

# Effect of Service-Learning Program on Student's Outcomes

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## ABSTRACT

This study was conducted to evaluate the impact of service-learning program on students' outcomes as a basis for enhancement. This study utilized a quantitative type of research employing a descriptive survey method. The respondents of the study were the 792 Senior High School Students of USL for the SY 2023-2024. Mean was used to assess the impact of the service-learning program on students' outcomes. Mann-Whitney U test and Kruskal Wallis were also utilized to test the significant difference on the impact of service-learning program on students' outcomes when grouped according to profile. Civic Responsibility and Quality Service were deemed "Very High" when it comes to the impact of service-learning program on students' outcomes. Moreover, there is a significant difference on the level of impact of service-learning program when grouped according to sex and strand.

**Keywords:** Service-learning, Civic Responsibility, Integrated Learning, Quality Service, Life Skills

## INTRODUCTION

School-based service-learning is a teaching strategy that explicitly links community service to academic instruction. It is a form of experiential learning where students apply academic knowledge and critical thinking skills to address community needs. It provides students with practical, hands-on experiences and fosters a deeper understanding of course materials through reflective activities. Service-learning is a pedagogical approach to teaching designed to create space for students to reflect critically on community service within an academic course of study with the aim of developing socially minded and actively engaged citizens (Shea, 2022). It is grounded upon John Dewey's call for a pedagogy grounded in experience that prepares students to be active members of a democratic society. By engaging in meaningful service activities and reflecting on these experiences, students develop a stronger sense of social responsibility and personal growth (Filges, et. al., 2021).

The benefits of service learning are well-documented in recent literatures. In the study of Hansen (2021), students participating in service learning exhibit increased academic engagement, improved critical thinking abilities and heightened cultural competence. Additionally, service learning has been linked to enhanced interpersonal skills, greater empathy, and a more profound commitment to community service (Jones & Stanley, 2021). These positive outcomes suggest that service learning is an effective strategy for holistic student development.

Despite the extensive research on the benefits of service learning, there are notable gaps in the literature concerning the systematic assessment of these programs. Many studies focus on short-term outcomes without addressing long-term impacts on students' academic and professional trajectories (Bringle & Clayton, 2020). Furthermore, there is a lack of comprehensive evaluation frameworks that consider the diverse contexts and implementation strategies of service-learning programs. This gap limits the ability to generalize findings and develop best practices for service-learning implementation.

The University of Saint Louis through the Community Engagement and CICM advocacies (CECA) office is responsible for the implementation of service-learning programs. The Basic Education School especially the Senior High School Unit integrate service-learning program as one of the requirements of the students per

semester. The awareness to encourage community service in schools is grounded on the acceptance that it does not only give students extra credit points but serving others or one's community also makes them better citizens (Hussain, 2020). In fact, in the study of Shea (2022), it was out that including SLP on course syllabi are associated with increased changes in students reported civic attitudes. This means that it plays an important role in the learning experience and outcomes of students.

The study was conducted to evaluate the effect of service-learning program on student's outcomes.

## RESEARCH QUESTIONS

This study aimed to evaluate the effect of service-learning program on student's outcomes as a basis for enhancement. Specifically, it seeks to answer the following questions:

1. What is the profile of the respondents along:
  - 1.1 Sex
  - 1.2 Strand
  - 1.3 Frequency of SLP attended in the current school year
2. What is the effect of the service-learning program on students' outcomes along:
  - 2.1 Integrated Learning
  - 2.2 Quality Service
  - 2.3 Collaboration
  - 2.4 Student's Voice
  - 2.5 Civic Responsibility
  - 2.6 Reflection
  - 2.7 Life Skills
3. Is there a significant difference on the effect of the service-learning program on students' outcomes when grouped according to profile?

## SIGNIFICANCE OF THE STUDY

The study on the effect of service-learning programs on students' outcomes lies in its potential to provide comprehensive insights that can improve educational practices. By analyzing how service-learning impact students' outcomes, CECA can identify strengths and areas of improvement in these programs. Understanding the impact allows the development of more effective curriculum that better integrate service-learning with academic learning, fostering greater student engagement and success.

## METHOD

This study utilized a quantitative type of research employing a descriptive survey method. The respondents of the study were the 792 Senior High School Students of USL for the SY 2023-2024. A questionnaire developed by the Community Engagement and CICM Advocacies (CECA) was utilized as the major data collection tool. Data about the impact of service-learning program on students' outcomes were gathered using a questionnaire (5-Strongly Disagree, 4-Disagree, 3-Moderately Agree, 2-Agree, 1-Strongly Agree). Mean was used to assess the impact of the service-learning program on students' outcomes with the following scale:

Scale	Descriptive Interpretation
4.50 - 5.00	Very High
3.50 - 4.49	High
2.50 - 3.49	Moderate
1.50 - 2.49	Low
1.00 - 1.49	Very Low

Mann-Whitney U test was also utilized to test the significant difference on the effect of service-learning program on student’s outcomes when grouped according to sex. Meanwhile, Kruskal-Wallis was used to test the significant difference on the effect of service-learning program on student’s outcomes when grouped according to strand and frequency of attended SLP in the current school year.

## RESULTS AND DISCUSSION

**Table 1:** Profile of the Respondents

Profile Variables	Categories	Frequency	Percentage
Sex	Male	353	44.57
	Female	439	55.43
	<b>Total</b>	<b>792.00</b>	<b>100.00</b>
Strand	HUMMS	67	8.45
	ABM	103	13.01
	STEM-H	343	43.31
	STEM NH	279	35.23
	<b>Total</b>	<b>792.00</b>	<b>100.00</b>
Frequency of attended SLP in the current school year	1-2	519	<b>65.53</b>
	3-4	167	<b>21.09</b>
	5-6	61	<b>7.70</b>
	7 and above	45	<b>5.68</b>
	<b>Total</b>	<b>792.00</b>	<b>100.00</b>

The table shows that majority of respondents are male students. It can also be seen in the table that most of the respondents were from the Stem-health strand. In terms of frequency of attended service-learning program in S.Y. 2023-2024, majority attended 1-2 SLPs.

**Table 2:** Effect of Service-Learning Program on Students’ Outcomes

STUDENTS’ OUTCOMES	MEAN	INTERPRETATION
Integrated Learning	4.48	HIGH
Quality Service	4.50	VERY HIGH
Collaboration	4.48	HIGH
Student’s Voice	4.42	HIGH
Civic Responsibility	4.54	VERY HIGH
Reflection	4.49	HIGH
Life Skills	4.45	HIGH
<b>OVERALL</b>	<b>4.48</b>	<b>HIGH</b>

The table presents the effect of service-learning program on student’s outcomes. The mean scores all fall above 3.50 which indicate that there is service-learning program had a great impact on student’s outcomes. Civic Responsibility has the highest mean of 4.54 suggesting that service learning positively impacts student’s

civic responsibility by allowing students to care for others and contribute to the community. This is aligned with the study of Hsu & Chang (2021) that experiential learning like service-learning program is linked to higher levels of civic engagement. Another study by Albanesi & Companare (2023), showed that service learning can increase student’s awareness to contribute to the community and social justice, leading to a greater sense of civic responsibility. Quality Service is also deemed ‘Very High’ when it comes to the level of impact of service-learning program. This means that students see service-learning programs as well-organized and responds to actual community need. This is supported by the study of De Marco & Kretzschmar (2018) where it was found out that volunteers who participated in service-learning programs developed a deeper understanding of poverty and homelessness, as well as improved communication, leadership, and financial literacy skills. These skills are crucial for effectively addressing actual community needs.

Meanwhile, it can also be gleaned in the table that student’s voice has the lowest mean of 4.42 which means that not all students are involved actively in planning and implementing the reflection sessions, evaluation, and success of the activity. In fact, a study says that there is a need for student involvement in all stages of service learning, from preparation to debriefing, to ensure successful outcomes (Baillie, 2019). Without student involvement in planning, service-learning programs may lack relevance, fail to address community needs effectively, and miss the opportunity to provide students with valuable experiential learning opportunities that integrate theory with practice (Guzman, Ciavattoni, & Dellavecchia, 2019).

Overall, there is a high effect of service-learning program on student’s outcomes. This suggests that service learning is a highly effective pedagogical approach that can lead to a wide range of positive outcomes for students. By integrating academic content with community service, educators can foster students' intellectual, personal, and civic development (Harahap, Selaras, & Ardi, 2023).

**Table 3:** Test of Significant difference on the Effect of Service-Learning Program on Students’ Outcomes when grouped according to Sex

Students’ Outcomes	Mean		Mean Difference *
	Male	Female	
Integrated Learning	4.38	4.55	-0.17
Quality Service	4.43	4.56	-0.13
Collaboration	4.43	4.56	-0.13
Student’s Voice	4.37	4.58	-0.21
Civic Responsibility	4.53	4.59	-0.61
Reflection	4.41	4.53	-0.11
Life Skills	4.38	4.45	-0.07

\*Significant at 0.05 level of significance

Table 3 shows that there is a significant difference on the effect of service-learning program on students’ outcomes when grouped according to sex. This implies that the impact of service-learning program varies differently for male and female. In the study of Osman (2020), service-learning has a significant positive impact on developing civic responsibility and life skills in female students compared to male students in Sudan. In the study of Snyder & Majewski-Schrage (2023), where female students were more likely to report significant changes in their attitudes and perceptions of community service and civic engagement after participating in the service-learning experience. This suggests that female students may be more receptive to the benefits of service-learning and more likely to engage in civic activities. Moreover, the impact of service learning on females' outcomes can be attributed to the nurturing of personal and professional growth, as highlighted in the study of Boughar (2020). This suggests that female students are more likely to benefit from service-learning experiences in terms of their civic engagement, reflection, and life skills.

This may be due to the unique opportunities that service-learning provides for females to connect with others from different backgrounds, develop important civic skills, and engage in meaningful community service.

**Table 4:** Test of Significant difference on the Effect of Service-Learning Program on Students’ Outcomes when grouped according to Strand

Students’ Outcomes	$\chi^2$	p-value	Description
Integrated Learning	23.00	< .001	Significant
Quality Service	18.80	< .001	Significant
Collaboration	29.50	< .001	Significant
Student’s Voice	29.10	< .001	Significant
Civic Responsibility	31.90	< .001	Significant
Reflection	18.20	< .001	Significant
Life Skills	28.60	< .001	Significant

Table 3 shows that there is a significant difference on the effect of service-learning program on students’ outcomes when grouped according to strand. This means that the impact of service-learning program varies differently across all strands. In the study of Pinto & Costa-Ramalho (2023), students in medical-related courses on which Stem-health strand is aligned with, have reported increased empathy and improved communication skills when participating in service-learning programs.

Another study by Queiruga-Dios et.al (2021) highlighted that service-learning experiences in engineering-related courses like the Stem-Non-Health strand can enhance their academic and professional development. This highlights the importance of tailoring service-learning programs to the specific needs and interest of different academic strands to maximize their effectiveness in promoting students’ outcomes.

**Table 4.1:** Significant Mean Differences on the Effect of Service-Learning Program on Integrated Learning when grouped according to Strand

Compared Strands	Mean Difference	p-value
ABM and HUMMS	0.36	0.00
HUMMS and STEM H	-0.40	<.00
HUMMS and STEM NH	-0.27	0.00

Table 4.1 shows the comparison on the effect of Service-Learning Program on Integrated Learning across all strands. It can be shown that there is a significant difference between Accountancy and Business Management (ABM) strand and Humanities and Social Sciences (HUMMS) strand.

It can be seen that service-learning programs have a significant impact on ABM strand compared to other strands by enhancing students’ understanding of the subject matter and its practical applications such as the development of their life skills. Research also consistently shows that students in the ABM strand perceive service-learning programs as an enhancement to their course or topics (Blewitt, 2015).

**Table 4.2:** Significant Mean Differences on the Effect of Service-Learning Program on Quality Service when grouped according to Strand

Compared Strands	Mean Difference	p-value
ABM and HUMMS	0.30	0.01

HUMMS and STEM H	-0.34	<.00
HUMMS and STEM NH	-0.25	0.02

Table 4.2 shows the comparison on the effect of Service-Learning Program on Quality Service across all strands. It can be shown that there is a significant difference between Accountancy and Business Management (ABM) strand and Humanities and Social Sciences (HUMMS) strand. There is also a significant difference between Humanities and Social Sciences (HUMMS) strand and Science, Technology and Engineering (STEM-Health) strand. In the study of Cea (2014), service learning is designed to address actual community needs. This means that the quality of service learning lies on its potential to be responsive on the needs of community.

**Table 4.3:** Significant Mean Differences on the Effect of Service-Learning Program on Collaboration when grouped according to Strand

Compared Strands	Mean Difference	p-value
ABM and HUMMS	0.40	<.00
HUMMS and STEM H	-0.41	<.00
HUMMS and STEM NH	-0.27	0.01
STEM H and STEM NH	0.14	0.01

Table 4.3 presents the comparisons of the effect of service-learning programs on collaboration across different academic strands. The effectiveness of service-learning programs in promoting collaboration varies across different academic strands, with ABM and STEM Health students experiencing a significantly higher impact compared to HUMMS and STEM Non-Health students. Levesque-Bristol (2018) noted that the effectiveness of service-learning varies across academic disciplines, with its impact on collaboration potentially differing based on the students' academic strand. This suggests that the level of impact of service-learning on collaboration may indeed differ when grouped according to academic strand.

**Table 4.4:** Significant Mean Differences on the Effect of Service-Learning Program on Student's Voice when grouped according to Strand

Compared Strands	Mean Difference	p-value
ABM and HUMMS	0.45	<.00
HUMMS and STEM H	-0.43	<.00
STEM H and STEM NH	0.16	0.00

Table 4.4 shows the comparison on the effect of service-learning program on student's voice among various strands. Students in various strands have different level of participation in planning and organizing different service-learning programs.

As can be seen in the table, ABM and STEM H have high level of participation or student's voice when it comes to planning and implementing service-learning program.

In the study of Wu (2014), participation in SLP can lead to the development of a more effective and sustainable program, with high-quality content and student autonomy. This suggests that students from various strands should be given an autonomy to take roles and tasks in planning and organizing SLPs.

**Table 4.5:** Significant Mean Differences on the Effect of Service-Learning Program on Civic Responsibility when grouped according to Strand

Compared Strands	Mean Difference	p-value
ABM and HUMMS	0.64	<.00
HUMMS and STEM H	-0.42	<.00
HUMMS and STEM NH	-0.28	0.01
STEM H and STEM NH	0.14	0.02

Table 4.5 shows the comparison on the effect of service-learning program on civic responsibility across academic strand. It can be seen that there is a significant difference among various strand. ABM and STEM Health students have high level of civic responsibility when attending service-learning program as shows in the table. The use of service-learning in STEM education is shown to be beneficial in developing students' sense of civic responsibility (Mackenzie, 2019). Moreover, in the study of Davis & Babu (2024), service-learning cultivates civic responsibility, empathy, and risk management while fostering the holistic growth of learners as responsible citizens in this century.

**Table 4.6:** Significant Mean Differences on the Effect of Service-Learning Program on Reflection when grouped according to Strand

Compared Strands	Mean Difference	p-value
ABM and HUMMS	0.20	0.00
HUMMS and STEM H	-0.35	<.00
HUMMS and STEM NH	-0.26	0.02

Table 4.6 shows the comparison on the effect of service-learning program on reflection across academic strands. It can be seen in the table that there is a significant difference between ABM and HUMMS. Similarly, there is a significant difference on the effect of SLP on reflection between HUMMS and STEM H and STEM NH strands.

This implies that different academic strand establishes connections between their service experiences and the academic curriculum when participating in service-learning programs. In the study of Guthrie (2014), through reflection, students are empowered to both assess individual learning goals and collaborate with others to make meaning of their individual service-learning experience. Furthermore, reflective practices developed in the service-learning programs can persist in students' lives after graduation, shaping their civic and professional identities (Mitchell, 2015).

**Table 4.7:** Significant Mean Differences on the Effect of Service-Learning Program on Life Skills when grouped according to Strand

Compared Strands	Mean Difference	p-value
ABM and HUMMS	0.43	<.00
HUMMS and STEM H	-0.41	<.00
HUMMS and STEM NH	-0.30	0.00

Table 4.7 shows the comparison on the effect of service-learning program on life skills across academic

strands. As can be seen in the table, there is a significant difference between ABM and HUMMS strand. Similarly, there is a significant difference between HUMMS and STEM H and STEM NH on the impact of SLP on the life skills of students. However, ABM, STEM H and STEM NH demonstrate high life skills when participating in service-learning programs. This is supported by the study of Haylord (2014) where it was found out that service-learning enhance STEM literacy, as demonstrated by improved science literacy and higher grades in STEM-related courses. Additionally, participating in service-learning program can enhance the development of life skills particularly in the areas of teamwork and community self-efficacy (Sabat, 2015). These highlights the positive effect of service-learning on the development of life skills in students.

**Table 5:** Test of Significant difference on the Effect of Service-Learning Program on Students’ Outcomes when grouped according to Frequency of attended SLP in the current school year

Students’ Outcomes	$\chi^2$	p-value	Description
Integrated Learning	2.41	0.49	<b>Not Significant</b>
Quality Service	0.70	0.87	<b>Not Significant</b>
Collaboration	0.63	0.89	<b>Not Significant</b>
Student’s Voice	2.46	0.48	<b>Not Significant</b>
Civic Responsibility	0.70	0.87	<b>Not Significant</b>
Reflection	0.59	0.90	<b>Not Significant</b>
Life Skills	2.70	0.44	<b>Not Significant</b>

Table 5 shows that there is no significant difference on the effect of service-learning program on students’ outcomes when grouped according to frequency of attended SLP in the current school year. This mean that regardless of the numbers of attended SLP, service-learning does not affect the students’ outcomes. This is supported by the study of Pinto (2023), wherethe frequency of attendance at these service-learning programs does not seem to significantly affect the impact on students’ outcomes. Another study by Compare (2023) found out that there are positive effects of service learning on social responsibility and academic success, but did not specifically address the impact of attendance frequency.

## CONCLUSION

This study concludes that there is a high effect of service-learning program on student’s outcomes. This suggests that service learning is a highly effective pedagogical approach that can lead to a wide range of positive outcomes for students. Meanwhile, there is a significant difference on the effect of service-learning program on students’ outcomes when grouped according to sex and strand. However, there is a necessity to address challenges especially on student’s voice where students should be involved in taking roles and tasks in planning and implementing service-learning program.

## RECOMMENDATIONS

Based on the findings of the study on the effect of service-learning programs on students’ outcomes, the following recommendations are suggested:

1. Basic Education School must enhance the service-learning programs by allowing the students to be involved in the planning, implementation, reflection, and evaluation of the programs.
2. Basic Education Teachers should incorporate reflection sessions to help students connect their experiences with leaning objectives.
3. Regular feedback and assessment mechanisms should be implemented to continuously refine the program, ensuring it meets the needs of students and communities.



4. Future researches can also employ qualitative research to deeply understand the impact of service-learning program on students' outcomes that will contribute to the development of more effective and meaningful program.

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