

# Impact of Service Learning among University College Students

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## ABSTRACT

The present study has examined the impact of service learning on college students' academic, school, and civic engagements as well as the attitudes and behaviors associated with environmental stewardship. Data were gathered from three hundred twenty five students at the end of the semester. Respondents had been engaged in service learning through academic courses for which they completed their questionnaire. The results of the study indicate a positive impact of service learning. Such findings support that students are able to gain a more valuable academic experience and increase their desire to be active in the community by incorporating the service-learning pedagogy.

**Keywords:** service learning, academic engagement, school engagement, civic engagement

## INTRODUCTION

Service Learning has been developing for more than fifteen years in the United States. However, in the Philippines, it a fairly recent development. Service-learning is a credit-bearing educational experience in which students participate in an organized service activity that meets identified needs of a social development entity or cultural

institution and reflect on the course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility ( Bringle & Hatcher, 1996).

The American Psychological Association (APA) defined service learning as a teaching method which combines community service with academic instruction as it focuses on critical, reflective thinking, and civic responsibility. Service learning programs involve students in organized community service that addresses local needs, while developing their academic skills, sense of civic responsibility and commitment to the community.

In the pedagogy of service-learning, higher educational institutions are experimenting with “hands-on” approach where students actually get to use the educational knowledge they gain in a community setting. This pedagogy consists of students engaging in their community in order to create social and civic change in areas of need (Herrera, 2017).

According to Tumapon (2018), there are several models of service learning. All models integrate academic learning (a subject, an academic program, on the job training, action research, etc.) with experiences in meaningful service to address community needs. One is a discipline based model where the content and learning objectives of an academic subject become the bases in evaluating their service experience. Another is a problem-based model where the knowledge, skills, and attitude to be developed are drawn from an academic program. In this case, “students or (teams) related to the community are as much as “consultants” working for client. They work with community members to understand a particular community problem/need, presuming that students will have some knowledge they can draw upon to make recommendations to the community or develop a solution the problem. (Examples are architecture students designing a park; business students developing a website; or botany students identifying non-native plants and suggesting eradication methods).

A third is capstone-based. These service-learning courses are generally designed for majors and minors of a given discipline. Almost exclusively for students in their final year, students draw upon the knowledge from their coursework and combine it with relevant service work in the community. In capstone courses, students draw from their major areas and demonstrate their understanding of their major discipline. Such an undertaking is an excellent help to students to transition from theory to practice by helping them establish professional contacts and gather personal experience.

A fourth is the undergraduate community-based action research. This is a relatively new approach gaining popularity. More effective with small classes/groups of students, it is similar to an independent study option for the student highly

experienced in community work. Students work closely with faculty members to learn research methodology while serving advocates for communities.

A fifth is internship-based service learning where students work from 10-20 hours weekly in a community setting to produce a body of work valuable to the community or site. With small groups or peers or one-on-one meetings with faculty advisors providing feedback, “students” analyze their new experiences using the discipline-based theories during the regular and ongoing reflective opportunities focused on reciprocity (Tumapon, 2018).

In recent years, service learning has become an integral part of the university curriculum. It is aligned with its mission to deliver quality instruction, research, and service learning for global integration. The university firmly believes in the development of the community through the capabilities of the faculty, students, staff, and alumni to reach out the underserved communities by providing them with effective continuing education, livelihood skills, and training opportunities as ways of enhancing the level of the people’s productivity. Students participate in the programs and projects that have been established and developed by the university beyond the campus in order to enhance experiential learning, community involvement, social consciousness, and generate a feeling that responds to the concerns of others.

Through service learning, the students are expected to develop within themselves a special concern and respect for others, and thus, serve as catalysts who will continuously change the lives of the people in the development of various communities.

The present study examined the impact of service learning on college students’ academic, school, and civic engagements, as well as the attitudes and behaviors associated with environmental stewardship.

## FRAMEWORK

This study is anchored on the writings of John Dewey’s theory of service-learning. For Dewey, citizenship flowed through the school. In school “students experience the mutuality of social life through service...” (Eyler & Giles, 1994).

In the *School and Society* (1915), Dewey advocated that school work was both intellectual (learning one’s lessons) and social (helping others; not as charity, but as empowering the recipient to gain more worth and self-confidence). Dewey’s passions were that students develop “...a willingness to suspend action in the face of a problematic situation and an inclination to engage in inquiry in trying to decide how to resolve the problem” (Robertson, 1992).

***Service-learning*** is a method under which students learn and develop

through active participation in thoughtfully organized service experiences that meet actual community needs, that are integrated into the students' academic curriculum or provide structured time for reflection and that enhance what is taught in school by extending student learning beyond the classroom and into the community (Willms, 2000) .

**Academic engagement** is an indicator that combines academic identification which refers to getting along with teachers, having an interest in the subject matter, and related behaviors and attitudes and academic participation which captures the student's work effort both inside and outside of school, including hours spent on homework, meeting deadlines, not skipping classes and so on (Statistics Canada, 2011).

According to Moss (2009), empirical study explored the effects of service learning on student attitudes toward academic engagement and civic responsibility. Results were used to determine the efficacy of service learning as interpreted in student attitudes toward academic engagement and student attitude toward civic responsibility. The study found no significant difference between the academic engagement and the civic responsibility attitudes of a high-school service learning project group and comparison group with comparable school and similar demographic characteristics (Moss, 2009).

According to (Appleton et al., 2008; Baron & Corbin, 2012; Fredericks et al., 2004; Phan & Ngu, 2014; Sharma & Bhaumik, 2013), engagement is a complex term that emphasizes students' various patterns in motivation, cognition, and behavior (International Education Studies, 2016) .

**School engagement** is divided into three dimensions as follows: cognitive engagement, emotional engagement, and behavioral engagement. Cognitive engagement refers to students' behaviors that reflect their thinking in terms of dedication which combines both ideas and willingness to take an action. Emotional engagement is a positive feeling students have for their teachers, peers, and school. It is believed that promotion of school engagement results in willingness to work. Behavioral engagement is students' practices or behaviors that are related to studying that takes place in school and brings about positive behaviors such as adherence to school rules, having no negative behaviors (Fredricks et. al, 2004). As Finn & Rock (1997) stated that adhering to school rules and not cutting class are considered behavioral engagement. Finn (1989) defines emotional as good feelings toward teachers, peers, and parents.

**Civic engagement** is an active involvement in the discourse dealing with the

need to develop and utilize knowledge for the improvement of society, to use talents and offer wisdom for the greater good, and to provide opportunities for education in the spirit of a democratic society. It is a duty to be informed and engaged to the fullest extent possible in the life and decisions of a democratic society and its governance. It means that the citizenry understands their role and the contributions their individual actions make in facilitating a working democracy. A civically educated and engaged citizen will be one who is open-minded, informed and empathetic to the idea of the public good (Civic Engagement in Higher Education, American Association of Higher Education, 2001).

A case study of Brogan (2012) examined student attitudes toward service-learning and future civic engagement based on level of institutionalization at 4-year state universities with the Carnegie Classification for Community Engagement. Using the Wingspread Principles as a guide for document analysis of each university's application for the Carnegie Classification for Community Engagement, common themes were identified regarding service-learning and community engagement among the five institutions participating in the study.

Analysis reveals all institutions participating in the study have a centralized service-learning office, strong university leadership support, and numerous community partnerships that designate all five universities as "high" institutionalization for service-learning and community engagement. Common themes among the universities may assist other institutions in service-learning and community engagement institutionalization. Student attitudes were examined in four categories: Attitude toward Service, Social Responsibility, Expected Community Results, and As a Result of Participation. Findings indicate there is a difference in student attitudes in all four categories among ethnicities and universities. Findings reveal no difference in student attitudes in all four categories between genders (California State University, 2012).

***Environmental stewardship*** is one way through which people get involved in promoting sustainability. It is a valuable and holistic concept for guiding productive and sustained relationships with the environment (Bennett et.al, 2018).

According to ScienceDirect, human activities have impacted the environment considering the human population has grown and changed, so has our impact on the environment. Stewardship will be shown to involve determination and monitoring of many key indicators and environmental processes, followed by

the tough decisions on how to steward those processes to maintain a healthy environment for all inhabitants.

***Environmental stewardship*** can also be defined as “ the responsible use (including conservation) of natural resources in a way that takes full and balanced account of the interests of society, future generations, other species, as well as of private needs, and accepts significant answerability to society” (Worrell & Appleby, 2000).

Environmental Stewardship is the responsibility for environmental quality shared by all those whose actions affect the environment (archive .epa.gov).

In a study on environmental stewardship by Guimaraes and Sato (1996) results suggest that companies showing higher degree of environment stewardship will derive greater business benefits than organizations which are, at minimum compliance with government regulations in this area (Journal of Transnational Management Development, 1996).

Perceived Self-Efficacy is defined as people’s beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self- Efficacy beliefs determine how people feel, think, motivate themselves and behave. Such beliefs produce these diverse effects through four major processes. A strong sense of efficacy enhances human accomplishment and personal well-being in many ways. People with high assurance in their capabilities approach difficult tasks as challenges to be mastered rather than as threats to be avoided.

People’s beliefs about their efficacy can be developed by four main sources of influence. The most effective way of creating a strong sense of efficacy is through mastery experiences. Personal /Self-efficacy is further divided into four categories first is the mastery or performance experiences, secondly vicarious experiences, third one is verbal persuasion and social influences (Gonzales, 2013). In the mastery experiences, a person is judged by their success or failure in an activity. Vicarious category explains that self-efficacy will increase when observing the success of a model in a similar situation. Verbal persuasion deals with comments and feedback coming from another person. If the one giving positive feedback is in authority, it may result to increase the self-efficacy. Social influences refer to the physical and emotional factors when facing situations that can contribute to his confidence level (Bandura, 1994).

Self-efficacy influences choices about which behaviors to undertake, the effort and persistence exerted in the face of obstacles, and ultimately, the mastery of those behaviors. Individuals are more likely to take on certain behaviors they

feel will have positive consequences rather than those they do not feel will be as favorable (Manglicmut, 2015).

Self-Efficacy is composed of three models: (1) Interest Development Model; (2) Career Choice Model; and (3) Performance Model. The Interest Development Model examines how to develop interests over time, while the Career Choice Model explores how personal, contextual, and experiential factors affect career-related choice behavior especially in relation to technology. The Performance Model explores the role of ability .self-efficacy, outcome expectations, and performance goals on academic or career related behavior (Perkman, 2009).

According to Tian and Huang (2013), leader empowerment behavior can influence employees' voice behavior through self-efficacy; organization-based self-esteem has moderating effect between leader empowerment behavior and employees' self-efficacy.

In a study by Nowell (2014) on sense of community responsibility in community collaborative, advancing a theory of community as resource and responsibility aimed at advancing our understanding of the experience of community by empirically investigating sense of community responsibility in relation to traditional measures of sense of community and indices of satisfaction, engagement, and leadership in inter-organizational collaborative settings. Findings support the proposition that, although both are related to the experience of community, SOC and SOC-R emphasize different aspects of that experience and operate under different theoretical mechanisms of influence. SOC emphasizes community as a resource which was found to be a more salient aspect in differentiating those who will be more or less satisfied with their experience. In addition, SOC was found to predict general participation in a community collaborative. SOC-R emphasizes the experience of community as a responsibility which appears to be a stronger predictor in explaining higher order engagement requiring greater investment of time and resources. Even more importantly, this study indicates that SOC-R is uniquely equipped to help us advance models of community leadership. As such, it represents an important contribution to expanding our understanding of the factors that drive members' willingness to give of themselves toward collective aims (Nowell, 2014).

Service learning may influence process of intellectual and social maturation in the education of a child by unifying the affective, cognitive, and behavioral domains. A succession of educational writers and scholars dating Dewey and Vygotsky, to the more recent Kolb and Freire developed the theoretical roots of service-learning. These theoretical roots supported this study (Moss, 2009).

Assessing the impact of service-learning on students' view on engagement, attitudes, and behavior was the basis of the study.

### **OBJECTIVES OF THE STUDY**

The purpose of this study was to determine the impact of service-learning on student engagements, attitudes, and behaviors associated with environmental stewardship. Specifically, it sought to determine: 1) the students' demographic profile, 2) students' views on how service learning impacted their academic engagement, school engagement, civic engagement, personal efficacy and empowerment, sense of belonging to school, and social responsibility.

### **METHODS**

Students from a university completed a survey questionnaire. Data were gathered from three hundred twenty five students at the end of the semester. Respondents had been engaged in service learning through academic courses for which they completed their questionnaire. Service learning in this university is incorporated into a 3-unit course. To earn the 3 unit credit, the students is required to spend time in a community setting during the semester, complete a reflection component, discuss his/her service learning experience, and complete a project by the end of the semester.



## RESULTS AND DISCUSSION

The students' profile and assessment of the impact from the service-learning was examined based on how the participants responded to the Likert Scale surveys. The responses were then codified by conducting a SPSS Frequency of the variable that measures the participants' responses.

**Objective 1:** To determine the demographic profile of the respondents in terms of age, colleges, and year levels.

Table 1

### *Demographic Profile*

Age Categories	Frequency	Percentage
50-55	2	.62
44-49	0	0
38-43	1	.31
32-37	4	1.24
25-31	25	7.7
18-24	293	90.17
<b>Gender</b>		
Male	137	42
Female	188	58
TOTAL	325	100

Table 1 Continued

College Categories	Frequency	Percentage
College of Arts and Sciences	30	9
College of Business and Accountancy	48	15
College of Criminal Justice	19	6
College of Teacher Education	30	9
College of Engineering	18	6
School of Graduate Studies	14	4
College of Information Technology	21	6
College of Law	5	2
College of Medical Laboratory Science	29	9
College of Medicine	10	3
College of Music	5	2
College of Nursing	20	6
College of Pharmacy	28	9
College of Rehabilitation Sciences	30	8
College of Radiologic Technology	18	6
TOTAL	325	100
<b>Year Level</b>		
1 <sup>st</sup> year	14	4
2 <sup>nd</sup> year	17	5
3 <sup>rd</sup> year	138	43
4 <sup>th</sup> year	143	44
5 <sup>th</sup> year	13	4
TOTAL	325	100

Age. The age brackets were grouped into : 18-24 years old ( 293 or 90.17%), 25-31 years old ( 25 or 7.7 % ) , 32-37 years old ( 4 or 1.24%), 38-43 years old ( 1 or 0.31 % ) ; 44-49 years old ( 1 or 0.31 % ) , 50-55 years old, ( 2 or 0.62 %).

Majority of the respondents are young as 18-24 years old followed by 25-31 years who were enrolled in the college level and professional schools. A few of the respondents were 32 years old to 55years old, it can be observed that these are students who were from the post-graduate programs or professional schools like the College of Medicine, College of Law and School of Graduate Studies.

Gender. The table shows that female respondents with a frequency distribution of 188 or 58% dominates the males with a frequency distribution of 137 or 42%.

College. The data on classification of colleges and professional schools indicated that majority of the respondents were from the College of Business and Accountancy ( 48 or 15 % ) , College of Arts and Sciences ( 30 or 9 % ) College of Teacher Education ( 30 or 9 % ) , College of Medical Laboratory ( 29 or 9% ), ) College of Pharmacy ( 28 or 9 % ) , College of Information Technology 21( 6 % ) , College of Nursing ( 20 or 6 % ) , College of Criminal Justice ( 19 or 6 % ) , College of Engineering ( 18 or 6 % ) , College of Radiologic Technology ( 18 or 6 % ) , School of Graduate Studies ( 14 or 4 % ) , and College of Medicine ( 10 or 3 % ). Majority of the respondents came from non-health related courses

and the least were from the professional schools.

Year Level. The year levels of the respondents are the following, 1st year level (14 or 4%), 2nd year level (17 or 5%), 3rd year level (138 or 43%), 4th year level (143 or 44%), and 5th level (13 or 4.0%). The data implied that majority of the respondents were enrolled in the fourth year level followed by the third year or junior level then the second year level, the least number of respondents were from the first year level and the fifth year level. The data revealed that most of the students were from the senior level while some were from the junior level, followed by the sophomore. It can be noted that majority were enrolled at the senior level and junior level taking up their major subjects and have practicum where the students were exposed to service learning for them to practice in the real world situation.

**Objective 2:** To determine the impact of Service learning among students in terms of Academic Engagement, School Engagement, and Civic Engagement.

Table 2

*Impact of Service Learning on Academic Engagement*

<b>Academic Engagement</b>	<b>Mean</b>	<b>Verbal Description</b>
Please indicate how much you agree or disagree with each of the following statements.		
1. I like being in school.	3.17	Moderately High Impact
2. I am interested in the work at school.	3.10	Moderately High Impact
3. I pay attention in class.	3.25	Moderately High Impact
4. Time seems to pass quickly when I am doing schoolwork.	3.21	Moderately High Impact
5. I like schoolwork best when it is challenging.	3.02	Moderately High Impact
6. I feel that the school work I am assigned is meaningful and important.	3.15	Moderately High Impact
7. My courses/subjects are interesting to me.	3.28	Moderately High Impact
8. I think that the things I am learning in school will be important for my future.	3.46	Moderately High Impact
<b>Overall Mean</b>	<b>3.20</b>	<b>Moderately High Impact</b>

Legend:

Scale	Range	Description
4	3.50 - 4.00	High Impact
3	2.50 - 3.49	Moderately High Impact
2	1.50 - 2.49	Low Impact
1	1.00 - 1.49	No Impact

Table 2 presents the survey result of the respondents’ assessment on the impact of service-learning on Academic Engagement. All the responses showed a total mean of 3.205 which verbally describes as moderately high impact. This implies that there is an agreement to service learning being able to produce positive impact on academic engagement. This is supported by a study of Dallimore & Souza (2002) on the interface between experience community service, and subject matter prepares students to become concerned, considerate, and connected members of society. Students can acquire new skills and knowledge about course material through participation in service-learning classes while providing community partners with a much needed service. According to Krupar (1994), that during the service-learning experience, students become profoundly and actively involved in their own learning discover for themselves rather than accept verbal and written pronouncements or directions (Vizenor, Souza, & Ertmer, 2017). The result of the study uphold the research by Lundy (2007), which states that service-learning supports the relationship between practical experience and academic performance. Einfeld and Collin (2008) support the participants’ desire to continue to serve their community after the service-learning.

Table 3

*Impact of Service Learning on School Engagement*

<b>School Engagement</b>	<b>Mean</b>	<b>Verbal Description</b>
1. I feel close to people at my school.	3.17	Moderately High Impact
2. I feel like I belong in my school.	3.16	Moderately High Impact
3. I am happy to be at my school.	3.18	Moderately High Impact
4. The teachers at my school treat student fairly.	3.08	Moderately High Impact
5. I feel safe in my school.	3.16	Moderately High Impact
6. I like most of my teachers at school.	3.18	Moderately High Impact
7. The students at this school do not like who are different.	2.54	Moderately High Impact
8. I am getting a good education at my school.	3.08	Moderately High Impact
9. I will graduate from high school/college.	3.59	High Impact
10. I want to go to college/graduate school.	3.46	Moderately High Impact

Table 3 Continued

<b>School Engagement</b>	<b>Mean</b>	<b>Verbal Description</b>
11. The discipline at my school is fair.	2.92	Moderately High Impact
12. Most of my teachers care about how I am doing.	3.00	Moderately High Impact
13. Most of my teachers know the subject matter well.	3.12	Moderately High Impact
14. I learn a lot from my classes.	3.10	Moderately High Impact
15. There is an adult at school that I can talk to about my problems.	2.86	Moderately High Impact
16. I respect most of teachers.	3.41	Moderately High Impact
17. Most of my teachers are always telling me what to do.	2.78	Moderately High Impact
18. Most of my teachers understand me.	2.94	Moderately High Impact
<b>Overall Mean</b>	<b>3.09</b>	<b>Moderately High Impact</b>

Legend:

Scale	Range	Description
4	3.50 - 4.00	High Impact
3	2.50 - 3.49	Moderately High Impact
2	1.50 - 2.49	Low Impact
1	1.00 - 1.49	No Impact

Table 3 shows the survey responses on the impact of service learning on school engagement. On the item “I will graduate from high school/college”, the respondents expressed their high impact with an average of 3.59. The rest of the responses showed an average ranging from 2.54 to 3.46 which is verbally described as moderately high impact. This implies that there is an agreement to positive service-learning impact on school engagement. This is in consonance with the study wherein teachers had a perceived role of establishing students ‘behavioral engagement as their duty required them to make students want to come to school and students ‘emotional engagements their duty required them to make the students love the school and their teachers. Fredericks, Blumenfeld, and Paris (2004), Chen (2008), Dalun, Hsu, Kwok, Benz, and Bowman(2011), Dotterer and Lowe (2011), and Roorda et al. (2011) have concluded that school engagement of students has an influence on their learning environment ([ac.els-cdn.com/](http://ac.els-cdn.com/) [www.sciencedirect.com](http://www.sciencedirect.com/)).

Table 4

*Impact of Service Learning on Civic Engagement*

<b>Civic Engagement</b>	<b>Mean</b>	<b>Verbal Description</b>
1. Students my age can do things to make the world better.	3.15	Moderately High Impact
2. I can make a difference in my neighborhood or town.	3.13	Moderately High Impact
3. I feel responsible for helping others.	3.23	Moderately High Impact
4. I often think about the needs of others.	3.19	Moderately High Impact
5. Helping to solve community problems is something everyone should do.	3.22	Moderately High Impact
6. I intend to volunteer throughout my whole life.	2.94	Moderately High Impact
<b>Overall Mean</b>	<b>3.14</b>	<b>Moderately High Impact</b>

Legend:

Scale	Range	Description
4	3.50 - 4.00	High Impact
3	2.50 – 3.49	Moderately High Impact
2	1.50 – 2.49	Low Impact
1	1.00 – 1.49	No Impact

Table 4 reveals the survey responses generated in terms of the impact of service learning on civic engagement. With a total mean of 3.14, the students expressed their agreement to moderately high impact on service-learning impact on school engagement. Providing opportunities for students to link community service with their classroom experience adds value to their college experience and enhances qualities of understanding and commitment that lead to effective citizenship participation.

This is in consonance with the study on service-learning and civic responsibility in a sample of African American college students investigated the impact of past and current service-learning on the civic attitudes of African American college women: 44 students enrolled in either service-learning or non-service-learning courses were given pretests and posttests measuring civic attitudes. Repeated measures analyses of variance were conducted to examine the effect of previous and current service-learning experiences on 6 different aspects of civic attitudes. Results did not indicate changes in civic attitudes over time for service-learning students. However, there was a significant interaction between past and current service-learning in predicting political awareness (Blankson et al., 2015).

**Objective 3:** To determine the impact of service learning on students' attitudes and behaviors associated with environmental stewardship in terms of personal efficacy and empowerment; sense of belonging to school; and social responsibility.

Table 5

*Attitudes and Behaviors associated with environmental stewardship on Personal Efficacy and Empowerment*

<b>Personal Efficacy and Empowerment</b>	<b>Mean</b>	<b>Verbal Description</b>
1. I re-examined my beliefs and attitudes about myself.	3.11	Moderately High Impact
2. I was exposed to new ideas and ways of seeing the world.	3.22	Moderately High Impact
3. I learned about the "real" world.	3.25	Moderately High Impact
4. I did things I never thought I could do.	3.27	Moderately High Impact
5. I changed some of my beliefs and attitudes.	3.11	Moderately High Impact
<b>Overall Mean</b>	<b>3.19</b>	Moderately High Impact

Legend:

Scale	Range	Description
4	3.50 - 4.00	High Impact
3	2.50 - 3.49	Moderately High Impact
2	1.50 - 2.49	Low Impact
1	1.00 - 1.49	No Impact

Table 5 presents the results of students' responses toward attitudes and behaviors associated with environmental stewardship on personal efficacy and empowerment. The responses showed an average of 3.192 which verbally describes as moderately high impact. According to Caldwell, as leaders strive for excellence, self-efficacy and self-awareness can empower them to unlock their own potential of their organizations and those with whom they work (Caldwell and Hayes, 2016). Students are empowered when they realize how their knowledge in a subject area can benefit the community at large and that they themselves can benefit society--something that they often neglect to realize to their experiences within the community (O'Hara, 2001).

Table 6

*Attitudes and Behaviors associated with environmental stewardship on Sense of Belonging to School*

<b>Sense of Belonging to School</b>	<b>Mean</b>	<b>Verbal Description</b>
1. I feel like I belong to this school.	3.11	Moderately High Impact
2. I contribute to this school.	3.00	Moderately High Impact
3. I am viewed by teachers as a valued part of this school.	3.07	Moderately High Impact
4. I have a responsibility for the welfare of this school.	3.07	Moderately High Impact
5. I feel proud of this school.	3.05	Moderately High Impact
6. I do things to make this school a better place.	3.01	Moderately High Impact
<b>Overall Mean</b>	<b>3.05</b>	Moderately High Impact

Legend:

Scale	Range	Description
4	3.50 - 4.00	High Impact
3	2.50 – 3.49	Moderately High Impact
2	1.50 – 2.49	Low Impact
1	1.00 – 1.49	No Impact

Table 6 reveals the responses of respondents on attitudes and behaviors associated with environmental stewardship on sense of belonging to school. They expressed agreement (3.051) on the positive impact of service learning on attitudes and behaviors. Engaging schools were also found to promote academic values and goals. Students value education when they are reinforced for behaviors that show the importance of education, have role models who are committed to education, and are encouraged by teachers and peers to pursue education opportunities. Students become more engaged in schools that place a strong emphasis on higher thinking skills, active participation, collaboration and meaningful connections to students’ culture. Research shows that engaging schools promote a sense of belonging; this includes the feeling of being valued by the teacher and other students. Students who believe they are treated unfairly or feel their teachers do not care become disengaged. Teachers need to take the time to learn about their students especially their strengths and interests (Billig and Shelley, 2006).



Table 7

*Attitudes and Behaviors associated with environmental stewardship on Social Responsibility*

<b>Social Responsibility</b>	<b>Mean</b>	<b>Verbal Description</b>
1. Students my age can do things to make the world better.	3.21	Moderately High Impact
2. I can make a difference in my neighborhood or town.	3.14	Moderately High Impact
3. I feel responsible for helping others.	3.24	Moderately High Impact
4. I often think about the needs of others.	3.16	Moderately High Impact
5. Helping to solve community problems is something everyone should do.	3.21	Moderately High Impact
6. I intend to volunteer throughout my whole life.	2.99	Moderately High Impact
<b>Overall Mean</b>	<b>3.16</b>	<b>Moderately High Impact</b>

Legend:

Scale	Range	Description
4	3.50 - 4.00	High Impact
3	2.50 – 3.49	Moderately High Impact
2	1.50 – 2.49	Low Impact
1	1.00 – 1.49	No Impact

Table 7 presents the results of students' responses toward attitudes and behaviors associated with environmental stewardship on social responsibility. The responses showed an average of 3.158 which verbally describes as moderately high impact. According to Henderson (2007), upon examining the relationship between service learning and self-reported attitudes of civic responsibility for community college students, the study revealed that community college students who participate in service learning do not exhibit different attitudes of civic responsibility than community college students who did not participate in service learning. It is important that there are notable differences reported by community college students who participated in service learning and those who did not participate. Unlike the larger group of students in the course, the service learning students reported having had more prior service learning experience than did the non-service learning students. In addition, the study participants who participate in service learning exhibited higher levels of civic consciousness from pretest to posttest than those who did not participate (Henderson, 2007).

## CONCLUSIONS

Overall, this study indicate a moderately high impact of service learning on Academic Engagement, School Engagement, Civic Engagement, and Attitudes and Behaviors associated with Environmental Stewardship among the university college students. Such findings support that students are able to gain a more valuable academic experience and increase their desire to be active in the community by incorporating the service-learning pedagogy. It clearly indicates that academic service-learning provides multiple benefits to students in higher education institutions.

## RECOMMENDATIONS

Based on the findings, the following are recommended:

1. Given that the study supports that when a student participates in a service-learning course, they are able to obtain a further academic and community engagement experience. The service-learning pedagogy needs to be integrated in all academic subject offerings and all academic levels regardless if it is for an undergraduate or graduate student;
2. Since this study is only limited to the under graduate students, another research will be conducted to see if there is a difference between the undergrad and graduate school students impact of service learning; and
3. Another study could be made on gender analysis in both undergraduate and graduate levels in order to determine significant differences.

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