students' understanding of societal issues. Lasallian service-learning supports transformative education across intellectual, moral, and spiritual dimensions by fostering empathy and ethical responsibility. Students internalize Lasallian values through reflective practices and commit to meaningful service and lifelong learning. The Lasallian Service Learning Framework combines three learning theories of service learning (Challenge-Based Learning, the Lasallian Reflection Framework, and service learning) to produce a layered and developmental education experience. CBL, an education program created within the "Apple Classrooms of Tomorrow—Today" (ACOT2) program, is anchored to authentic problem-solving and challenges that prepare students to think critically and contribute actively to 21st-century issues. The Lasallian Reflection Framework, rooted in the Church's social teachings through the Pastoral Spiral—"See, Judge, Act"—guides students in reflective thinking, encouraging them to discern and act by the values of faith, service, and communion. At the same time, Service Learning, as informed by John Dewey's theory of experiential-based teaching, stresses learning by doing, connecting academic knowledge to service, and social responsibility. Individually and collectively, these three frameworks are used harmoniously to enable students to become intellectually and virtuously what they believe should be (their "mission" as agents of faith, service, and justice in the world informed by Lasallian values and ideals).

2.2 Integration Model

The Integration Model for this study demonstrates the dynamic interconnection between Sustainable Development Goals (SDGs), Social Science, Christian Living and Values Education (CLVE), gamification, and values formation. By integrating these components, the model offers a unified method for creating interdisciplinary educational experiences that develop compassion, critical thinking, and global awareness in the sixth grade De La Salle University Integrated School students.
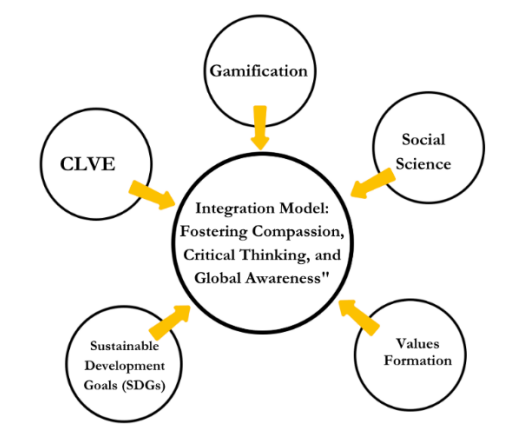

Figure 2: Interdisciplinary Integration Model for Values Formation and Global Awareness in Sixth-Grade Education

2.3 Linking SDGs with Social Science and CLVE

The SDGs offer a contextual framework for teaching Social Science and CLVE by connecting historical and ethical concepts to contemporary global challenges. For instance, discussions on the past Philippine president's developmental policies during the Third Republic are enriched by aligning them with modern SDG priorities such as poverty eradication (SDG 1), quality education (SDG 4), and climate action (SDG 13). CLVE creates linkages that enable the students to examine the ethics of leadership and its relevance for service and faith. This

connection helps students appreciate the value of historical events and actions and their societal and environmental consequences.

2.4 Gamification as a Bridge to Interdisciplinary Learning

As used in this initiative, gamification combines three essential components: Social Science, CLVE, and SDGs to create engaging learning experiences. Students interact with cross-disciplinary content by creating role-playing games that imitate historical events and ethical challenges, transforming theoretical ideas into concrete experiences. This method helps students learn to work and cooperate with others while creating impactful ideas.

2.5 Values Formation: Encouraging Compassion, Critical Thinking, and a Global Perspective

The process of values formation is at the heart of the Integration model. Immersive role-play activities encourage students to reflect on ethical dilemmas and develop compassion. Students also gain a global perspective by addressing real-world problems. Further, students are motivated to think critically about their roles in promoting social justice and sustainability. The Reach-In Program, a culminating activity where students collaborate with Lumaniag Elementary School, reinforces these values by connecting classroom lessons to meaningful community service. This Integration Model illustrates how gamification, SDG themes, and Lasallian values create an innovative and holistic educational approach. It prepares students to navigate complex global challenges while fostering lifelong learning and ethical responsibility.

3. Methodology

This study employs a qualitative and project-based learning approach to integrate gamification, Sustainable Development Goals (SDGs), and Lasallian Service Learning into the educational experiences of Grade 6 students. The initiative promotes critical thinking, ethical reasoning, and community engagement by focusing on the interdisciplinary connections between Social Science and Christian Living and Values Education (CLVE).

3.1 Participants

The participants of this initiative include Grade 6 students from the De La Salle University Integrated School (DLSU IS) and Grade 6 students from Lumaniag Elementary School in Lian, Batangas, during the Academic Year 2023-2024.

Grade 6 Students (DLSU IS) - One hundred forty-nine (149) Grade 6 students from DLSU IS, who come from middle to upper-middle-class families, serve as the primary participants. These students are experienced in collaborative since pre-school and project-based learning methods. They have access to modern educational tools like iPads. Their socio-academic backgrounds and exposure to Lasallian values make them ideal for this gamified and interdisciplinary learning initiative.

Grade 6 Students of Lumaniag Elementary School (Partner Institution) - The Reach-In Program involves 40 students from Lumaniag Elementary School, a public school in a coastal community in Barangay Lumaniag, Lian, Batangas. The institution primarily serves low-income families, and its students represent the socio-economic realities that inform the themes of the role-playing games.

3.2 Learning Design

This initiative follows a structured learning design divided into three key phases:

Lesson-Discussion - The "Masid-Danas" (See-Experience) stage uses video and photo analysis to connect students directly with real-world events and issues, providing a firsthand experience. Guided classroom activities explore these events' social, emotional, and ethical dimensions, cultivating empathy and a deeper understanding of

past and present issues. The aim is to link classroom learning with real-life experiences, promoting critical thinking and social responsibility.

Research - This stage, known as Analysis-Reflection or Suri-Nilay within the Lasallian Framework, saw the Grade 6 DLSU IS students begin their integrated Social Science and CLVE performance task by investigating the historical and socio-economic context of Philippine presidents from 1946 to the present. This involved evaluating leadership decisions, economic development, and the impact of governance on Filipino society. Students explored the links between historical events and Sustainable Development Goal (SDG) themes, connecting these to the challenges faced by each president.

Game Creation - During this stage, students designed role-playing games incorporating historical events and themes aligned with both Sustainable Development Goals and Lasallian values to promote social responsibility, critical thinking, and the practice of Christian values. Using provided templates, they developed game scenarios, characters, and challenges that encouraged strategic decision-making and ethical reasoning. This "Commitment-Action" or "Taya-Kilos" phase, as it's known in the Lasallian framework, emphasizes "committed action" – combining the concepts of offering/committing ("taya") and acting ("kilos"). This values-driven commitment results in a concrete, contextually relevant plan implemented individually or as a group. The process concludes with evaluating quality and consistency before a new cycle begins (LMO-LRF, 2011).

3.3 Tools and Resources

The tools and resources for this initiative focused on guiding students to independently research, design, and create meaningful role-playing games (RPGs) that integrate Sustainable Development Goals (SDGs) and Lasallian values. At DLSU IS, research is a fundamental part of the curriculum, even in grade school, students are encouraged to take the lead. At the same time, teachers provided guidance to ensure the accuracy and reliability of their work. Students used role-play templates as a guide to structure their RPGs effectively. These templates served as a framework for character development, plotlines and game mechanics, and values integration.

3.4 Implementation Process

This initiative implemented a carefully designed process that provided a comprehensive learning experience that integrated SDGs and Lasallian principles to finish a meaningful community-oriented project. The process focused on three key phases: classroom preparation, collaborative game creation, and partnership engagement.

Classroom Preparation: Introduction of SDGs and Lasallian Principles - The foundation for the initiative was established during the United Nations Month Celebration, led by the Social Science Department, which served as a springboard for introducing the SDGs. The SDG themes were integrated into the month-long celebration through informational videos, pamphlets, and posters displayed in the schools and on different social media platforms. Different subject areas, specifically Social Science and CLVE, also engaged the SDG themes in their lessons and activities. In this sense, students understood world problems and how these goals solve pressing issues through themed activities and discussions. These discussions were further reinforced in their classroom lessons, where students examined the relevance of SDGs to historical and socio-economic contexts. The Lasallian values of faith, service, and communion have been a lifelong component of Lasallian education from preschool all the way through, where the principles are instilled in us as the basis of our shared calling as the Church to actively respond to God's call-in serving others and forming a community of disciples. These principles are revisited and emphasized in classroom discussions, encouraging students to align their academic work with values-based decision-making. With this Social Science and CLVE integrated performance task, students were tasked with using the SDGs and Lasallian principles as the primary framework for designing their role-playing games (RPGs). This early preparation ensured that students had the necessary knowledge and values to approach the project thoughtfully and creatively.

Group Work: Collaborative Game Creation - The project initially started as an individual task in Social

Science and later evolved to require student collaboration when the integration with the CLVE began. During the integration, students consolidated their ideas and selected a unified concept for their RPG, which they could later use in their Transfer Task. The Grade 6 students created characters, situations, and obstacles grounded in historical contexts from the Third Republic of the Philippines to today as a component of the gamification process. By working together, the students conceptualized their RPGs by reflecting on ethical dilemmas aligned with SDG themes.

Partnership Engagement: Planning the Reach-in Program - The final phase is the extensive co-creating of the Reach-in Program for Lumaniag Elementary School. Students assumed some planning roles and some ownership of activity design and preparation and went so far as to host parts of the event. It was more than just having the games; they needed to think of operational tasks and precisely how their partner school would need to be able to incorporate what they were doing. Teachers worked as facilitators, offering advice and guidance but not taking the lead in students' output. This mode of engagement gave the students the liberty to cultivate leadership, organizational, and problem-solving abilities. Students utilized this to the extent that they were more involved in the core logistics of the Reach-in Program, making sure their games and activities went off without significant hitches. The initiative managed to embed fundamental academic courses with values-based community service learning by encouraging independence and teamwork during the implementation. The virtual involvement in the planning and implementation of Reach-in facilitated a better understanding of SDG and Lasallian value for the students. It enabled them to be of actual use to their partner community.

4. Results and Discussion

This part presents the findings from the survey responses explaining the outcomes, challenges, and insights gained from implementing gamification and the Reach-In Program.

4.1 Outcomes of the Initiative

Academic Achievements

Figure 3. *Participants' perceptions of how well the activities enhanced their understanding of Philippine presidents and socio-economic challenges from 1946 to the present*
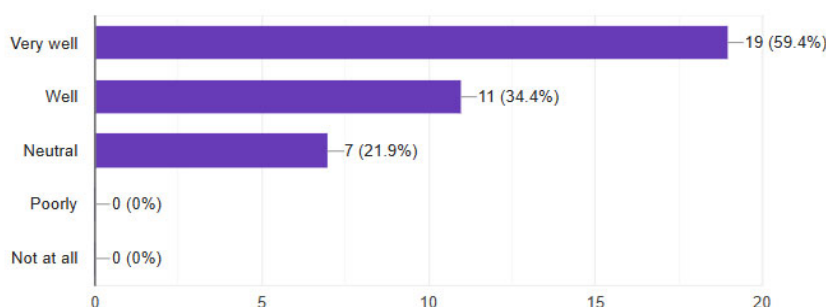
The survey results reveal a marked increase in students' historical knowledge and critical thinking abilities. Figure 3 illustrates that most participants felt that gamification, as a performance task, significantly enhanced their understanding of Philippine presidents and socio-economic issues from 1946 to the present. Many students reported that the interactive nature of the gamified learning experience improved their visualization of historical events, leading to a stronger connection with the material.

Figure 4 *Difficulties encountered by participants in creating the role-playing games*

As a teaching method, gamification encourages students to apply their knowledge creatively. Students demonstrated a strong ability to analyze historical narratives and integrate important socio-economic themes into their role-playing games. However, Figure 4 indicates that some students found it challenging to design historically accurate scenarios due to their complexity.

Values Formation

Figure 5 *Values developed by participants during the Reach-in Program with Lumaniag students*
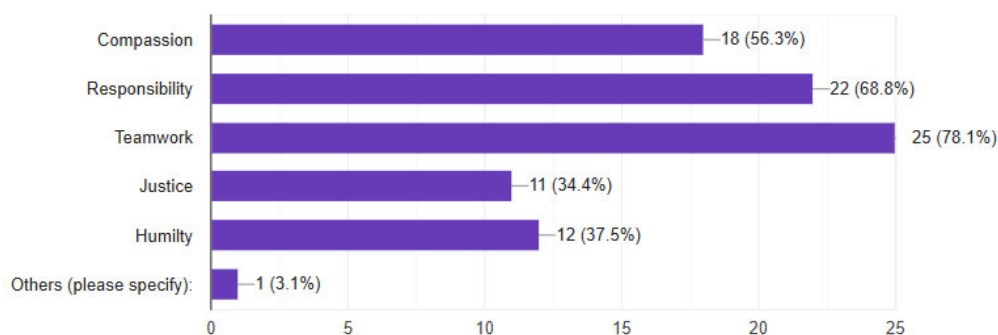
The initiative significantly impacted students' values development, extending beyond academics. Figure 5 shows that students developed camaraderie, responsibility, and compassion through the Reach-In Program. Working with students from Lumaniag Elementary School gave participants direct experience applying their knowledge to real-world community challenges.

Figure 6 *Participants' ratings of the integration of Christian values into the activities*
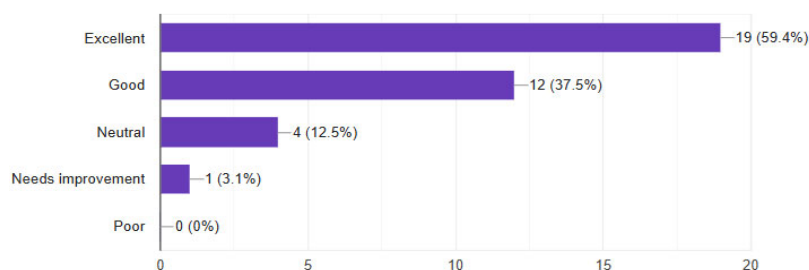

Figure 6 demonstrates the initiative's successful integration of Christian values. Many students recognized that the activities strengthened values like compassion, responsibility, and service, which were consistent with Lasallian principles. This confirms that service-learning contributes to students' intellectual, moral, and ethical growth.

Creativity and Engagement

Figure 7 *How enjoyable participants found the role-play gamification performance task*
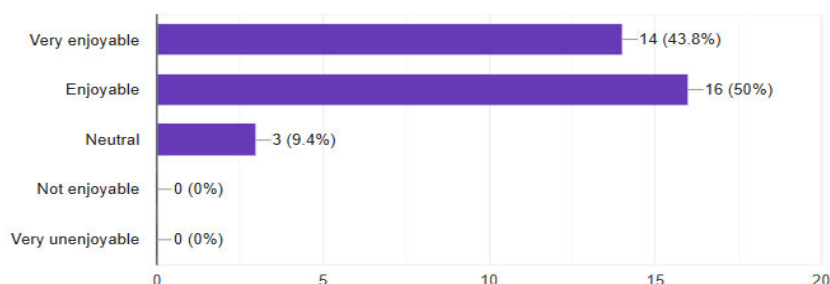
Incorporating gamification in teaching proved successful in boosting student engagement. As shown in Figure 7, most participants enjoyed the role-playing game activity primarily due to its interactive and immersive qualities.
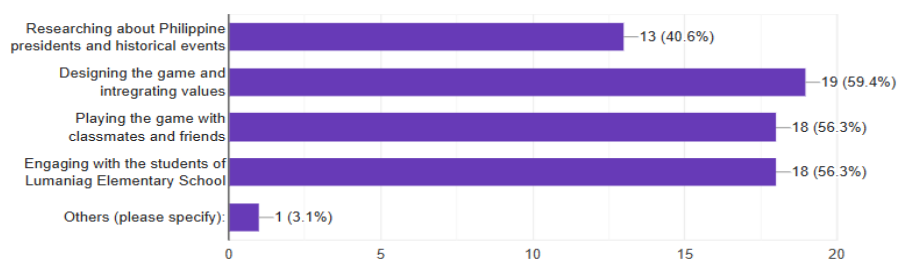
Figure 8 *Most enjoyable parts of the program as identified by participants*

Figure 8 also highlights the initiative's most popular aspects: game design, collaborative problem-solving, and community engagement. Notably, participants found creating their value-integrated games particularly enjoyable.

Figure 9. Participants' motivation to continue learning about historical and socio-economic topics after participating in the programs.
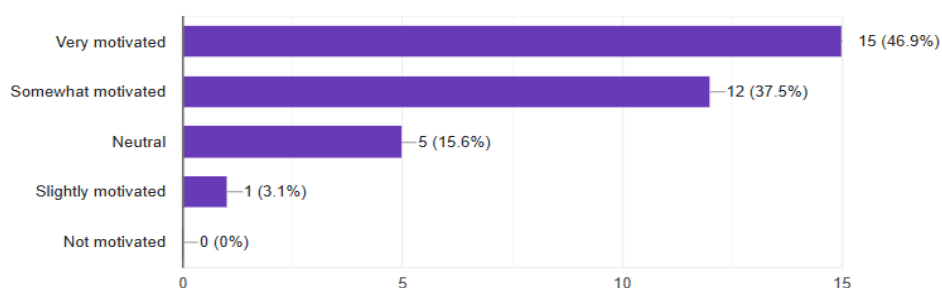
The findings indicate that student enthusiasm and motivation for learning increase when they have creative control over their learning experiences. Figure 9 supports this by showing that students reported a greater desire to continue exploring historical and socio-economic subjects after participating in the initiative.

4.2 Challenges Encountered

Logistical Issues in Organizing the Reach-In Program

Figure 10 *Challenges encountered by participants while facilitating or supporting the initiative*
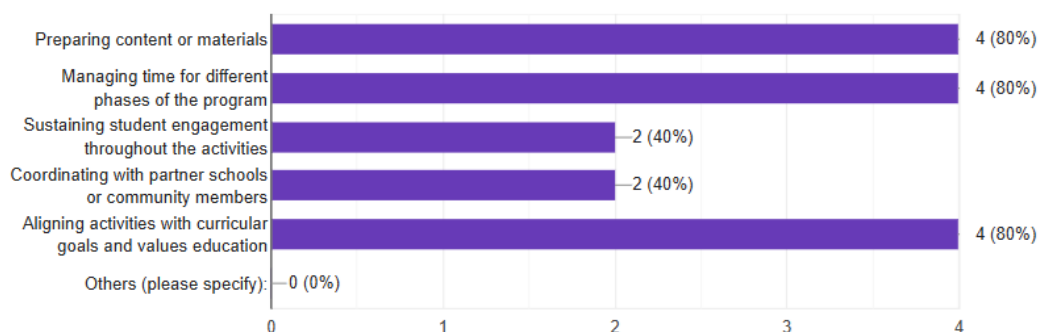
The initiative has achieved its goals, but another problem that surfaced was the logistics. Managing time, preparing content or materials, and aligning activities with the relevant goals of the two schools required meticulous planning. As shown in Figure 10, these logistical issues were a common concern among participants.

Balancing Interdisciplinary Content Delivery

Figure 11. Teachers' views on the extent to which the program addressed real-world socio-economic challenges through the lens of history and values education.
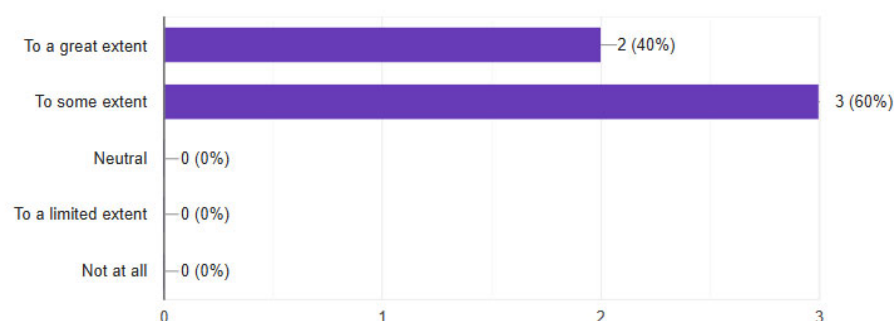

Integrating Social Science, CLVE, and Lasallian values into the gamified learning experience proved challenging. Students sometimes found it difficult to balance historical accuracy with the creative demands of storytelling in their role-playing games. Moreover, as illustrated in Figure 11, the Grade 6 teachers who participated in the initiative have a range of opinions regarding the program's success in tackling real-world socio-economic problems by integrating history and values education.

Addressing Diverse Learning Needs - Although gamification boosted student interest, some struggled with the technical side of game creation. Figure 12, as noted earlier, illustrates students' difficulties in structuring their role-playing games, explicitly crafting intricate narratives and game mechanics. This reinforces the study's finding that the game design materials required a higher cognitive ability than anticipated for grade school students, demanding advanced problem-solving skills usually honed in later education.

Figure 12. Difficulties encountered by participants in creating the role-playing games.
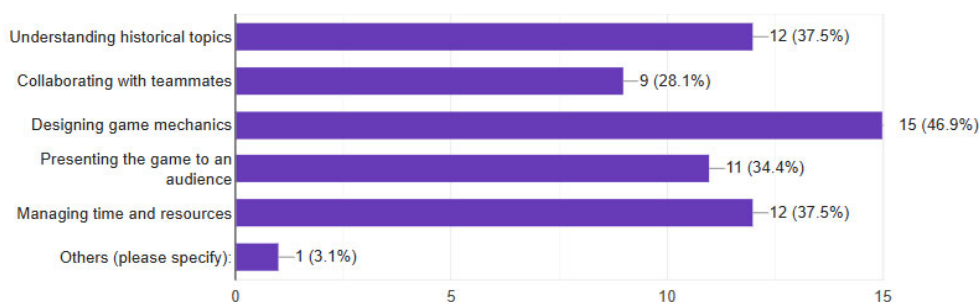
4.3 Reflections and Insights

Teachers' Reflections on Integrating SDGs and Lasallian Service-Learning

Figure 13. Effectiveness of integrating the Sustainable Development Goals (SDGs) in enhancing students' understanding of socio-economic challenges from 1946 to the present.
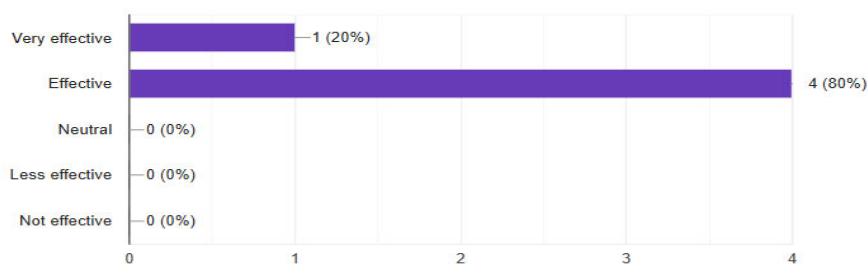
According to Figure 13, educators observed that combining Sustainable Development Goals (SDGs) with Lasallian Service-Learning (LSL) significantly positively affected student engagement and the development of their values. The figure also shows that integrating SDGs was highly effective in improving students' comprehension of socio-economic problems, as many participants realized the connection between these topics and current events.

Figure 14. Participants' ratings of the impact of Lasallian Service-Learning (LSL) in fostering values of compassion, responsibility, and service among students.
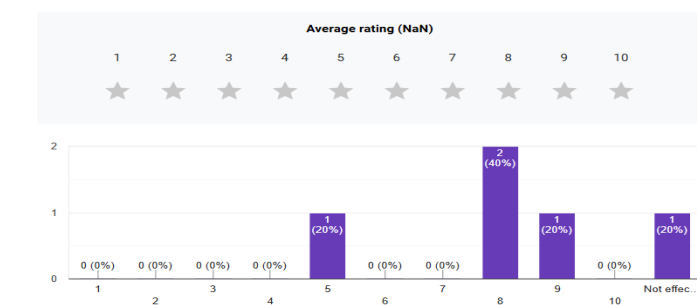
Further, Figure 14 demonstrates how the Lasallian Social Learning (LSL) program cultivated compassion, responsibility, and a spirit of service. By applying their historical knowledge to real-world community issues,

students learned that history is not merely academic in nature but also a tool for understanding and tackling contemporary problems. The Reach-In Program proved to be a valuable experiential learning opportunity. It bridged theoretical knowledge with practical applications, fostering a sense of social responsibility among students. By working alongside Lumaniag Elementary School students, participants learned the importance of collaboration, empathy, and ethical reasoning in addressing community challenges.

Students' Testimonials on Their Learning Experiences - Students' reflections further support the quantitative findings. Many participants expressed how the gamification and service-learning activities made history more engaging and relevant to their lives. One student noted, "Creating the game helped me understand history better because I had to think about how the events actually affected people's lives." Another shared, "Working with the Lumaniag students made me realize that history is not just about the past but about how we can help people today." The results and discussion highlight the initiative's success in enhancing historical knowledge, values formation, and engagement through innovative learning strategies. Despite the challenges, the program effectively fostered critical thinking, social awareness, and ethical reasoning among students, making it a promising model for future educational initiatives.

5. Conclusion and Recommendations

This research shows that the game design materials used in the study required more advanced cognitive and technical skills than expected for grade school students. While gamification combined with interdisciplinary learning strengthened critical thinking, ethical reasoning, and social awareness, a gap remains between basic education and the specialized skills needed for game development. The Reach-In Program connected academic learning with community service, fostering global citizenship and social responsibility. De La Salle University Integrated School students and Lumaniag Elementary School worked together on real-world issues, applying SDGs and Lasallian values. Role-playing and real-life scenarios helped them grasp historical events and ethical challenges while encouraging teamwork and engagement. Gamification made learning more interactive and immersive. Students designed role-play games on historical and social issues, linking them to SDGs such as Quality Education (SDG 4), Reduced Inequalities (SDG 10), and Peace, Justice, and Strong Institutions (SDG 16). Feedback showed increased interest in history and a deeper connection to learning through hands-on experiences. Despite challenges, the program strengthened critical thinking, values formation, and social awareness. It gave students problem-solving skills and ethical perspectives while reinforcing community engagement. This approach offers a strong model for future projects integrating gamification, service-learning, and sustainability in education.

5.1 Recommendations

To further enhance the program, several recommendations are proposed. These include incorporating basic game design into early curricula, partnering with the gaming industry for professional guidance and tools, and integrating game design across subjects to develop interdisciplinary skills. Professional development for educators in game design and interdisciplinary approaches is essential. Gamification should be expanded to all grade levels to foster creative and critical thinking. Finally, continued integration of Sustainable Development Goals will deepen students' understanding of global issues and inspire action.

6. References

Institutional and Organizational Reports:
De La Salle University. (n.d.). *Foundation principles of Lasallian formation*. Retrieved from
https://www.dlsu.edu.ph/brothers/foundation-principles-lasallian-formation
Edutopia. (n.d.). *Teaching about the Sustainable Development Goals*. Retrieved from
https://www.edutopia.org/article/teaching-about-sustainable-development-goals
UNESCO. (2017). *Education for sustainable development goals: Learning objectives*. United Nations
Educational, Scientific and Cultural Organization. Retrieved from

https://www.unesco.org/en/articles/education-sustainable-development-goals-learning-objectives

United Nations. (n.d.). *Student resources*. United Nations Sustainable Development. Retrieved from
https://www.un.org/sustainabledevelopment/student-resources

United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. Retrieved
from https://www.un.org/sustainabledevelopment

Conference Papers:

Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining
"gamification." *Proceedings of the 15th International Academic MindTrek Conference: Envisioning
Future Media Environments*, 9–15. https://doi.org/10.1145/2181037.2181040

Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does gamification work? A literature review of empirical studies on
gamification. *47th Hawaii International Conference on System Sciences*, 3025–3034.
https://doi.org/10.1109/HICSS.2014.377

Books:

Drake, S. M., & Reid, J. L. (2018). *Interdisciplinary approaches to curriculum: A guide for educators*. Teachers
College Press.

Institutional Publications (Lasallian Studies):

Lasallian Reflection. (2021). *Lasallian values in education*. Retrieved from [Institutional Source]