

ASSESSMENT OF SERVICE-LEARNING IN HIGHER EDUCATION: CHALLENGES AND POSSIBILITIES

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Service-learning has expanded unprecedentedly during the last few decades. Despite this, there are many issues remain to be resolved. One such long standing issue is assessment of service-learning. Although currently many attempts have been made to assess its impact from different quarters at school levels in different parts of the world, in the field of higher education, the nature, quality and applicability of these assessments are questioned for being incomplete or less reliable due to many shortcomings affiliated with the practice of service-learning. Hence, this paper critically reviews the assessment practices, their importance, nature and types in the field of service-learning in higher education. The paper also discusses some of the challenges and possibilities faced by service-learning practitioners for using different assessment sources and procedures for assessing service-learning. Finally, the paper concludes with an emphasis on the need of using different assessment techniques in service-learning as it will be easier to answer the current assessment debates in the field of service-learning.

Keywords: service-learning, service-learning assessment, service-learning assessment tools, service-learning challenges, and service-learning assessment equipment

INTRODUCTION

There is a debate in the current literature regarding the assessment of service-learning. During the last many years, research has indicated that service-learning promotes students' learning (Driscoll, Holland, Gelmon, & Kerrigan, 1996; Gelmon, 2001). However, there are critical questions being asked that how service-learning impacts learning of students and what are the evidences to prove it (Narayanan, 2011). These and other questions have put writers, service faculty members and administrators in state of flux and uncertainty. Although many service-learning programmes have yielded some deeper benefits both for the students and community, their implications have remained unexplored or unclear due to the unclear assessment practices associated with the concept and practice of service-learning. The major purpose of this paper is to review this situation in the current service-learning field and answer the long standing issue of assessment and its application in service-learning.

There are many challenges service-learning faces at higher education level. One such challenge is its sustainability as an academic discipline which has always

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been at stake due to its much idealized and less realized role and position among other academic instructional models (Furco, 1996). Writers believe that for service-learning to gain its proper recognition, it must be widely integrated into general or specific educational programmes, and effective assessment techniques and methods must be used to ensure its real impact which is always questioned and debated (Carver, 1997; Holland, 2001). For this purpose, different educational assessment practices may be adopted at college and university level. This paper attempts to explain why quality assessment practices in service-learning are necessary in higher education.

There are many educational tools available to measure cognitive and affective performances of students involved in educational programmes. Service-learning is one such educational academic programme (Tonkin & Quiroga, 2004). Service-learning is defined as an academic pedagogy or educational experience that facilitates the realization of community needs through provision of an organized or structured service activity along with fulfilling learning objectives of an educational course (Bringle & Hatcher, 1996). Some have defined service-learning as educational practice that contain credit, which includes reflection that effectively links the needs of the society or community with that of the classroom learning or goals (Seifer, 1998; Sigmon, 1996).

THE CHALLENGES OF ASSESSMENT IN SERVICE-LEARNING

The assessment of service-learning has been a subject of debates since long time due to the multiple role and connection of service-learning as an academic course or model (Bringle, Phillips, & Hudson, 2004). There are different types of assessment practices both formative and summative which provide enough evidence to the faculty members or practitioners to decide about the level of development and improvement among learners in the field of education (Ash & Clayton, 2004; Gelmon, 2000). These assessment practices are geared towards evaluating the cognitive as well as affective domain of learning. Being an academic field, service-learning also calls for different assessment techniques to judge the quality of performance and its impact on students' development (Kuh, 2001; Strage, 2000).

Given the important role of assessment in curriculum development and improvement, it is felt that service-learning curriculum must be shaped by using evidences as a result of assessment as a source (Weigert, 1998). It is believed that assessment in service-learning is used for providing quality learning opportunities to students for their development. Assessment must also reveal how service-learning shapes and enhances students' learning outcomes (Bringle & Hatcher, 2000). These are some of the frequently asked questions. Regardless of the evidence, there is hardly any possibility that service-learning would be able to transform the curriculum. Hence, researchers believe that systematic and ongoing assessments will provide first hand opportunities to the programme evaluators, administrators

and faculty members to show the powerful and much talked influence of service-learning as an experiential learning pedagogy on students' learning and development (Suskie, 2010; Tonkin & Quiroga, 2004). For this purpose, some of the recent writers have suggested that faculty members and administrators must design and administer high quality assessment procedures and tools keeping in view the local needs and requirements of the curriculum by using different models (Zhang, Zeller, Griffith, Metcalf, Williams, Shea, & Misulis, 2011).

It is believed that better assessment provides a verity of ways for interjecting service-learning into the quality of graduate or undergraduate programmes (Molee, Henry, Sessa, & McKinney-Prupis, 2010). However, critics of service-learning argue that higher education has failed to focus on the required knowledge and skills which are important to achieve success outside of the academia especially for preparing students for the real world problem-solving and critical thinking (George & Shams, 2007). In the literature, it is mentioned that little efforts is being made during the service-learning activity to make sure that students can apply or use whatever they learned in their classroom in the community context or outside world which is the main target of the service-learning programme (Dunn, Mehrotra, & Halonen, 2004; Gelmon, 2003). Of course, grades and other assessment procedures usually collect information related to students' short answers, multiple choices or essay writing questions which requires little effort or low order thinking skills for understanding or conceptualizing the main concepts (Hatcher & Bringle, 1997). The role of service-learning is that it may ameliorate or lessen some of these problems or accusations levelled against the higher education institutions (Bailey, 1997). The reason is that service-learning as a transformational pedagogy allows the students to critically investigate, analyse and reflect on the service provided and the issues identified and mitigated. Service-learning teaches thinking skills in multiple contexts. Additionally, service-learning provides the right balance of challenges and support for fostering intellectual growth and development (Bringle & Hatcher, 1996; Ward & Wolf-Wendel, 2000).

So far as the assessing the knowledge application is concerned, service-learning provides the best platform to shift the theory to practice and practice to theory (Ash & Clayton, 2004). Since the main aim of assessment is improving learning and knowing development in all its forms and aspects (Sanderson & Vollmar, 2000), increased formative and summative assessment of service-learning will also provide important feedbacks for improving the quality of service practice and enhanced students' learning (Holland, 2001; Serow, 1997). Looking at this, it has been seen that many faculty members in their service-learning courses collect data that may be used for assessment through different means such as surveys, interviews and observations (Tonkin & Quiroga, 2004). But they do not use these evidences or documents systematically for decision-making regarding students' performance or programme effectiveness. This will help in collaborating with the colleagues

and assessing the outcomes across courses and curriculum. All this will result in systematic examination of the data collected and an increased discussion with colleagues about the results of the students' performance in service-learning. This can be shared with other service-learning practitioners and researchers (Bowman & Brandenberger, 2010; Kearney, 2004).

It is also essential to involve service-learning practitioners in assessment practices. It will provide the added benefits of getting more variety of service-learning assessment procedures and sources and research literature (Abes, Jackson, & Jones, 2002). With the passage of time, as classroom programmes and institution wide service-learning assessment of service-learning are conducted, it would be easier to use more professionally sound assessment procedures and tools (Toncar, Reid, Burns, Anderson, & Nguyen, 2006). This would also provide chances to the faculty members to collect and present their assessment results not only to the management of the higher education but also in the conferences related to assessment, service-learning and scholarship of teaching and learning. This would effectively stimulate more service-learning researchers and research tools from the grassroots levels (Shumer, Duttweiler, Furco, Hengel, & Willems, 2000).

APPLICATION AND POSSIBILITIES OF ASSESSMENT IN SERVICE-LEARNING

Assessment is an evaluative activity that begins with the aims and objectives related to a specific programme which needs to be assessed (Balazadeh, 1996; Gelmon, 2003). So the first important step in assessment is identifying goals and objectives. Service-learning practitioners should also attempt to clarify their goals and objectives for assessing a service activity. Goals and objectives are basically the specific service-learning programme outcomes (Applegate & Morreale, 1999). The second important step is developing tools for measuring the outcomes. There are different ways to measure or assess the service-learning outcomes. Among these are surveys, attitudinal scales and so on (Butin, 2006). These tools play a key role in supplementing and providing context to the assessment and directing relevant measures related to student learning. Practitioners must include such tools which cover all aspects of the service-learning activity in the assessment report (Oates & Leavitt, 2003).

Another key aspect of the assessment process is that the measurement must be relevant and meaningful to the programme goals so that it may fairly facilitate the process of decision-making and the results may help in improving the service practice (Hegeman, Horowitz, Tepper, Pillemer, & Schultz, 2003). Here it becomes clear that the main aim of service-learning assessment is improvement in the practice. To achieve this goal, it is observed that service-learning faculty members develop and use different assessment tools and techniques as the needs and scope of the programme to assess that even includes locally made rubrics. Others use

tools adapted which are developed somewhere else but that are relevant and reliable (LaMaster, 2001; Schaffer, Mather, & Gustafson, 2000).

TOOLS AND TECHNIQUES FOR ASSESSING SERVICE-LEARNING

For assessing service-learning, different types of tools are used by faculty members. Some of them are adopted and adapted while others are self-developed (Clayton, Bringle, Senor, Huq, & Morrison, 2010). There are evidences that as an academic model, service-learning affects different outcomes such as civic, ethical, and social and leadership development of students in all disciplines. However, as said earlier, the main aim of this review focuses on reviewing the assessment practices in service-learning (Shaw & Jolley, 2007). There are two types of assessments. One assessment is related to programme evaluation and the other is cognitive assessment which related to assessing the cognitive outcomes of students as a result of participating in service-learning programme.

This paper specifically investigates into the current literature on cognitive outcomes of students who participate in the service-learning programme (Gray, Ondaatje, Fricker, & Geschwind, 2000). There are various tools commonly used by faculty members in assessment of service-learning outcomes which are, for example, research scales, surveys, written essays, protocols, checklist, and interviews and so on. It is necessary to mention here that service faculty members may use any of these tools according to the need of the context and nature of the programme (Galantino, House, Olsen, Fayter, & Frank, 2006). These tools can also be aligned with the cognitive outcomes such as knowledge application, critical thinking skills, problem-solving skills and intellectual growth of the learners. Researchers suggest that faculty members must review the assessment tool before applying it in the field for the purpose of data collection regarding student development. Additionally it must also be ensured that before application, the validity and reliability of the tool is examined and accrued for evaluation whether or not the required assessment tool will help in right measurement (Hydorn, 2007; Werder & Strand, 2011).

Research scales are developed and used for assessing specifically the cognitive outcomes of service-learning learners. For this purpose, generally the Cognitive Learning Scale (CLS) is used which was developed by Strouse (2003). This is an eight item scale that includes pre-test and post-test versions. The scale asks about a specific course requirements. This scale measures very specific outcomes such as ability to justify, explain and apply concepts related to a particular course material in a real world situation and problems. Basically it is an indirect measure of learning because it mostly depends on the answers given by the course participants or evaluates their judgments on what they have learned between the pre-test and post-test applications. In this regard, many writers such as Bringle *et al.* (2004) have used research scales for data collection. Although these scales were not originally

created for assessing service-learning outcomes, they were relevant to the common service-learning outcomes in different ways.

Another assessment tool frequently used is the Problem-Solving Inventory (PSI). This tool actually assesses the individual perceptions regarding problem solving skills of learners participating in a service-learning activity. This is also an indirect measurement tool which basically includes measures specifically related to the critical thinking skills. In research, another assessment tool frequently used is called Watson Claser Critical Thinking Appraisal (WGCTA). This is a famous measure used in a number of service-learning experiences. The tool provides guidelines about assessment of critical thinking skills of students in service-learning programme. This measure includes five scales such as Inference, Recognition of Assumptions, Deduction, Interpretation and Evaluation of Arguments.

In addition to WGCTA, another instrument can be used for measuring service-learning experience is called California Critical Thinking Skills Test (CCTST). This measure provides five cognitive dimensions of the construct of critical thinking such as Analysis, Evaluation, Inference, Deductive Reasoning and Inductive Reasoning.

The Cornell Critical Thinking Test (CCTT) is another assessment tool used in the field of service-learning over the years. It has six dimensions such as Induction, Deduction, Observation, Credibility, Assumption, and Meaning. Additionally, for measuring the intellectual development of service-learning participants, scholars have developed Scale for Intellectual Development (SID). This scale was developed by Erwin in 1983 for measuring the three or four stages of Perry's scheme (1968-1999) for intellectual development. The measure has three dimensions such as Dualism, Relativism, Commitment and Empathy (Butin, 2010; Jarmon, Traphagan, Mayrath, & Trivedi, 2009).

Mostly the intellectual development assessment tools explain new dimensions for direct versus indirect ways of conceptualization measures. These scales explain how students think. Basically these tools assess the beliefs, and attitudes of students involved in service-learning programmes (McClam, Diambra, Burton, Fuss, & Fudge, 2008). These are also the direct measurement of student responses on a self-report assignment or task.

There is another assessment tool called mixed measures or Learning Environment Preferences (LEP) which is developed by Moore. The basic goal of this scale is to assess Dualism, Early Multiplicity, Late Multiplicity, Contextual Relativism and Cognitive Complexity Index. This mixed measurement scale is based on the work of intellectual development scale and Epistemological Questionnaire of Schommer developed in 1990. This assessment scale measures students' beliefs about their knowledge and learning on four different dimensions such as stability of knowledge, structure of knowledge, speed of learning and ability for learning (Young, Shinnar, Ackerman, Carruthers, & Young, 2007).

ASSESSMENT OF SERVICE-LEARNING IN HIGHER EDUCATION 1755

Another assessment tool used for measuring service-learning outcomes is Problem-Solving Analysis Protocol (P-SAP). This measurement tool is used by researchers for critical thinking analysis in service-learning field. For measuring the conception of knowledge of students and their learning, the Cognitive Level and Quality Writing Assessment Instrument are used as direct measures for assessing writing skills and cognitive skills of students. These assessment tools provide faculty members of service-learning the knowledge and ability to assess critical thinking and problem-solving skills specifically in a classroom setting. These models of assessment are based on the work of King and Kitchner's Reflective Judgmental Model developed in 1994 and Ficher's Dynamic Skill Theory presented in 1980. These scales were developed for assessing how service-learning promotes students' higher order thinking skills as a result of participating in service experience (Furco, 1999, 2007).

There are some other assessment tools such as interviews and questionnaires used to measure both certain cognitive and affective performances of learners in a service-learning activity such as written work, field work, assignment and project work (Hesser, 1995). One of the famous assessment tool used in service-learning assessment is Problem Solving Interview Protocol. This tool is used for assessing diverse outcomes of service-learning (McDonald, 2012). The interview protocol investigates students' attitudes towards the impact of service-learning on the abilities of students to identify the causes, solutions and strategies about a social programme before and after participation. In addition to the many assessment tools, there are other alternative instrument available in the field of service-learning which can be used for assessing the outcomes of college students about their experiences of participating in service-learning activities (Bringle *et al.*, 2004).

CONCLUSION

Service-learning is a diverse and dynamic field. In this review, many aspects of the issues of assessment of service-learning were analysed with respect to the concept, application, types of challenges and different ways and types of assessment tools that can be possibly used for measuring outcomes. Different arguments were presented and various tools were explained which can be used for measurement of service-learning outcomes in higher education. The paper reviewed the assessment tools which are specifically related to the cognitive skills development of students. It did not touch the programme evaluation assessment tools. Hence, the paper suggests that future studies must investigate into the different service-learning programme evaluation tools used to understand the effectiveness of service-learning programme in developing academic skills and knowledge.

The paper in the review mainly focused on the how aspect of the assessment of service-learning and also pinpointed some of the benefits associated with the practice of service experience for higher education. It is recommended that future

research must investigate the aspect of service-learning assessment in secondary or post-secondary level. The paper concludes that service-learning is a goal based, active and real world perspective oriented pedagogy. For increasing and promoting the quality of service-learning programme, more quality assessment techniques must be employed that may cover different dimensions of the service experience in different contexts and disciplines. This will help resolve the complex and hard debates of assessment practices at college or university level.

This review provides the insight that using an increasingly diverse and dynamic assessment practices in the service-learning field will play a key role in better measuring the skills, knowledge and abilities of students who participate in the service for community outside the classroom. It is recommended that faculty members, the programme administrators and researchers must highlight the different practices of assessment and try to address the current critiques which may be relevant to the real world experiences.

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ASSESSMENT OF SERVICE-LEARNING IN HIGHER EDUCATION 1757

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ASSESSMENT OF SERVICE-LEARNING IN HIGHER EDUCATION 1759

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