

# **Towards A Conceptual Framework for Service-Learning in Online Learning Environment**

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## **Abstract**

Service learning is widely becoming as a very important experiential practice in Higher Education Institutions (HEI) around the world. In part of Malaysian Higher Education Strategic Plan the growing popularity of service learning has been a response to create graduates who are holistic, entrepreneurial and balanced. In this context students must be prepared to become lifelong learners to gain the skills and knowledge required for our modern knowledge society. There has been many research conducted among undergraduates use service learning in traditional way. Not much study have shown to foster online learning environment in service learning. Due to lack of conceptual framework that can guide this implementation, this research aimed to develop a conceptual framework of service learning in online virtual learning environment. The presented conceptual framework for online educator could benefit all who are involved in supporting quality online education, in an effort to develop and impactful online practice that aligns with the corresponding educational needs, services, and resources.

## **Keywords**

Service Learning, Virtual Learning, Conceptual Framework, Higher Education, Malaysia.

## **1. Introduction**

Service learning a form of experiential learning practices is very important in Higher Education Institution (HEI). According to Malaysia Education Blueprint (2015-2025), Malaysia Ministry of Higher Education (MoHE) has included service learning in one of the 10th shift statement to create graduates who are holistic, entrepreneurial and balanced. The pedagogy teaching tool is well underway in Malaysia HEI since MoHE encourage HEI to take advantage of service opportunities in order to apply or observe principles learned in the classroom outside in the community. The Centre for Co-curriculum Courses and Service Learning (CCSL, 2017), Universiti Teknologi Malaysia has come out with the initiative to implement the National Higher Education Strategic Plan beyond 2025. The overall planning of CCSL (2017) is to provide an experiential learning that provides students the opportunity to apply experiences gained in serving people in the local community to their understanding of material learned in the classroom. Therefore, the students are trained to develop their graduate attribute skills such as communication skills, thinking skills, scholarship, leadership & team working skills, adaptability, global citizen and enterprising skills (CCSL, 2017).

Learning by doing facilitated through an effective experiential learning practice which is full of activities that have direct association to students graduate attribute skills. The concept of service learning can be traced back to Dewey's (1938) theory of experiential learning, who emphasized that students' learning can be enhanced through valuable fieldwork in order to inspire academic interest. Therefore, service learning cultivate bonds between educational

institutions and the communities in which they reside. It provides help and support to those in need and facilitates interactions between students and members of the community who might not otherwise have contact. Dewey (1938) also argued that learning should emphasize the experiences of the learner and stressed the importance of connecting institution to community. In this way it promotes student-centered learning. This philosophy provides the foundation of service learning, as both concepts focus on “learning by doing” and connecting to the community can encourage student-centered learning. Dewey argued that education should extend beyond the walls of the classroom and occur in a real-world setting, an idea that is embraced in the concept of service learning in our modern knowledge society (Hatcher and Erasmus, 2008; Scott, 2012).

To gain the skills and knowledge required for our modern knowledge society students must be prepared to become lifelong learners. To acquire these skills students must learn to become active partners in the learning process and to take control of their own learning (Hoic-Bozic, Mornar, & Boticki, 2009). To become an active learner the student must be engaged in his/hers learning (Bowen, 2005; Cleveland-Innes, 2010; Kuh, Kinzie, Schuh, & Whitt, 2005). The structure of the traditional classroom wherein the instructors conducts a lecture and the students are expected to gain knowledge from listening and capturing the information from the lecture tends to be more instructor-centric versus student-centric. This instructor-centric environment does not tend to lead to student engagement. While learning in this fashion has been the mode in which generations have acquired knowledge, technology has enabled a new type of structure in which students are able to become more active learners. Blending online instructional technology with service learning is a newer learning modality and investigations of the process are warranted (J. Killian, 2004).

## **2. Background of Study**

Majority of previous research conducted on service learning examines undergraduate students enrolled in traditional face-to-face and on-site service learning. Not much study have shown to foster technology in service learning. Sandy and Franco (2014) conducted a meta-analysis on 15 papers and discovered that there are less scholarly references directly related to e-service learning or online service learning. Service learning through online course differs from traditional service learning. In the traditional service learning model refers to face-to-face instruction, typically involved in a lecture or note taking classroom and on-site field service visits (Waldner *et al.*, 2012).

Indeed, service-learning is a teaching method as well as unit bearing course that encourages field based learning and reflection process. Creating and encouraging engagement in opportunities for an online reflection such as forums, blogs, discussions, collaboration in an online course whether synchronous and asynchronous are important to facilitating students’ successful participation in an online course specifically in an e-service-learning courses (K. L. Guthrie & H. McCracken, 2014). Moreover, reflection is a key component of service learning, and is that component which distinguishes service learning from volunteerism (Eyler, 2002). Reflection provides the means to assess the experiential learning that occurs when students participate in service activities outside the classroom.

Within such context, students’ and teachers’ engagement with curricula, learning environments, and technologies combine to ignite uniquely reflection experiences. These experiences are essential to constructing new areas of knowledge that are representative of individualized meaning making as well as collective problem solving. It is through such processes that students develop capacities for the reflection and inquiry essential to learning and knowing: about themselves, the academic disciplines with which they are engaged, and societal challenges. J. Killian (2004) agreed that effective online course teaching and service learning activities are able to nurture reflection thinking skills.

The learning outcome should not just lean on knowledge acquisition but aid to develop cognitively and socially. At higher education institutions the offering of online courses and online enrollments continues to grow at a rapid rate (Allen & Seaman, 2010; Yusof *et al.*, 2017). Today’s students desire the flexibility provided by online courses and the anytime, anywhere learning they provide. Historically, however, online courses have had lower retention and achievement rates, with higher education institution typically demonstrating the highest dropout rates (Morris, Wu, & Finnegan, 2005; Yusof *et al.*, 2017). Those students who do not complete their online courses frequently attribute their dissatisfaction to a lack of social presence and feelings of isolation resulting from a lack of interaction with the instructor and other students (Nistor & Neubauer, 2010; Rovai & Downey, 2010; Rovai *et al.*, 2007).

To develop students teaching presence, social presence and cognitive presence, there has been an escalating interest in exploring factors that influence the effectiveness of online learning, among which motivation was found to be one of the most critical factors that affect various learning outcomes (Lim & Kim, 2002; Xie, Debacker, & Ferguson, 2006). Self-determination theory, a comprehensive theory of motivation, seems to be overlooked in online learning

research. In fact, for over thirty years, SDT has become “one of the most comprehensive and empirically supported theories of motivation available today” (Pintrich and Schunk, 2002).

Self-determination theory (SDT; Deci & Ryan, 1985, 2002) is a general theory of motivation that purports to systematically explicate the dynamics of human needs, motivation, and well-being within the immediate social context. SDT begins with an assumption that humans are active and growth-oriented organisms seeking a sense of wholeness, vitality, and integrity (Ryan & Deci, 2000). Psychological growth and integration are facilitated through the satisfaction of three universal human needs: the need for autonomy (a sense of control and agency), the need for competence (to feel oneself competent with tasks and activities), and the need for relatedness (feeling included, or affiliated; Pintrich & Schunk, 2002). Through the satisfaction of these basic needs, individuals may experience an elaborated and unified sense of self, embrace self-oriented motivation, and achieve a better sense of well-being (Ryan & Deci, 2002). On the other hand, the absence of needs satisfaction may produce a highly fragmented, reactive, or alienated self.

Following the above assumptions, SDT theorizes three types of motivation as the mediating process between needs satisfaction and well-being: intrinsic motivation, extrinsic motivation, and amotivation. Intrinsic motivation refers to doing something because it is enjoyable, optimally challenging, or aesthetically pleasing (Ryan & Deci, 2002). Extrinsic motivation occurs when people are “doing something because it leads to a separable outcome” (Deci & Ryan, 1985). With extrinsic motivation, people act because of fear, guilt, external incentives, or in recognition of personal importance. Amotivation refers to “the state of lacking intention to act” (Ryan & Deci, 2002). Usually, it results from a lack of contingency, feeling of competency, or perceived value of the tasks.

### **3. Literature Review**

#### **3.1 Service Learning**

Service learning in higher education is often defined as an academic course based on credit that involves participating in service and reflecting on that service in order to gain a better understanding of the curriculum and a deeper appreciation of the field (Bringle & Hatcher, 2000). Service learning has been a recognized pedagogical method for more than twenty years as John Dewey (1938) suggested the importance of linking learning and knowledge to activity and social inquiry. Since that time, educators have been aware that students learn better when their learning is not bound by classroom, textbooks and memorization.

Service learning as a pedagogy is different from more traditional types of pedagogy because of its emphasis on the group rather than individual. Service learning indicate that properly implemented service learning projects not only enrich the learning experience of the students, but promote reflection on the long term benefits of community service. In addition to providing students with opportunities to apply the knowledge they learn in the classroom to a real world environment, Hatcher and Erasmus (2008) argue that service learning teaches civic responsibility and at the same time it is helping to strengthen communities. The benefits of service learning not only providing students with real-world experience in technical and social skills but also developing in students a sense of responsibility and ownership (Ferguson *et al*, 2006; 2003; Webster & Mirielli, 2007).

#### **3.2 Reflection in Service Learning**

According to Dubinsky (2006), “Reflection is an essential way for students to learning by doing and understanding”. Reflection is the process by which students recognize and articulate what they have learned. “Reflection is the hyphen that links service to learning” (Eylar, 2002, p. 453). Service learning as a type of experiential education in which students participate in service in the community and reflect on their involvements in such a way as to gain further understanding of the course content and of the discipline and its relationship to social need and an enhanced sense of civic responsibility (Bringle and Hatcher, 1996).

Recent studies of service learning have begun to demonstrate the value of community service in facilitating the understanding of course material, helping students achieve personal and educational goals and stimulating student interest in course material and related issues (Edmund Tsang, 2000). Sanderson & Vollmar (2000) found that classroom learning and course grades increased significantly because of students' participation in course-relevant community service. A study by Webster and Mirielli (2007) showed that students doing a weekly reflection in their

journal improved their writing skills, as well as their creative and reflective thinking. Ferguson *et al* (2006) points out that experiences outside the classroom are an important venue where students develop an appreciation for people from background different from their own, and cultivate skills that enable them to relate personally to those individuals.

Service learning can also produce positive outcomes for the HEI and the community. Utilizing readily available resources for the good of the community is in itself a lesson in civic duty and pride. Students have many positive experiences throughout the process and the school and community benefit (Astin, 1984; Godfrey, 1999; Tinto, 1997). However, the most learning occurs when each participant reflects on the process and the outcomes. Reflection is the point at which all involved can see the true benefits of their accomplishments. Students will learn not only from their experiences, but also from the intimacy and immediacy of their personal reflections (Godfrey, 1999). Reflection is the essential component for learning and growth in service learning (Shinnar & Young, 2003). Reflection can take many forms: oral or written, formal or informal, class presentations, papers, interviews, or journals. The reflection should be required in the course and it should also challenge the students to critically think about the linkage between the academic and service components of the course (Godfrey, 1999).

### 3.3 Service Learning in Online Course

Community engagement initiatives have the potential to improve the technical writing classroom experience for undergraduate students by connecting learning and experience (Soria & Weiner, 2013). The results of a study by Soria and Weiner (2013) “provide evidence for the benefits of incorporating service learning activities into distance education technical writing courses and build toward a theory that describes the ways in which students’ learning is enhanced through the real world connections established with community partners.” The authors asserted that because web-based learning is growing in higher education, it is important to discuss its implications for service learning. The results of their study imply that students were able to transfer what they learned in an academic setting to the real world within a virtual environment.

In Figure 1, Waldner *et al.* (2012) differentiate three different types of service learning. According to Waldner *et al.* (2012), the combination of on-site service component and online course or vice versa are conducted online is considered e-service learning. And e-service learning is called extreme when both instruction and service component are conducted online. Meanwhile, on site instructions and on-site service are called traditional service learning.

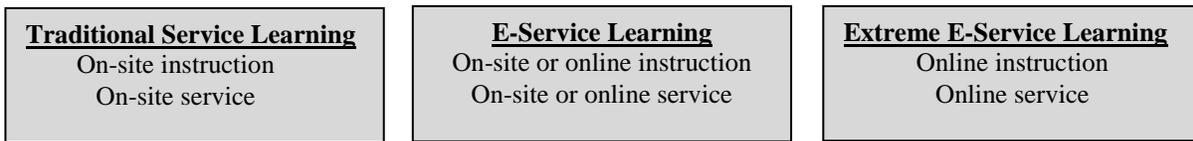


Figure 1. Different types of Service Learning

#### 3.3.1 Community of Inquiry (CoI)

Several studies have provided evidence that learning without proper guidance from instructors will result in the students’ feeling of isolation, lack of self-confidence, reduced motivation and difficulty in accomplishing complex tasks (McLoughlin and Marshall, 2000; Reiser, 2002; Ludwig-Hardman and Dunlap, 2003). These issues have also attracted other researchers to investigate the effects of students’ losing guidance from teachers and content expert. These students may lose their focus on their studies or lose hopes and interests in developing their potential skills and knowledge (Holmes *et al.*, 2010). Such effects have ignited researchers and academicians to find possible factors in identifying factors that constitutes to teaching presence and the ability to enhance both social and cognitive presence that can assist learners in their learning process. Community of Inquiry (CoI) is a framework developed by Garrison *et al.* (2000) that identifies three essential elements which are critical for fostering learning in an online education course. A higher level of presence increases the level of motivation and achievement. As a result, scholars have come to realize that learners require guidance from instructors or more skillful peers in order to meet instructional objectives in learning (Reiser, 2002; Kazlauskas and Applebee, 2007) and this guidance is

necessary when it comes to online course. The three elements are teaching presence, social presence, and cognitive presence. In figure 2 has shown that the interaction between the three elements influences learning.

### **3.3.2 Collaborative and Reflective Process**

According to the CoI framework students need to be “engaged in a collaborative and reflective process which includes understanding an issue or problem, searching for relevant information, connecting and integrating information, and actively confirming the understanding” (Garrison 2011, p. 94). An obvious instrument to do so seem to be discussion forums, which are therefore commonly used in eLearning. Computer-mediated communication tools, like discussion forums, provide ways for learners to interact. Research suggests that asynchronous online discussions are even superior with regard to knowledge co-construction due to the available time for reflection and constructive contributions when compared to synchronous face-to-face discussions (Wang *et al.* 2009). On the other hand, in practice, it usually stays unassessed and questionable whether the initiated discussions really provided for the intended critical and reflective interaction among the participants and thus for cognitive presence.

### **3.4 Student Motivation**

Without some motivating force students are unlikely to learn. Students are motivated to learn in the online course environment based on intrinsic and extrinsic motivation. This framework is developed based on Deci and Ryan’s (1985) “self-determination theory”. This theory divides motivation into intrinsic and extrinsic motivation. Intrinsic motivation of the students will lead them to collaborate and reflect their learning for their own inner desire and enjoyment. Extrinsic motivation of the students will lead them collaborate and reflect their in the online course for the sake of external rewards such as for grades, to improve knowledge and others. Both intrinsic and extrinsic motivation does influence students’ choice on collaborating and reflecting in an online course. Motivation is important in any type of learning as it influences what we learn, how we learn, and when we choose to learn (Schunk, 1995). Motivated students are more likely to be actively engaged in learning activities and to display enhanced performance and persistence (Schunk, Pintrich, & Meece, 2008). Students become motivated to learn when they are fully absorbed in a task, characterized by personal experiences of concentration, energy and success (Csikszentmihalyi, 1990). Therefore, an important task in trying to motivate students is instilling the right amount of students scaffolding from a more knowledgeable peer, teacher or instructor to successfully accomplish the learning task (Vygotsky, 1978).

## **4. Conceptual Framework Proposed for Service Learning in Online Course**

In the discussion above, a conceptual framework was developed based on the service learning model by John Dewey (1938), Community of Inquiry model by Garrison and Anderson (2007) and Self Determination Theory by Ryan & Deci (1985). The service learning in online course model in the figure below depicts the basic components of service learning, illustrating that the concepts of service, reflection, and academic are connected to each other. Dewey (1938) saw learning can achieved through learning from experience, engagement in the community and reflective thinking. Dewey (1938) felt that experiences should be combined with education in order to create authentic learning experiences. Through learning by doing, students can grow into active members of society. According to Dewey (1938), community involvement is a central part of experiential learning. Dewey believed that it is every student’s responsibility to work towards a common good for the nation.

Dewey (1938) specified that four conditions must be present to maximize the potential for learning to be educative: a) it must generate interest in the learner; b) it must be intrinsically worthwhile to the learner; c) it must present problems that awaken new curiosity and create a demand for information; and d) it must cover a considerable time and foster development over time. The figure below also shows that academic content is strongly connected to teaching presence with extrinsic motivation, service connected to social presence with extrinsic motivation and reflection connected strongly to cognitive presence with academic performance.

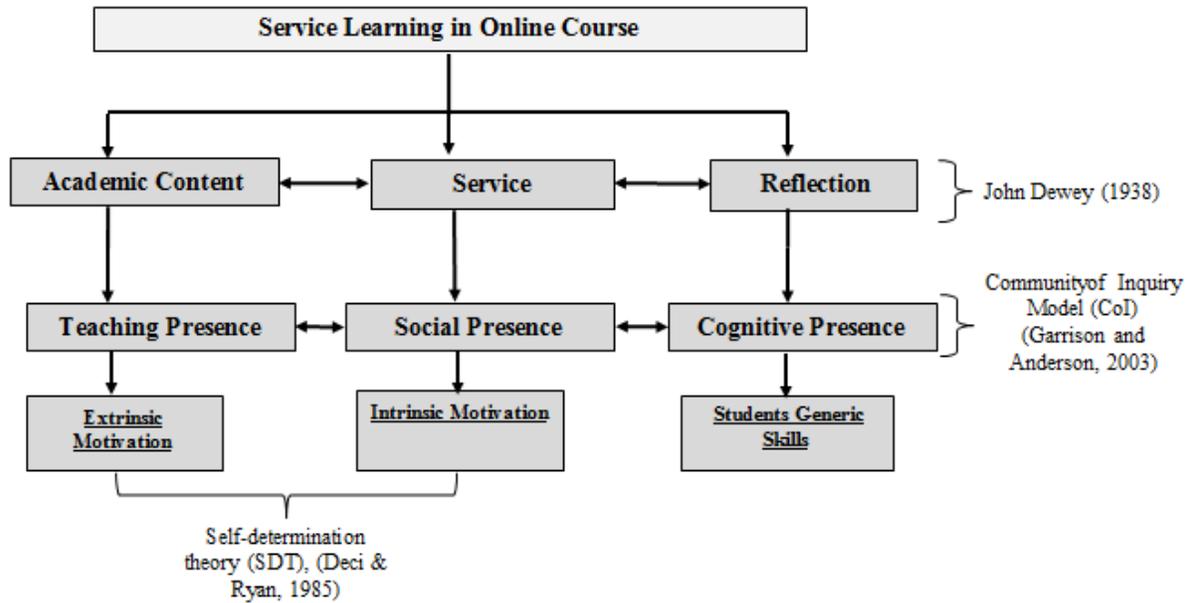


Figure 2. Conceptual Framework the Integration of Service Learning with Online Course

Teaching presence is the design, facilitation, and direction of cognitive and social processes to bring about relevant and meaningful learning outcomes (Garrison & Anderson, 2007). This is the communication between the student and the subject matter expert; instructors provide the presentation of information and the motivation for students to learn and gain new knowledge (Garrison *et al.*, 2000; Moore, 1989). In this conceptual framework study, it refers to facilitating discourse in which extrinsic reward given to the learners in identifying their points of agreement and/or disagreement.

Social presence is the ability of learners to project themselves as real people in the community of learners (Garrison *et al.*, 2000). It means sharing ideas and asking questions of each other without the presence of the instructor (Garrison *et al.*, 2000; Moore, 1989). In this conceptual framework study, it refers to student's ability to intrinsically motivate in communicating with their peers via online discussion as to effective expression, open communication, and group cohesion.

Cognitive presence is the extent to which learners are able to construct meaning through the sustained reflection and discourse that is characteristic of higher education (Garrison, Anderson, & Archer, 2001). Cognitive presence is the core of the educational experience in bringing about changes in knowledge (Garrison *et al.*, 2000; Moore, 1989). In this conceptual framework study, it refers to the ability of a student to understand course content, and participate in effective online discussion based on triggering event, exploration, integration, and resolution.

Each of the connection in the service learning is centered on learning objectives with the aim to optimize the learning outcome by developing a better learning environment in the online course. The students are collaborating information and conducting discussion in online forum to solve the problem and accomplish the goal by overcoming the obstacles in the task given. Service learners reflect on the service they perform and how that service relates to academic concepts. Although academic content, service, and reflection are distinct concepts on their own, when combined with CoI and SDT they form the concept of service learning in online course.

## 5. Conclusions

It has been argued that online service learning instruction is distinctive from the conventional service learning. If an effective online practice is to emerge in service learning, it is essential that educators be proficient at engaging students in reflection because it is a critical component of service learning. Through meaningful reflection in online course, students will be better able to achieve their potential as active participants in online course. A model of service learning in online course provides a foundation for developing tools to help educators become empowered as autonomous and self-directed professionals who actively and consistently engage in reflective practice and work

toward effective instructional strategies that are congruent with ICT mediated learning environments. The conceptual framework can also be used in developing instruments for assessment and evaluation, as well as for research and inquiry into the collaboration and reflection of online educators. The presented conceptual framework for online educator could benefit those involved in supporting quality online education, in an effort to develop an impactful online practice that aligns with the corresponding educational needs, services, and resources.

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## **Biographies**

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