

Sivalingam & Yunus, 2017

Volume 3 Issue 1, pp. 346 - 356

Date of Publication: 30th January, 2017

DOI-<https://dx.doi.org/10.20319/pijss.2017.31.346356>

This paper can be cited as: Sivalingam, P., & Yunus, M., M. (2017). Nurturing 21st Century Skills through Service Learning: from Isolation to Connection. *PEOPLE: International Journal of Social Sciences*, 3(1), 346-356.

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NURTURING 21ST CENTURY SKILLS THROUGH SERVICE LEARNING: FROM ISOLATION TO CONNECTION

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Abstract

As our nation is gearing up towards 21 century learning, herculean measures have been taken to ensure that our students are geared with 21st century skills. One of the key milestone in tailoring our students with 21st century skills is Service Learning (SL). Although SL is incorporated in the education world, the advent of Service Learning concept itself is still relatively new in our region. This quasi-experimental study explored on the effects of service learning on student's attitude towards learning. The pre and post-survey data shows that service learning has significant positive impact on student's learning attitude (Mean=10.2, SD=1.74). Concomitantly, service learning has a bright prospect in our country towards honing 21st century skills among our students.

Keywords

Service Learning, 21st Century Skills, Attitude Towards Learning

1. Introduction

The inception of the concept 21st century learning is thrusting educators to diversify their teaching pedagogies in the classroom. Imperative to 21st century learning, educationists are constantly brainstorming ways to accentuate learner's 21st century skills to meet demands of the globalization era. On par with 21st century learning, the Malaysian education system is designed to empower students to gain and impart the knowledge learnt for the benefit of the community. This notion is relevant with one of the six student aspirations outlined in the Malaysian Education Blueprint (2013). One of the key attributes delineated in the student's aspiration is 'ethics and spirituality'. The education system hopes to nurture citizens who are caring and are able to contribute to the betterment of the community. In addition, our National Philosophy of Education aspires to produce holistic individuals who are not only knowledgeable but possess high moral standards. Plausibly, it is hoped that students acquire the knowledge, skills, and attitude to face the advent of 21st century

Corresponding to this, our curriculum is designed to incorporate topics that depict real life situations. Though, the topics give a glimpse of what the real world scenarios are, learners are not exposed to the experience itself. The learning merely takes place within the four walls of the classroom. This posits bigger issue when learners step into the real world. In a research conducted by Ang (2016) showed that Malaysian youths were less worried about civic engagement. Therefore, incorporating experiential learning theory in our education system is pivotal. According to Kolb (2014), experiential learning offers learners have direct touch with the realities being studied. In view of the experiential theory, learners construct knowledge from their socio-cultural environment. This is further supported by Pacific Policy Research Center (2010) who propounds that 21st century learning should take place in contexts that empowers students to learn in real milieus.

Thus, one of the many ways to cultivate experiential learning is through service learning. Service learning provides a platform for learners to construct their knowledge based on their interaction with the wider community. This notion is supported by Clark (2016) & McDonnell (2017), who mention that service learning encourages learners to connect educational elements to real-world communities. Although the concept of service learning has been implemented in the education system in the West, not many researches have been done on the effectiveness and

the implication of service learning in our region. Therefore, this paper aims to explore the effect of service learning in enhancing learner's attitude towards education.

2. Literature Review

2.1 Experiential Learning

Experiential learning is an educational concept that emphasizes on the process of active creation of knowledge (Kolb, 2014). The advent of experiential learning was propounded by John Dewey, which later gained recognition and adopted by various academicians such as Kolb (1984); Eylar (2009) and many more. David Kolb's ELT constitutes the progression of creating knowledge, sense-making and in transferring the knowledge (Mughal & Zafar, 2011). Therefore, experiential learning is a process that allows learners to grasp knowledge, apply the knowledge, and reflect on the new knowledge. This process goes beyond their traditional classroom experiences.

The 21st century learners that our nation aspires to produce, need experiential learning environment whereby they can experience and practice what they have learnt in the classroom and undergo series of reflection. This will definitely hone their higher order thinking skills.

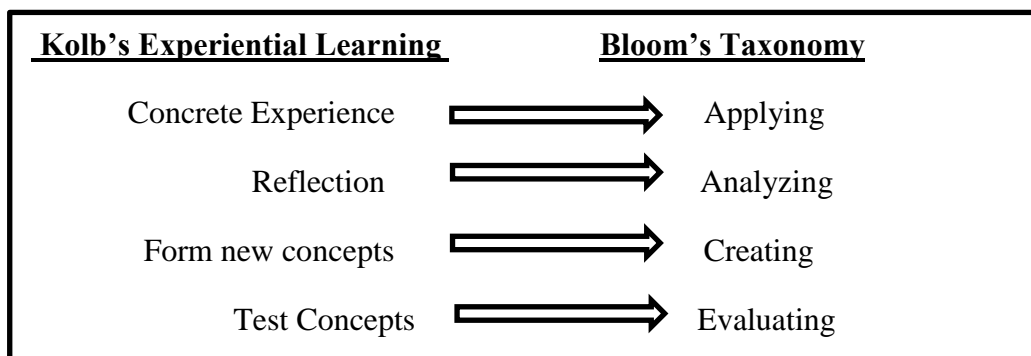


Figure 1: *The link between experiential learning and Bloom's taxonomy*

The figure above denotes the linkage between experimental learning and Bloom's Taxonomy. The four steps explained in Kolb's Experimental Learning namely; concrete experience, reflection, formation of new concepts and test concepts are pivotal in shaping our future generation with 21st century skills. This is evident that experiential learning helps to hone learner's Higher Order Thinking Skills (HOTS) such as evaluate, synthesize, analyze and use. Through experiential learning, students can use the knowledge they have gained in the classroom

and analyze its relevance to the wider community. They can further synthesize the relevance and effectiveness and finally evaluate the impact it has on the learner and the community.

2.2 Service Learning

Service learning (SL) is not a neoteric idea or concept. Farber (2011) elucidates that the concept of service learning has been incorporated in education since the nineteenth century where John Dewey believed that service learning amalgamated into the academics could help learners to be effective learners and better citizens. Brail (2016) advocates that service learning is a powerful tool that fuels students learning and understanding. Therefore, it is pivotal for us to comprehend what constitutes the paradigm of service learning. There are many definitions pertaining to service learning, however, one definition encapsulated the essence of service learning.

“Service learning is distinguished from other approaches to experiential education by its commitment to certain values as well as its inclusion of continuous, structured reflection.”
(Eyler, 2009)

Service learning is knitted to the experiential learning theory (ELT) whereby learners gain knowledge through direct experiences tied to real world predicaments (Mughal & Zafar, 2011; Bartle, 2015). However, some may argue that community service is similar to service learning and is sufficient to enhance student’s knowledge and 21st century skills. Although, community service adopts experiential learning theory, it is not similar to service learning. Unlike community service, service learning deliberately links the service aspect to the educational goals (Bingle & Hatcher, 1999). Service learning allows educators to bring the pedagogical aspect into the real world. Thus, learners can apply what they have learnt in the classroom to the real world. Concomitantly, service learning promotes critical thinking where learners face the real community and deal with situations that are real. Therefore, they are able to solve problem and apply what they have learnt in the classroom. Prentice and Robinson (2010) explained that service learning encourages students to deal with real life situations critically and logically. Therefore, learners go beyond what they experience in the classroom. Besides that, learners reflect on what they have gained through service learning. Service learning helps learners to experience and impart the knowledge gained in the classroom.

The conceptual framework that explains the concept of service learning is explained as shown in Fig. 1.

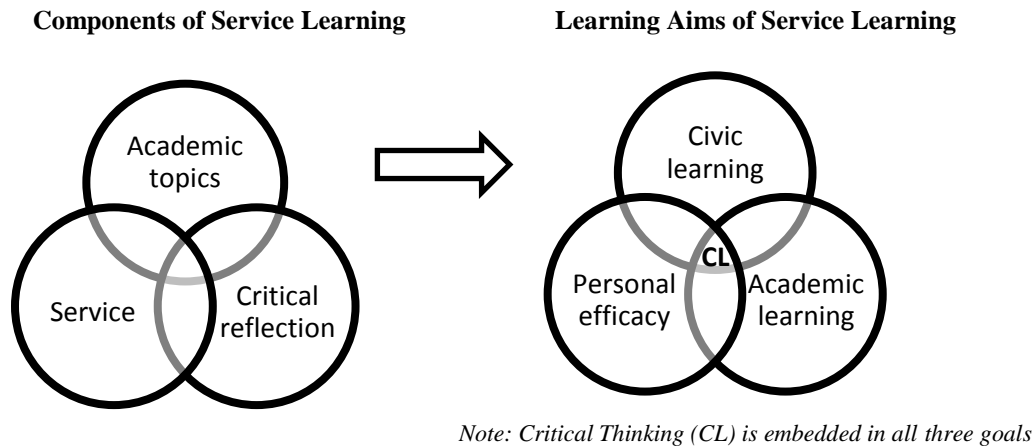


Figure 2: *Conceptual framework of service learning*

The framework shows a clearer picture of the components and learning goals pertaining to service learning. There are three components related to service learning namely; academic topics, service and critical reflection. Each components are integral to one another. Through applying these components of service learning, learners are expected to achieve three learning goals- civic learning, academic learning and personal efficacy. Each goals helps to shape student's thinking skills, personality and attitude that are relevant to this globalization era. Vogelgesang, Ikeda, Gilmartin, & Keup (2002) posit that a well-designed service learning will benefit students in making connections between their academic material and service experiences. Therefore it is pertinent for educators to carefully execute the service learning sessions to gain maximum advantages of service learning.

3. Methodology

3.1 Study Design and Sample

A quasi-experimental study was conducted at a primary school in Merlimau, Melaka. The sample included 15 Year 5 students (10 male and 5 female). The study was conducted as part of the English Language subject. Students learnt a topic in their English textbook with the title

“Being a Good Citizen”. The study was conducted in two sessions. The first session is conducted without the service learning (NSL) meanwhile for the second session, service learning (SL) was incorporated as part of their lesson. Students were brought to a nearby old folks home at Merlimau. Students were able to apply the knowledge they have gained in the classroom. A pre and post survey was conducted to measure student’s attitude towards learning.

3.2 Instruments

Firstly, student were taught the topic “Being a Good Citizen” in the traditional classroom setting using the Ministry of Education English Year 5 textbook. After the teacher concluded the topic, students were given a survey. A number of six statements were asked in the pre and post survey forms. Likert Scale approach was adopted for the survey forms. John (2010) suggests that Likert Scale espouses a simple and versatile feature. Therefore, in this study laconic language and simple design were used. In addition, 3 Scale Likert was used namely; Agree, Not sure, and disagree, to ensure a ground understanding of the statements and the scales used.

3.3 Data Analysis Procedure(s)

The obtained data was inputted into IBM SPSS Statistics version 20. Descriptive statistics was used to describe sample attitude towards learning. For this study, mean and standard deviation (SD) were calculated for continuous data. Paired sample t-test was conducted to derive the mean and SD for the pre and post surveys. The 3 scales of the Survey were given a score to compute the total scores obtained by each student. Each question is carefully given a score ranging from 0-2 (refer Table 1)

Table 1: Scores for each scale based on the questions.

Statements	Agree	Not Sure	Disagree
Statement 1	1	0	2
Statement 2	1	0	2
Statement 3	1	0	2
Statement 4	2	0	1
Statement 5	2	0	1
Statement 6	2	0	1

The total score for each student is calculated based on their response on the Likert Scale. The same method is applied for the post-survey scores.

4. Results and Findings

The results in this study are grounded on descriptive statistical analysis. The average score for pre and post survey results were analyzed using pair sample t-test (refer Table 2). The average score for attitude towards learning without service learning (NSL) is 6.40 (SD=2.10) meanwhile for service learning (SL), the average attitude score was 10.2 (SD=1.74). The mean for SL is higher than the mean for NSL. This shows that students have more positive attitude towards learning after they were involved in SL. Besides that, there is a strong evidence ($t(14) = 6.971, p < 0.05$) that SL elevates students attitude towards learning (refer Table 3).

Table 2: SPSS output for *paired sample t-test*

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	NSL	6.4000	15	2.09762	.54160
	SL	10.2000	15	1.74028	.44934

Note: The response for each student is summed each for pre (NSL) and post (SL) survey. The value range of the scale for Statement 1 to 3 – “Agree”(1), “Not Sure”(0) and “Disagree”(2) and for Statement 4 to 5- “Agree”(2), “Not Sure”(0) and “Disagree”(2).

Table 3: SPSS output for *paired sample t-test*

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 NSL - SL	-3.80000	2.11119	.54511	-4.96914	-2.63086	-6.971	14	.000

Overall, students were more positive towards learning after they were involved in SL as compared to traditional classroom setting. They were more enthused to learn and apply their knowledge and skills in the real setting. Based on the survey the highest score for NSL was 11 (6.67%) meanwhile the highest score for SL was 12 (33.3%).

Table 4: Mean for pre and post-survey items referring to attitude towards learning.

Statements	NSL	SL
The topic is boring	1.20	1.80
The topic is not relevant to my life	0.80	1.93
There is no use learning the topic	1.00	1.20
I am interested in learning the topic	1.27	1.87
There is active learning involved	1.33	1.73
The lesson is student-centered	0.80	1.80

Note: The response for each statement is summed each for pre (NSL) and post (SL) survey. The value range of the scale for Statement 1 to 3 – “Agree”(1), “Not Sure”(0)and “Disagree”(2)and for Statement 4 to 5- “Agree”(2), “Not Sure”(0) and “Disagree”(2).

The table above shows the mean for each item in the survey for pre and post-survey. For each of the statements in the survey, SL scored a higher mean compared to NSL. The most significant difference in mean is for Statement 2, whereby, students felt the topic that they learnt was relevant to their life after SL session (Mean=1.93) compared to NSL session (Mean=0.80). This shows that experiential learning helps students to relate the academic content to their life. Thus, meaningful learning takes place.

For example, during the service learning session, students had the opportunity to communicate and socialize with the senior citizens. They had fun communicating and they also learnt on how to be a good listener. Divulging students to experiential learning at a young age gives them the platform to implement what they have learnt and experience real life situations and problems. This is supported by Houston et al (2016) who state that presenting workplace situation to academics ensures heightened engagement between the stakeholders. This helps them to cultivate their critical thinking and problem solving skills since young. Brown (1998) advocates that service learning that is introduced during the pre-adolescent years helps to probe risk of drop outs in school. Besides, through service learning, the inculcation of moral values is also evident. This could be seen when students were respectful and helpful towards the senior citizens at the old folk’s home. Students enjoyed and appreciated the lesson learnt in the classroom as it added meaning to their life.

5. Conclusion and Future Work

Gearing our students to be well-equipped with 21st century skills is a challenging task for educators. Many approaches have been taken by the policy makers, stakeholders and educators to produce holistic learners. While a lot of emphasis is given in leveraging information communication technology (ICT) in schools nationwide (Malaysian Education Blueprint, 2013), learners were not given the opportunity to practice what they have learnt. In light to this, many graduates are unemployed in Malaysia due to their inadequate social skills (Rosnizza & Suhaiza, 2015). Therefore, service learning is one of the many portals of growth that could be implemented in our education to further enhance the birth of 21st century leaders. Service learning helps students to actively engage with the wider community, make connections with their service experiences and academic topics learnt in the classroom, and critically reflect and consult on the learning that took place.

In this study, only 15 students were used as sample to determine the effect of service learning on their attitude towards education. Future research could be done on larger samples to provide profound comprehension on the effects of service learning towards student's attitude towards academic. In addition, the effect of service learning on academic outcomes and personality could also be studied. A longitudinal study would also provide a better understanding on the process and effect of service learning in education.

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