Service-learning research: Definitional challenges and complexities

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This article highlights some of the challenges a researcher has to confront when conducting a study on the impacts of service-learning. A review of the literature has revealed that the term 'service-learning' has been variously defined and is often misunderstood. This confusion is exacerbated by the inconsistencies in the way service-learning is interpreted and implemented. The aim of discussing the difficulties associated with the research is premised upon the belief that to gain deeper insights and understanding of a field as perplexing and multifaceted as service-learning, one is required not only to acknowledge its complexities but also be willing to deal with them. The article concludes by reiterating what many researchers of this field had suggested, that is, the importance of adopting a holistic approach and the necessity to address various mediating factors, if one is to capture a more accurate and complete picture of how service-learning impacts students. *(Asia-Pacific Journal of Cooperative Education, 2014, 15(4), 347-358)*

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This article highlights some of the difficulties a researcher may have to confront when conducting a study to assess the outcomes of service-learning. Unfortunately, notwithstanding that service-learning has been around for decades, researchers and practitioners have yet to come to an agreement on how best to characterize this concept (Furco, 2011). By its very nature, service-learning is complex and as such not easily explained or understood (Billig, 2002; Vogelgesang & Astin, 2005). As a result, there has been a substantial variation in terms of its interpretations and implementations (Billig, Root, & Jesses, 2005; Billig, 2000; Bringle, 2003; Flecky, 2011). A review of the literature revealed that the term 'service-learning' has sometimes been used interchangeably with other forms of experiential learning such as community service, volunteerism and internships despite their differences (Billig & Eyler, 2003; Eyler, 2009; Howard, 2001; Taggart & Crisp, 2011). Terminology aside, the processes and pathways to learning are far from straightforward. The environments for learning and conditions of learners often interact to produce infinite possible outcomes (Astin, 1999). It is this diversity and complexity that the researcher has to grasp and learn to address. The following discussion attempts to shed some light on the processes involved in coming to grips with the notion of service-learning and the learning outcomes often associated with it.

DEFINITION DIFFERENCES

The task of finding a precise definition for service-learning is often bewildering and it is understandably so considering the dizzying array of terms associated with it (Bergstrom, 2004; Taggart & Crisp, 2011). Unfortunately, even with the surge in scholarly interests in the field, the confusion surrounding the term has not been completely eliminated (Howard, 2001; Saltmarsh, 1996). According to Kendall, former executive director of the National Society for Experiential Education, there are greater than 147 definitions of service-learning (Bergstrom, 2004; Cain, 2014; Eyler & Giles, 1999). Hence, it is not surprising that among both researchers and practitioners, there are considerable variations in how service-learning is defined and so understood (Chambers & Lavery, 2012; Flecky, 2011; McBride, Pritzker, Daftary & Tang, 2007; Reinders & Youniss, 2006). One researcher has defined service-learning as "a teaching

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method that involves students performing community service in order to learn knowledge and skills connected to curricular objectives" (Billig, 2002, p. 184). Although useful, such a definition is broad and ambiguous and as such, can be interpreted in a variety of ways.

Perhaps what is more difficult to fathom is that even within a single study, there can be inconsistencies in how the term is used. In one study for example, service-learning was referred to as course-based service, course-sponsored service and classroom-based service-learning without the differences or similarities being explicated (Astin & Sax, 1998). Furco (2011) emphasized this problem of definition in his comment, "By perusing service program brochures, one realizes that the definition for service is as varied as the schools in which they operate" (p. 71). A lack of homogeneity in definition is a problem that researchers in the field of service-learning often have to deal with. Clearly, there is a need for researchers to probe more deeply and clarify what 'service-learning' or the various other terms associated with it mean to different people.

The term 'service-learning' not only has different definitions; it is also known by different names. A search through the literature revealed that service-learning is sometimes synonymously referred to as academic service-learning, civic-engagement, school-based service-learning, course-based service-learning, strategic academically-based community and scholarly service, community engaged learning, and community service-learning (Astin, et al., 2006; Burack, 2008; Eyler, 2009; Flecky, 2011; Howard, 2001; Kaye, 2010; McElhaney, 1998; Vogelgesang & Astin, 2000). The irregularity of nomenclature had been highlighted by Burack (2008) who bemoaned that even within an institution, service-learning can have different names. To illustrate, she cited the example of her own university where service programs are known as "community engaged learning" in one department and "service-learning" in another (Burack, 2008; p. 35).

On the other hand, as Eyler and Giles (1999) discovered in their study, there is an impressive number of diverse programs that are under the label of "service-learning". For example, activities ranging from classroom-based experiential education to career and lifestyle planning programs have been classified as "service-learning" (McElhaney, 1998). Interestingly, there is also a difference in the way 'service-learning' is spelt, either with a hyphen or without. Though seemingly pedantic, some argued that the hyphen is purposeful. Eyler and Giles (1999) equate the hyphen with the reflection that occurs in the learning process. There are also those in the field who think that the hyphen symbolizes the balance between the provision of service and the consequential learning (Chambers & Lavery, 2012; Flecky, 2011; McElhaney, 1998). Many definitions of service-learning attempt to reflect this balance. For example, Furco (2011) pointed out that service-learning can be distinguished by its intention to equally benefit the providers in terms of their learning, and the recipients, in terms of the service rendered to them.

In another attempt to clear the myth surrounding the term 'service-learning', Sigmon created a semantic typology that differentiates the various forms of service-oriented educational programs such as volunteerism, community service and internships (Billig, 2000; Eyler & Giles, 1999; Furco, 2011; McElhaney, 1998). This typology compares the types of service programs in relation to their learning goals and service outcomes (Table 1). With reference to Table 1, for service-LEARNING, the emphasis is primarily on the learning goals while for SERVICE- learning, the learning goals are secondary (Billig, 2000; Eyler & Giles, 1999; Furco, 2011). Thus, based on Sigmon's explanation, SERVICE-LEARNING is distinctly different because of its equal weightage on the service and learning goals (Billig, 2000; Eyler & Giles,

1999; Furco, 2011; McElhaney, 1998). However, for both the definitions by Furco and Sigmon, it is doubtful if it is ever possible in reality, for a program to have equal weightage and equal benefits. Even if the service-learning program is intentionally designed to be so, the balance may not be reflected in the actual experience of students (Eyler & Giles, 1999). Furthermore, it is hard to imagine how and what measures can be used to compare the benefits to the providers and recipients considering these benefits may have nothing in common.

TABLE 1: A Service and Learning Typology (from Eyler & Giles, 1999)

Service – LEARNING	Learning goals primary; service outcomes secondary
SERVICE – Learning	Service outcomes primary; learning goals secondary
Service – learning	Service and learning goals separate
SERVICE – LEARNING	Service and learning goals of equal weight; each enhances the other for all participants

The ambiguity of the term 'service-learning' is not only confined to its definition, it is also reflected in the myriad ways the field is conceptualized (Eyler & Giles, 1999; Giles & Eyler, 1994; Furco, 2011; McBride et al., 2007; McElhaney, 1998). In fact, even proponents could not agree whether service-learning should be conceived as a philosophy, a curricular tool, an educational reform, a model, or an enrichment activity (Billig, 2000, 2002; McElhaney, 1998). One criticism of service-learning is that it lacks a clear theoretical foundation or a unifying framework (Billig & Eyler, 2003; Cone & Harris, 1996; Flecky, 2011; Giles & Eyler, 1994; McElhaney, 1998). Billig and Eyler (2003) explained that the lack of theoretical clarity is in part reflective of the nature of service-learning itself. As a consequence, experts in the field of service-learning have relied on multiple theories to describe the concept (Billig & Eyler, 2003). For instance, service-learning is often linked to experiential learning, contextual learning, problem-based learning, environmental and ecological education and several other learning theories (Billig & Eyler, 2003). A search of the literature showed that quite frequently, service-learning practitioners draw largely on Dewey's insights on the moral and civic function of education (Bringle, 2003; Cone & Harris, 1996; Dewey, 1969/1938, 1967/1916; Giles & Eyler, 1994). For these practitioners, service-learning is seen as a vehicle to cultivate social and civic responsibilities and address social problems (Billig, 2000; Eyler & Giles, 1999; McElhaney, 1998). Another view of service-learning is that it is a form of experiential education that offers students opportunities to experience real-world learning and address genuine problems. Those who hold such a view often cite the work of experiential theorist, David Kolb, to explain the link between service and learning (Cone & Harris, 1996, Schwartz, 2011). Based on Kolb's (1984) principles, learning occurs through a cycle of concrete experiences, reflection, abstract conceptualization and active experimentation. The theoretical insights of Kolb on the importance of reflective thinking in experiential education have influenced how service-learning is perceived (Cone & Harris, 1996; Flecky2011). As stated by Jacoby (1996), "As a pedagogy, service-learning is grounded in experience as a basis for learning and on the centrality and intentionality of reflection designed to enable learning to occur" (p. 9). Apart from Dewey and Kolb, writers have also tried to explain service-learning from the perspectives of various other theorists such as Paul Freire, David Moore, David

Lewis, Donald Schon, Jerome Bruner, and Lawrence Kohlberg (Bernacki & Jaeger, 2006; Cone & Harris, 1996; Flecky, 2011; Hollander, 2008).

The plethora of definitions and terms for service-learning, together with the division of opinions on how to perceive the concept, are reasons why undertaking a research on this field can be so challenging (Billig, 2000; Furco, 2011; McBride et al., 2007). In fact, Furco et al., (2012) acknowledged the problem of definition as a limitation in their own study. According to them, respondents could possibly have misinterpreted the survey questions because of confusing terminology (Furco et al., 2012). As Burack (2008) lamented, "How can we measure the impact of a service-learning experience if we can't even agree on how to describe it?" is itself a telling question (p. 35). Indeed this question raises a fundamental issue with which researchers in the field often have to grapple with, namely, one of conceptual clarification.

IMPLEMENTATION VARIATIONS

The confounding use of the term service-learning is reflected in the innumerable ways it is interpreted and implemented. As Billig (2002) pointed out, service-learning can be so complex that even ardent practitioners are unsure about its implementation (p. 184). As a consequence, there is much variation in the ways schools conduct their service programs in relation to its quality, content, duration, goals and objectives (Billig, Root & Jesse, 2005; Billig, 2000, 2002; Furco, 2011; Hecht, 2003; Jones, Segar & Gasiorski, 2008; Polin & Keene, 2010; Steinke & Fitch, 2007; Taggart & Crisp, 2011). In a review of 17 empirical studies, Taggart and Crisp (2011) reported that service-learning programs are different across all the studies. Looking through the literature, service-learning programs can be mandatory, optional, voluntary or credit-bearing (Steinke & Fitch, 2007; Taggart & Crisp, 2011). Similarly, the types of activities associated with the field can range from accruing a few hours of "service" by helping out teachers, working in soup kitchens, donating blood, to building nature trails and establishing philanthropic organizations (Billig, 2002; Jones et al., 2008). Even the duration of service programs varies. Some practitioners advocate that service-learning programs typically require around 20 hours of community service while others argued that a service-learning experience must span at least one year (Bernacki & Jaeger, 2008; Taggart & Crisp, 2011). Unfortunately, it has been reported that some students managed to earn credits for their service-learning courses without performing any service at all as shown by a study conducted by Jones et al. (2008). With such great irregularity in program characteristics, any study on service-learning can be most daunting. This is one of the reasons why some studies do not adequately address these variables and risk being inaccurate and incomplete (Burack, 2008). It follows then, that researchers have to be more precise in differentiating the types of service-learning and the various features and activities associated with it (Billig & Eyler, 2003; Hecht, 2003; Reinders & Youniss, 2006).

While there may be much disagreement about how service–learning is defined, there is a greater consensus that it is the quality of the programs that counts (Astin et al., 2006; Billig, Root, & Jesse, 2005; Billig, 2000, 2002; Jones & Hill, 2003; Kahne, 2008, Levine, 2008; Taggart & Crisp, 2011). Research summaries indicate that there is increasing evidence to show that well implemented and meaningful service programs are consistent with multiple positive learning outcomes (Billig, 2002; Frederick & Billig, 2009; Jones et al., 2008; Levine, 2008; Lyngstad, 2009; Steinke & Fitch, 2007). Conversely, programs that are inadequate or are of insufficient quality do not often yield the desired effects (Billig, Root, & Jesse, 2005; Billig, 2002; Levine, 2008). Typically, high quality service-learning programs incorporate certain

key elements that include meaningful service activities, integration of service to the curriculum, structured reflection, youth voice, active and direct student involvement, diversity of experiences, clearly articulated goals, progress monitoring and sufficient duration (Bernacki & Jaeger, 2008; Billig, Root & Jesse, 2005; Billig, 2000; Eyler & Giles, 1999; Kaye, 2010; Wheeler, 2008). However, while these key elements are critical mediating factors in determining learner outcomes and serve as useful guidelines for best practices, what they look like when translated into actual practice can be vastly different (Hollander, 2008; Levine, 2008; Wheeler, 2008). In fact, it is rare for any one program to have all of the essential elements mentioned (Jones et al., 2008; Wheeler, 2008). In a study by Billig (2000) to evaluate high quality service programs, it was found that the programs selected varied dramatically in terms of implementation. For example, even though there is clear implication that the integration of service-learning with the curriculum is vital for high quality practices, the degree of integration differs between studies (Astin et al., 2006; Billig, 2002). In some cases, service-learning is driven by the curriculum, while others are only marginally related to it (Billig, 2002). Yet at the other extreme, there are also cases where integration is almost absent (Jones et al., 2008).

Apart from differences in the degree of integration, service programs also vary in their application of the reflection component (Billig, 2002; Eyler, 2009; Levine, 2008; McBride et al., 2007). Some reflection activities tend to be very academic in nature, while others incline towards personal awareness and self-reflection (Billig, 2002; Jones & Abes, 2004). Some programs make use of guided reflections while others do not (Billig, 2002; Jones & Abes, 2004; Taggart & Crisp, 2011). There can also be differences in terms of the formality, frequency and intensity of the reflection process (Astin, Vogelgesang, Ikeda & Yee, 2000; Eyler, 2009). In some instances, reflection activities take the form of written journals that are assessed (Chambers & Lavery, 2012). Alternatively, reflections can function as informal group discussions in the presence or absence of instructors (Astin, et al., 2000; Bernacki & Jaeger, 2008). According to Astin et al. (2000), the type of reflection that has the strongest mediating effects on service involves students engaging in discussions with other students. Although the literature on service-learning abounds with references to the significance of reflection, not all programs adhere to it (Jones & Abes, 2004). In a report by Jones et al. (2008) relating to a study on college students' perception of service-learning, there was no mention of reflection. Inconsistencies in the implementation of the reflection component have resulted in controversies over its real significance (Levine, 2008).

Another key element of quality service programs concerns student involvement. In *The Theory of Involvement*, Astin (1999) defined involvement as the "physical and psychological energy and time the student devotes to an academic experience" (p. 518). According to Astin (1999), student involvement is a strong predictor of learning outcomes. Hence based on his reasoning, how effective a service-learning program is, depends on its capacity to create environments that promote student involvement (Astin, 1999). However, Astin (1999) admitted that there are many forms of involvement and studies have yet to show how a specific type of involvement is linked to a particular learning outcome. Furthermore, the degree of involvement differs between students and even for the same individual, the extent of involvement may vary with the types of activities (Astin, 1999). Hence, hypothetically speaking, even if all other variables can be controlled and an investigator solely focuses on how a service program is affected by student involvement, it remains a challenge to understand the real nature of the involvement as this varies between students. In addition, Astin and Sax (1998) noted that involvement can sometimes be counterproductive and

researchers must be careful not to presume that an increased amount of involvement always equates with better outcomes. For instance, it has been reported that an increase in service involvement may occasionally result in loss of time for studies and as a result, offsets the academic benefits of service (Astin & Sax, 1998; Taggart & Crisp, 2011).

The discrepancies in the way in which service-learning is implemented and the subsequent variations in program characteristics are possible explanations for the inconsistencies in research findings (Bringle, 2003; Cipolle, 2010; Hecht, 2003; Jones et al., 2008). Hence, reports on program outcomes must be read with caution and the possible factors that may shape both the presence and intensity of the impacts documented need to be taken into consideration. As has been acknowledged in a longitudinal study of the effects of service-learning, the most serious limitation was that the service-learning measure treated a wide range of service experiences as equal (Astin et al., 2006).

STUDENT DIVERSITY

A search of the literature suggests that many inquiries conducted on service-learning have mainly centered on program evaluation rather than students' experience (Billig, 2000, 2002; Billig & Eyler, 2003; Hecht, 2003; Taggart & Crisp, 2011). However, to have a clearer understanding of the conditions under which students learn and what works or does not work for them, it is essential to redirect the focus back to the students themselves. The reason is that students are not "*tabula rasa"* or blank slates (Cone & Harris, 1996; Miller, 2006). They bring into the learning milieu their different skills, values, philosophical insights, attitudes, expectations, and perspectives that may moderate the learning outcomes associated with service-learning (Cone & Harris, 1996; Hecht, 2003; Miller, 2006).

The concept of placing learners in the equation of learning can be traced back to Dewey. In his book, "*Experience and Education"*, Dewey (1969/1938) explained that the educational process is inextricably connected to the human experience. Nevertheless, he cautioned that while all genuine education comes about through experience, it does not mean that all experiences are necessarily educative (Dewey, 1969/1938). According to Dewey (1969/1938):

> Any experience is mis-educative that has the effect of arresting or distorting the growth of future experience. An experience may be such as to engender callousness; it may produce lack of sensitivity and of responsiveness. Then the possibilities of having richer experience in the future are restricted. (pp. 25-26)

A literature search on the impact of service-learning validates Dewey's theory. For instance, there are many empirical studies that linked various positive learning outcomes with service-learning such as increases in compassion and leadership competency (Bernacki & Jaeger, 2008; Billig, 2002; Furco et al, 2012; McBride et al., 2007; Schwartz, 2011). Conversely, there are studies that pointed out that not only were there programs that failed to yield significant results, there were also some that negatively impacted students, such as by reinforcing stereotypes or decreasing students' perceptions of their personal efficacy (Cone & Harris, 1996; Flecky, 2011; Howard, 2001; Schwartz, 2011).

In specifying what makes an experience educational, Dewey identified two key principles, namely, *The Principle of Interaction* and *The Principle of Continuity* (Dewey, 1969/1938). In *The Principle of Interaction*, Dewey explained learning as a transaction between the learner and the learning environment (Dewey, 1969/1938). Learners, in other words, are never passive. *The Principle of Interaction* has two important implications for a research on service-learning.

Firstly, it can function as a theoretical framework for the researcher by providing the foundation upon which the context of learning can be better understood. Secondly, it serves to remind researchers to move learners back into the center of the picture so as to gain a clearer view of the learning process (Bridges & Smith, 2007; Giles & Eyler, 1994; Vogelgesang, 2008). Thus, learners need to be recognized as the social actors or "creators and makers" in their own life experiences and choices they make (Polin & Keene, 2010; Saltmarsh, 1996, p. 15). Moreover, service-learning is about the experience and researchers need to focus on the experience, in particular, those participating in it (Hecht, 2003; Reinders & Youniss, 2006).

The next important principle identified by Dewey is *The Principle of Continuity* or the experiential continuum (Dewey, 1969/1938). From Dewey's point of view, every experience is built upon past experiences and has the capacity to modify the next (Dewey, 1969/1938). To illustrate, a study by Stukas, Snyder, and Clary (1999) found that service-learning outcomes depend on students' prior experience, such as the experience with service participation. Based on their study, students with significant prior experience with service were less likely to be negatively influenced by required service compared to those with little or no prior experience (Stukas, Snyder, & Clary, 1999).

Dewey is not alone in underscoring that students need to be considered as key players in the education formula. Astin (1993) similarly emphasized the significance of student inputs in shaping learning outcomes. In his *'Input-environment-outcome' model*, Astin (1993) explained that outcome, or the growth and development of students is attributable to their learning environment such as the type of institution, program designs, school culture, policies and structures to which they are exposed to, as well as student inputs, namely their background characteristics such as their preexisting beliefs, attitudes, values, and behavioral patterns. Because individual students bring their unique beliefs and backgrounds into the learning situation, it cannot be assumed that learning opportunities impact students in similar ways (Bringle, 2003; Hecht, 2003; Kahne, 2008; Schwartz, 2011; Taggart & Crisp, 2011). There is a need to explore the diversity and complexity of student attributes and examine how students with different backgrounds respond to the learning opportunity (Billig, Root & Jesse, 2005; Kahne, 2008; Schwartz, 2011). For example, according to Hollander (2008), the beliefs and values of pre-college students were strong predictors of service-learning outcomes. Likewise, a study by Largent and Horinek (2008) suggested that age affects a person's level of satisfaction with the service-learning experience. There are also studies to indicate that gender accounts for differences in one's orientation towards service (Astin et al., 2006; Torney-Purta, 2008; Vogelgesang & Astin, 2005). According to Vogelgesang & Astin (2005), a survey on student engagement in community activities showed that female participants are more inclined to volunteer in civic and educational organizations while male participants prefer work that are political in nature. In discussing gender differences towards service, researchers often singled out the theories of Kohlberg and Gilligan. Gilligan's argument is that men are more likely to be justice-oriented while women are more care and relationship-oriented (Bernacki & Jaeger, 2008; Jorgensen, 2006).

With so much potential variability in student characteristics, it is reasonable to envisage that there could be an infinite number of possibilities that could combine to produce a unique, idiosyncratic learning mode for each student (Cone & Harris, 1996; Polin & Keene, 2010). As a consequence, to have a more complete and accurate understanding of the efficacy of service programs and how students transact them, researchers need to factor in students' backgrounds and characteristics (Billig, Root, & Jesse, 2005; Eyler, 2003; Hollander, 2008;

Schwartz, 2011; Vogelgesang, 2008). This means that research initiatives have to commensurate with the diversity and complexity of students and focus on the details of learners with greater specificity (Hecht, 2003; Holland, 2008; Polin & Keene, 2010; Torney-Purta, 2008).

CONCLUSION

The article has highlighted some of the difficulties associated with an investigation on service-learning that a researcher may need to confront in terms of the wide array of definitions and interpretations, the multiple levels of complexities in the learning contexts, as well as the diversity of student characteristics. The discussion is by no means exhaustive considering the fact that the field of service-learning itself has so many facets and that learning outcomes can be an interplay of multifarious and interconnected factors. Additionally, there will always be the question of causality and the risk of erroneously making inferences that "service" equates with "learning" without considering the multiple contexts in which learning takes place (Hecht, 2003; Holland, 2008). Life lessons and a constellation of other factors that may or may not have anything to do with school can be pathways to learning and bring about student transformation (Jones & Abes, 2004; Vogelgesang, 2008; Torney-Purta, 2008). Hence, it is hard to be sure if a particular outcome is a pure function of service-learning or service-learning in combination with other additional mediating factors (Astin & Sax, 1998; Billig, 2000; Jones & Abes, 2004). It follows then, that to gain clearer insights on how service-learning impacts students, one needs to look at the phenomenon in a holistic way, that covers the breadth and depth of the subject, and from diverse points of view rather than seeing things in isolation (Smeyers, 2007). Studies need to be more detailed if they are to contribute to a more comprehensive understanding of how service-learning impacts students (Hecht, 2003; Holland, 2008; Levine, 2008). For example, researchers need to identify how specific elements of programs are associated with certain outcomes and how different conditions of learning benefit different students (Billig, Root & Jesse, 2005; Hecht, 2003; Holland, 2008).

For someone endeavoring to conduct a study on service-learning, a useful starting point might be to approach it from a philosophical stance. This may mean having the willingness to view the concept as complex, to be more discerning when reading what other researchers report while at the same time be more reflective of what the studies may or may not predict (Alexander, 2007; Smeyers, 2007). Concomitantly, the researcher needs to be introspective, to be questioning and to be prepared to submit his or her understanding and perspectives to close scrutiny. It also means being able to allow one's mind to be troubled by the chaos and complexities involved in the process of gaining insights into human behavior (Smeyers, 2007). The research experience may turn out to be what Wendell Berry reflected:

> It may be that when we no longer know what to do we have come to our real work, and when we no longer know which way to go we have come to our real journey.The mind that is not baffled is not employed. The impeded stream is the one that sings. (Costa & Kallick, 2008, p. 15)

It is hoped that the journey for the aspiring researcher, though baffling, is also profoundly rewarding as he or she gains insights that could potentially help young people learn and become more active contributors to their community.

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