Service-learning Pedagogy: A Pathway to Empowering Students as A Catalyst for Sustainable Tourism Development through Civic Engagement and Community Development

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Abstract

The field of education for sustainable development advocates for new teaching methods that offer hands-on, engaging, and transformative learning experiences that encourage critical and systemic thinking within the framework of sustainable development. Higher education institutions strive to support the attainment of SDG 4 by promoting inclusive, fair, and high-quality education. Service-learning in higher education is in tune with the educational principles of critical and transformative pedagogy and facilitated through implementation of innovative pedagogical approaches in training professionals that will be socially critical and committed to social transformation, with the goal of achieving a larger social justice. Consequently, one of the major challenges attributed to the lack of social practice and community service in the learning environment leads to the detachment of students to the community, as well as the low social responsibility among the undergraduates. The study aimed to fill the research gap in the literature on the impact of service-learning pedagogies among students based on knowledge, attitude, and spirit and how it is correlated with professional development, personal development, social transactions. Furthermore, this study highlights how civic engagement and sustainable community development, the integral components of service-learning, contribute to and align with the principles of sustainable tourism. By connecting these elements, the research emphasizes the multifaceted benefits of service-learning in shaping socially responsible professionals and fostering sustainable tourism.

Keywords: community development, pedagogy, service-learning, sustainable tourism

1. Introduction

The United Nations Educational, Scientific and Cultural Organization (UNESCO) published a report in 2021 entitled Reimagining our futures together. A new social contract for Education, which stated that, education itself must be transformed in order to forge peaceful, just, and sustainable futures [1]. Higher education plays a crucial role in creating a fairer and more sustainable society, as well as in raising students’ consciousness about the consequences of human activities on the environment and their impact on future generations. The literature on education for sustainable development calls for pedagogical innovations that provide interactive, experiential, transformative, and real-world learning that mobilizes critical and systemic thinking in the context of sustainable development [2]. Service-learning is an impactful hands-on educational approach where individuals take part in activities that actively tackle social, environmental, and diverse human needs to advocate for social justice. It also involves incorporating service into communities through educational programs, aiming to instill a strong sense of civic responsibility in students and enhance critical reflection [3]. Since then, the concept of Service-Learning (SL), evolved as a teaching and learning strategy integrating meaningful service in the community, has spread globally. SL in higher education is in tune with the educational principles of critical and transformative pedagogy [4]. In the Philippines, SL of universities typically concentrated on education and facilitated the implementation of innovative pedagogical approaches in training professionals committed to social transformation. Various challenges occurred in the implementation of SL in higher education institutions (HEI), which include the expectation of integrating theoretical knowledge and skills of students in real-world applications and the universities’ contribution.
to improvement in the community [5]. The SL mandates among HEI forced students to conduct community services. Consequently, one of the major challenges of SL application is attributed to the lack of social practice and community service in the learning environment, which leads to the detachment of students to the community, among the undergraduates [6].

Mapua Malayan Colleges Laguna is an institution where one of the missions is to contribute to societal problems by expert application of knowledge. Responding to the mission of the institution, the College of Tourism & Hospitality aligned its Program Educational Objectives (PEOs), where SL in the course syllabus of professional courses is being integrated. It aims to help students to better understand the material learned in class by giving them the opportunity to apply it in a real-world setting while allowing them to develop a sense of civic responsibility through community engagement in partner communities. Additionally, the incorporation of SL fosters a sense of civic responsibility through community engagement in partner communities. The deliberate integration of SL into the curriculum is designed not only to address the immediate educational needs of students but also to cultivate sustainable professionals who are not only academically proficient but also socially conscious and committed to making a positive impact on the communities they serve.

Engaging students in hand-on community involvement through SL targets tourism challenges like waste management, environmental care and cultural preservation. This real-world experience prepares students to contribute effectively to sustainable tourism practices, SL bridges theoretical knowledge with practical application ensuring future professionals are well-prepared for the complexities of sustainable development. This study aimed to contribute to the existing literature by evaluating SL through the dimensions of knowledge, attitude, and spirit, and exploring its correlation with students’ professional and personal development, as well as their potential for social transformation, thereby emphasizing the role of service learning in shaping future professionals who are aligned with the principles and practices of advancing sustainable tourism.

2. Literature review

2.1. Service-learning pedagogy

Service-learning is defined as an active teaching and learning strategy based on service for others to develop students’ personalities and sense of civic responsibility [7]. It aims to build a strong society by assisting students in exploring themselves and society while using an analytical and in-depth perspective to develop their decision-making mechanisms [8]. Preradovic cited that the two elements of service learning contain engagement with the community (service) and reflection on that engagement (learning)[9]. Several authors proposed a renewal pedagogical approach suited for SL allowing students to learn while it acts on the different needs of the environment until it becomes a tool for learning and social transformation through specific actions. Such reflection processes foster the link between academic learning and service to the community, providing meaning to both [10].

2.2. Service-learning and Sustainable tourism

Sustainable development, as defined by the Brundtland Report [11], involves fulfilling the requirements of current generations while also ensuring that future generations are able to meet their own needs without any compromise. Higher education plays a crucial role in creating a fair and sustainable society, as well as in raising students’ awareness of the consequences of human activities on the environment and on the well-being of future generations by integrating service learning in the curricula. Sustainable tourism destinations provide excellent opportunities for service-learning projects, enabling students to utilize their expertise and knowledge to tackle real-life sustainability issues [12].

2.3. Related studies

Two related studies have formed the basis of this research paper. SL as teaching pedagogy allows the students to acquire knowledge and skills as they are deployed in the community [13]. This study included students’ personal and social transformation in the community.
Another study found that SL experiences have positive changes in the outcome of the program among students. The same study suggested that SL can boost the service leadership qualities of the students [14]. This study evaluated student knowledge on service leadership, linked knowledge to social work, deal with recipients in fieldwork and reflections on leadership skills. The present study used the variables included in the two previous studies.

2.4. Theoretical and conceptual framework

This study is anchored in Transformative theory which proposes that through a process of critical reflection, action, and empowerment one is transformed. This theory emphasizes interconnectedness of personal and societal transformation that when individuals analyze their circumstances it catalyzes social change or transformation [15]. This core concept of transformative theory will guide this research on SL pedagogy in examining students’ knowledge, attitude, and spirit in correlation to their professional, personal, and social transformations.

![Conceptual framework](image)

**Figure 1.** Conceptual framework

H1. Knowledge about service-learning leads to professional development.
H2. Attitude towards service-learning leads to professional development.
H3. Spirit of service-learning leads to professional development.
H4. Knowledge about service-learning leads to personal development.
H5. Attitude towards service-learning leads to personal development.
H6. Spirit of service-learning leads to social personal development.
H7. Knowledge about service-learning leads to social transformation.
H8. Attitude towards service-learning leads to social transformation.
H9. Spirit of service-learning leads to social transformation.

Service learning and sustainable tourism have a mutually beneficial relationship, where each contributes to the ability of the other to generate favorable outcome. Such interconnection between knowledge about service-learning and professional growth in sustainable tourism can be viewed as a dynamic cycle: through understanding service-learning, students can accelerate professional growth in sustainable tourism, providing a route for people to become better informed, involved, and impactful contributors to positive change within the field. The cycle persists as students apply their improved abilities and viewpoints to their jobs in the tourism sector, promoting and putting into action sustainable methods. While knowledge about service-learning is essential, a positive attitude is the driving force that transforms those experiences into valuable professional development opportunities. It fosters a growth mindset, enhances engagement, strengthens collaboration, and cultivates essential soft skills, ultimately contributing to a more successful and fulfilling career in sustainable tourism. Practical skills and knowledge are crucial, but the essence of service-
learning serves as a driving influence, molding individuals into ethical, committed, and proficient professionals in the sustainable tourism sector. This spirit, embedded in their work ethic and approach, can lead to a more meaningful and impactful career dedicated to creating a better world through responsible tourism. Service-learning emphasizes the interdependence of social and environmental issues, urging individuals to recognize their place within a broader system and to acknowledge their influence. Thus, service-learning is more than just doing service; it’s about developing a mindset of being an engaged citizen, taking social responsibility, and dedicking oneself to making a positive impact. By giving power to communities, removing social obstacles, and encouraging involvement in civic activities, this spirit has the ability to bring about significant and enduring social transformation.

3. Methods

3.1. Research design

This paper utilized a descriptive-correlation design. The researchers correlated the dimensions of service-learning pedagogies of students - knowledge, attitude, and spirit - with professional development, personal development, and social transactions.

3.2. Participants of the study

Purposive sampling, also known as judgment sampling, was utilized in this investigation. It’s employed when the researcher makes the judgment call on who should be included in the research participants. The criteria used to determine inclusion in this study were the following: (1) student of Mapua Malayan Colleges Laguna and (2) have experience in conducting service-learning initiatives. The distribution of the questionnaire was conducted online and sent to the students via email for one month, from June to July 2023. A total of 150 questionnaires were delivered to the target respondents, and 99 completed the online survey with a response rate of 66%.

3.3. Research instrument

A self-administered questionnaire was constructed with several items utilizing a five-point Likert's scale based on variables from prior work relevant to service-learning pedagogies, including factors such as knowledge, attitudes, and spirits towards SL. The scale ranges from (5) strongly agree to (1) strongly disagree. Questionnaires were drawn from Zhou et al. [6] specifically on knowledge in service learning and to measure service-learning pedagogies, and professional development, personal development, and social transformation were taken from Dzinekou et al. [13]. Cronbach’s Alpha was used to perform a reliability test. The data gathered is processed using tables to add transparency of the data presented. Cronbach’s coefficient alphas for each dimension were used to assess the internal consistency reliability of the instruments used in the study. To exhibit strong reliability, Cronbach’s Alpha must be equal to or greater than 0.70 [16]. All variables satisfied the criterion for the reliability test (Table 1).

### Table 1. Overall descriptive statistics of the variables

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Number of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge about service learning</td>
<td>4</td>
<td>0.883</td>
</tr>
<tr>
<td>Attitudes in service learning</td>
<td>5</td>
<td>0.898</td>
</tr>
<tr>
<td>Spirit of service learning</td>
<td>5</td>
<td>0.889</td>
</tr>
<tr>
<td>Professional development</td>
<td>6</td>
<td>0.951</td>
</tr>
<tr>
<td>Personal development</td>
<td>5</td>
<td>0.934</td>
</tr>
<tr>
<td>Social transformation</td>
<td></td>
<td>0.917</td>
</tr>
</tbody>
</table>

3.4. Data analysis

The researchers used the Statistical Package for the Social Sciences Version 26 to perform the statistical analysis. In the evaluation of students’ knowledge, attitude, and spirit towards service learning, mean and standard deviation were employed. Additionally, for the analysis
of personal, professional, and transformational development, mean and standard deviation were employed. The application of correlation analysis was utilized to explore the interconnections between knowledge, attitude, and spirit concerning students’ professional, personal, and social transformation.

4. Result and Discussion

Students had a very high knowledge about service learning, which was shown by the highest mean of 4.626 with standard deviation of 0.680 (Table 2). A similar result was shown in a study where students benefited in terms of knowledge constructions when engaged in service learning [17]. The other variables also showed very high mean, with the lowest being 4.341 on spirit of service learning. Such results indicated that students had very high attitude, spirit, professional development, personal development and social transformation through service-learning activities.

Table 2. Overall descriptive statistics of the variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Interpretation a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge about service learning</td>
<td>4.626</td>
<td>0.680</td>
<td>Very high</td>
</tr>
<tr>
<td>Attitudes in service learning</td>
<td>4.505</td>
<td>0.695</td>
<td>Very high</td>
</tr>
<tr>
<td>Spirit of service learning</td>
<td>4.341</td>
<td>0.769</td>
<td>Very high</td>
</tr>
<tr>
<td>Professional development</td>
<td>4.440</td>
<td>0.758</td>
<td>Very high</td>
</tr>
<tr>
<td>Personal development</td>
<td>4.531</td>
<td>0.722</td>
<td>Very high</td>
</tr>
<tr>
<td>Social transformation</td>
<td>4.494</td>
<td>0.736</td>
<td>Very high</td>
</tr>
</tbody>
</table>

a Legend: 1.00-1.80 Very low, 1.81-2.60 low, 2.61-3.40 Moderate, 3.41-4.20 High, 4.21-5.00 Very high

Pearson correlation showed that respondents' knowledge, attitude, and spirit of service-learning significantly correlated with professional development, personal development, and social transformation (table 3). Analysis of the data revealed that students’ knowledge (r = .763, p < .001), attitude (r = .842, p < .001), and spirit (r = .843, p < .001) correlated with professional development. The correlation coefficients were positive, indicating that as students’ gained knowledge, attitude and spirit through SL, they also gained an increase in their professional development. Thus, H1, H2, and H3 is supported. This denotes that students are more likely to comprehend the advantages of service learning and recognize how it can assist them in their careers as they get more knowledge about it. This knowledge may result in a more favorable attitude towards service learning and a stronger desire to engage in SL learning activities. The study of Halberstadt et al. [18], which found that SL approaches can foster social entrepreneurship competencies, confirmed this study. Similarly, a study stated that SL experiences benefited students in theoretical and practical learning both in academic and non-academic skills [19], while another showed that students perceived SL experience as an enhancement to an understanding of course material [20].

Table 3. Relationship of knowledge, attitude, and spirit with professional development

<table>
<thead>
<tr>
<th></th>
<th>Knowledge</th>
<th>Attitude</th>
<th>Spirit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Development</td>
<td>.763**</td>
<td>.842**</td>
<td>.843**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Personal Development</td>
<td>.743**</td>
<td>.821**</td>
<td>.769**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Social Transformation</td>
<td>.754**</td>
<td>.839**</td>
<td>.813**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed). N = 99

Second, the analysis of data revealed that students’ knowledge (r = .743, p < .001), attitude (r = .821, p < .001), and spirit (r = .769, p < .001) correlated with personal development. The correlation coefficients were positive indicating that as students’ knowledge about service learning, attitude towards service learning, and spirit in service-learning increases, personal development also rises. Thus, H4, H5, and H6 is supported. This implies that SL has the potential to be an effective tool for personal growth and development of students. This is confirmed in several studies where SL helped students to acquire deeper understanding of
the course material and engagement in civic responsibility had positive impact on students' confidence [21] and sense of empathy [22] and improved public speaking skills [23].

Lastly, analysis of the data revealed that students' knowledge ($r = .754, p < .001$), attitude ($r = .839, p < .001$), and spirit ($r = .813, p < .001$) correlated with personal development. The correlation coefficients were positive indicating that as students’ knowledge about service learning, attitude towards service learning, and spirit in service-learning increases, social transformation also rises. Thus, H7, H8, and H9 is supported. The findings denote that service learning is a potent tool for social change. Students can build the skills and knowledge they need to make a difference in their communities by learning more about service learning, developing positive attitudes towards service learning, and promoting a spirit of service learning in their studies. This result is in line with several other studies, which found that SL as a teaching pedagogy can contribute to students personal development, and that social transformational of the community [13] on SL experiences of undergraduate students resulted in higher mental health outcomes and more conducive attitudes on civic responsibilities [24] and the social being of students is promoted in terms of cooperation, solidarity, cohesion, coexistence, attitudes towards school, diversity and achievement [25].

In addressing the research gap pertaining to the evaluation of Service Learning (SL) across the dimensions of knowledge, attitude, and spirit, and its correlation with students' professional and personal development, along with its potential for fostering social transformation, the findings of this study irradiate the pivotal role of SL in shaping future professionals committed to the principles and practices of advancing sustainable tourism.

The outcomes underscore the significance of SL as a transformative educational approach that goes beyond traditional pedagogies. To strengthen alignment with program objectives, the study proposes the incorporation of a Service-learning Pedagogy framework (Figure 2).

This framework is designed not only to enhance the integration of SL within the curriculum but also to strategically guide its implementation, ensuring synergy between academic goals and the cultivation of socially responsible, environmentally conscious professionals in the field of sustainable tourism.

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![Figure 2. Proposed service-learning pedagogy (SLP) framework](image-url)
5. Conclusion
The study concluded that students’ knowledge, attitude, and spirit are all significant factors to succeed in their personal, professional, and social transformation positioning them as influential agents of change within their communities. The key to incorporating valuable community service involvement into sustainable tourism enable students to connect the theoretical learning with practical impact. It involves going beyond just learning from books and instead involving students in experiences that contribute to their personal development and the welfare of the communities they interact with. Thus, embracing these principles, sustainable tourism education though integrating community service engagement, can cultivate a new a generation of responsible tourism experts who have strong ties to the communities and environments they influence. Considering these findings, this study recommends a broader integration of service-learning pedagogy into educational frameworks, emphasizing its role not only in individual growth but also in nurturing socially conscious and empowered students who can contribute significantly to sustainable community development.

Acknowledgements
The author would like to thank Mapúa Malayan Colleges Laguna for the support of this research paper.

Author Contributions
IF: conceptualization, methodology, Investigation, writing-review & editing original draft; DEM: software, supervision and validation; and MR: resources, investigation and writing-review editing.

Conflicts of interest
There are no conflicts to declare.

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