

## Service Learning: an investigation in to its viability as a strategy to achieve institutional Goals

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### Abstract

Service Learning is a method of teaching and learning where students apply their knowledge and skills gained from the coursework to the real world problem to develop community partners. Students who have participated in Service Learning programs gain experience, moral development, observation, creativity, social responsibility, and more involvement with the local Community. This paper proposes a model of Service Learning that facilitates and integrates Service-Learning Program activities to the curriculum and the approach used to apply Service-Learning (SL) program into traditional learning style. Also the roles and responsibilities of computer science students in the SL program activities are identified. Challenges faced by the computer science students and the outcomes of the program are expressed in relation to the vision and mission of the Institute.

**Key Words:** Integration, Program Implementation, Curriculum, Infrastructure.

### 1. Introduction

Service-Learning is an approach that used to integrate concept of Theory in classroom with relevant community service. The idea of Service Learning program has become popular in 1980s, with the increasing awareness that provides value to the higher education development and classroom experience pushes [1] the Service to achieve educational goals. The issues of roles and responsibilities of higher education and the principles required to implement Service-Learning Model in academic Curriculum. Lecturer should have a sound theoretical and conceptual Service-Learning. Also have values and [1] ideas of teaching and learning. With respect of Service-Learning understand, the pedagogy of service-learning seeks to: Enhance

Students sense of social role and responsibility and commitment to the greater skills. Service-learning pedagogy is less individualistic than traditional pedagogy, based on that social responsibility is valued over individual [2] responsibility. Initiate a learning synergy for the students, whereby institution or

university learning is valued along with community partners based on experiential learning, which is inductively orientated [3].

In a Service-Learning program implementation, there are different types of a Service-Learning performance that used for the program workflow. To have Service-Learning as a regular class, meaning that, it perform as one of the compulsory classes in the semester work, and to have an hour a week being involved at a program for which the teacher has to made arrangements. Service-Learning used as one of course credits of the curriculum; students must be covered. Service-Learning used as course work, it means that [3], they use as to apply their class work to community service problems with limit hours for each semester. Also it has to do one time for whole the course with limit time in the beginning, therefore student will not allow graduating until they participate the Service-Learning activity with scheduled time. The course should focus on Service Learning that have some relevant to the objectives of the study of which each students are a part [4].

## **2. Literature review**

### **2.1. Service-Learning Definition**

Service-Learning is the method of involving students in Community Partners; it is a teaching and learning approach, also can be defined as a combination of community partners service and academic instruction, with a focus on critical thinking, reflective thinking, and civic responsibility. It's a way to develop academic skills in an environment which also encourages the development of personal skills, particularly civic skills. Within the discipline of computer science, there is a need to preserve academic rigor as much as possible, which must be balanced with a sense of engaging students with the other [5]. When doing comparison to other parts of experiential teaching and Learning such as internships, and cooperative education, mostly it is student-centered, and straight suitable to the curriculum. The important difference and distinguishing characteristic of service-Learning is reciprocal and balanced emphasis on both student learning and addressing community needs [6]. Service-learning provide very strong chance to obtain the behavior of critical thinking; which the capacity to specify the most significant questions or problems within a real-world situation. Service-learning program encourage students deeper learning for their subjects, because the results are quick and uncontrived. Service-learning is same to be personally meaningful to participants and to generate emotional consequences [7], to challenge values as well as ideas, and hence to support social, emotional and cognitive learning and development.

### **2.2. Service-Learning In Computer Science**

The aim of Service-Learning in computer science is to have the student's interaction with organizations or community partners outside of the academic field, the research might have to be made to identify what groups might be most amenable to work with students [8]. There are numerous opportunities for serving the community while also learning Computer Science concepts and skills, Based on this understand and experience, most activities that Computer Science students can participate in a Service-Learning is the service that related with Information Technology (IT), and can be categorized

into the following terms: 1) developing an information system for an organization's administrators. 2) Developing a web site for an organization's Database or school websites 3) developing classroom software's for Public schools. 4) Enhance [the network of the Organization's computer resources and, 5) Tutoring and other instructional activities that gives more beneficial to the Organizations or Community Partners. 6) Creating Central database for the none Governmental or Governmental agencies by using SL Concept. Based on the program successes, the academic will consider only the projects that provide students a clear picture and full understand for their educational purpose, and goals [7]. Also having full idea about The module of the program will help to the students to understand mission and vision of the program and how the program become an integral part of the course. It is important to give the students with what they are going to develop a clear understanding of the link between module content, service activities [9].

### **2.3. Impact Of Service Learning**

Institutes that use Service-Learning can have ability to collaborate with the Community Partners, Student get social skills with good quality. Universities report Institutional Commitment to Service-Learning Curriculum. Moreover; the program effects to the students retention, and enhance Community Partners relationship [9]. The Community get satisfaction with students Participation, receive meaningful service from the students and use students and Institutes as Resource. Students get a chance to apply the relevant academic subjects into the Community problems. Students may experience many important values not only normally learned in a traditional classroom environment, which include social and Self esteem issues while they are completing the service work through the course. Service learning experience give to the student Observation, creativity and aesthetics, insight, judgment, and knowledge [10], also afford students with visions of career development, value expression, Social role and responsibility and concern for others, Personal Growth, Very high Confidence Participation, Knowledge skills and discovering service related to the careers, Understanding, communicating, and appreciating understanding self and world, and self enhancement. Students get a glimpse of what type of work can expect to do after their graduation, and what kind of attribute can have. Therefore, all participants in a Service-Learning gain transparent outcome to continue the collaboration of the program.

### 3. Methodology

In the Model process, there is a method used for the Model data collection, which is an interview. This approach conducted to evaluate and approve the effectiveness of the model implementation, preliminary survey conducted to confirm the suitable experts of computer science to have an interview. process of interview have started to collect appropriated data. This mode is an output of different experts feedback, the model is suitable for computer science and information technology service-learning. Most of the experts agree that this mode can be useful for the institutions that supposing to include service-learning to their existing study.

### 4. SL Model

This Model is a collection of methods and procedures that designed to integrate Service-Learning program activities to the Institutions Curriculum. The Implementation of Service-learning Model in the institution's Curriculum, requires completing first the infrastructure of the Curriculum. Also is very good to have an integration plan for the current curriculum to the Service-Learning program, because the failure of the program may cause missing the style of the whole Institutions study, sometime it's important to keep based with the description of Service-Learning as an expressed goal, Include the explanation of the nature of the Service placement, Specify the roles and responsibilities of students in the placement of Service Learning projects, check whether or the Service Learning projects or experience is mandatory. If it's mandatory, offer an alternative for students who cannot do, for any reason, the specific type of service you have identified. Include time requirements by declaring how many credit hours per week [11]. Identify the needs of the

community that will be met through Service Learning placement. Identify how the course assignments link the Service-Learning placement to the course content; give details if appropriate, the expectations for the public dissemination of the students work.

Prepare the program activities before the beginning of the semester; don't wait to determine which Community Partners will be served. Do not allow student to do their own choice for program activities without getting approval from the institute. Also try to conclude the program before end of the semester in order to get chance for the completion of the other programs. In order to confirm the success of the program, analyze it by looking multiple prospective. This Model designed to be suitable for institutions that need to apply Service-Learning program in their Curriculum. The model has shared with some experts interviewed by the researcher to get their ideas and perceptions to confirm the evaluation of the model. As shown in figure 1.1, the model consists of four interdependent parts.

#### 4.1. Infrastructure

The first part is the infrastructure of the program; it's the main part of the program which contains the factors that the program is based on, such as Students, Institute, Budget, Community Partners, Institutional support, and Project management Office (PMO). Each one of the participants has specific role and responsibilities For the program performance. For example, Students have the most important role in the program, they are the active factor who conducts the Community Partners problems and solve it. The Institute also have to organize the program, by creating relationship with the community partners, and give Orientation to the both Students and Community Partners, defining them the mission vision, value, attributes, and strategy of the both program and Institute, and gives any support required

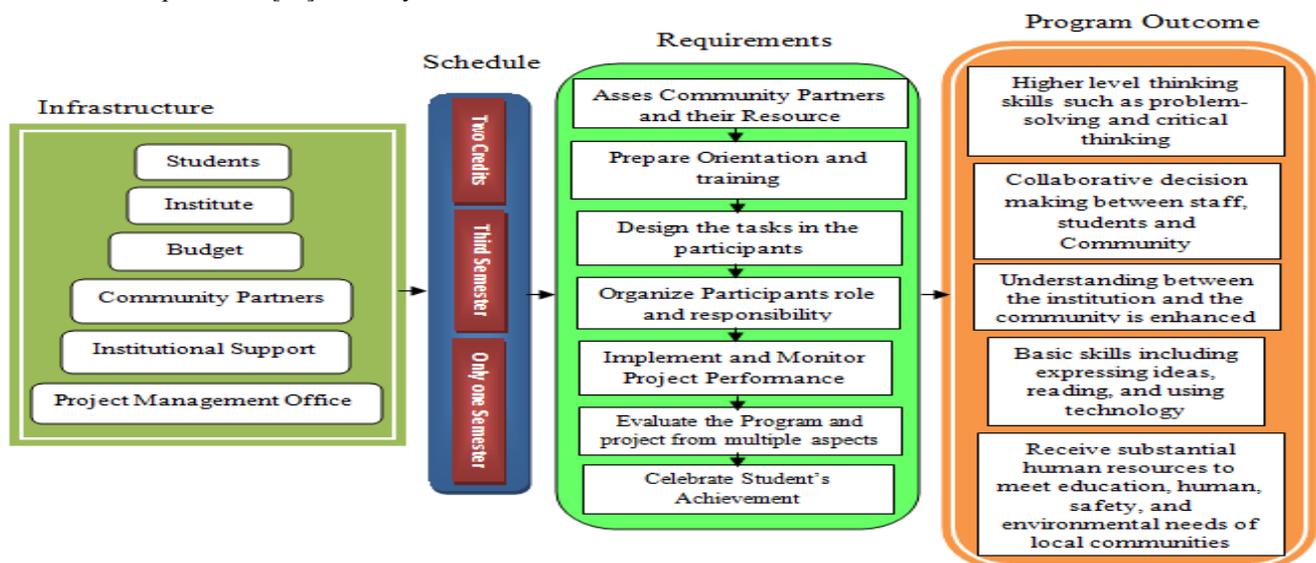


Figure 1.1: Service-Learning Model

for success of the program. Community Partners is also one of the Stakeholders of the program which is the receiver of the service, their role is to give a support to the students for the Communities behavior and environmental Issues. Moreover; Project Management Office (PMO) is a mediator between the Institute and Community Partners. Organize the project's tasks in the Participants by defining the scope, time, budget, resources and other necessary activities for the program performance. Whenever the Community partners need to share some problems with the Institute they contact to the Project management Office (PMO) and submit their problem to it. And the Office will organize in the Participants.

#### **4.2. Schedule**

Prepare number of Credits can be added to the Curriculum, and where to add. the Institute evaluates the current Curriculum whether it's overloaded or not, if it's not overloaded the program can make more than 3 credits a week in the beginning, when it's become stable, it's depend on the Institute to increase the credits by looking the Community requirements and students interest for the program. Furthermore; program can be offered more than 3 times for whole the course. When the current curriculum is overloaded it's important to make 2 credits a week at the first stage, because more than 2 credits, student may lose other requirements of the course, and is good to have two semesters for whole the study maximum.

#### **4.3. Requirements**

After the institute completed the schedule of the program, starts to find out the requirement of the program, which is to assess the Community Partners requirements and resource available first. These requirements, will give to the Institute ability to know more about the Community Partners, such as Community culture, Environmental Issues, and Community problems. When the Institute gets the Information from the community, and also their needs, the Institute analyzes the assessment report and comes back into its resource to adjust the work needed to perform and resources available. Give orientation to the students and the Community Partners. Design the tasks in the participants by defining how the role and responsibility of the participants, how the program performance will look like. Also give an orientation of Service-Learning program to the community partners through a meeting or community gathering in a

#### **4.4. Outcome of SL**

breakfast or lunch meeting, to held about two weeks prior to the module's commencement is an opportune time.

It allows community partners to be networked with one another as well as obtains detailed information about the module. The value of such an event has been well documented by academic staff, and community agencies alike. Necessary training can be provided through collaboration between communities Partners, because Orientation trainings provides for all participants to understand the goal of the program, and will get ability to perform tasks independently, and confidence, additionally, the program will finish successfully. Implement and Monitor the program performance. Formalization is the base of the Implementation success. The rules, roles and procedures need to be apply and the degree of formalization will determine the extent of investment of resources and exchanges among partners. Additionally, monitoring and Improving of the program is also important for the program performance.

Evaluate the program implementation and it's stability of Integration to the Curriculum. All the partners involved in the project can be a valuable source of information to the program. Consultation and reflection with everybody involved can provide ideas on how to improve the next round of implementation. Furthermore; the evaluators use the evaluation process by looking multiple areas, such as experiences gained, subject understand, level of collaborations. Prepare every project Completion a closing ceremony to encourage the students for the community service, and convert their theory understands into practical experience. During the celebration, presentations (or any other action of care, appreciation and recognition) are an important part of successful Service-Learning experience. Service students get the opportunity to share what they have learned, and gained their finished projects, as well as the products they have produced [13]. This allows students to share with their classmates what they have been working on and provide closure for all the participants. Be sure to involve all the partners of the project in these celebrations. Also consider inviting other members of the Institution's administration and community to share your successes. (This celebration day could also form part of summative assessment.). During presentations, lecture or coordinator will mark them based on their achievements. Therefore; in order to success the implementation of the program it's essentially good to look multiple aspects.

When the service program is completed, all the participants are expected to gain some outcomes. For

example, Students may gain from the program participation such these outcomes: Understanding, Communicating, appreciating and Civic participation, Application of Knowledge, Empowerment: more responsible, Moral development (values and beliefs), Exploration of new roles and interests, Willingness to take risks and challenges, Basic skills including expressing ideas, reading, and using technology, Higher level thinking skills such as problem-solving and critical thinking, Abbreviations, creativity and aesthetics, insights, judgments and Knowledge [14].

Institute also gain from the service Collaborative decision making between staff, students and Community Partners, More involvement from local Community, Increase No. of Scholarships, Increased school pride and sense of community, Increase number of grant projects, more positive student behavior, Overall increase in student academic achievement, Teachers are more motivated to teach. Also Community get a lot of advantages from the Program like: Community meet Service needed. Understanding between the institution and the community is enhanced, Valuable service to meet community need, Community Use Universities as resources, Empowerment-community's partnership, Positive relationship built with Community; Community uses students as resources, Meaningful Community Involvement with Service Performance, Receive substantial human resources to meet education, human, safety, and environmental needs of local communities.

## 5. Discussion and Conclusion

The Integration of Service-Learning with the existing Curriculum is one of the most challenged works in the academic management. Also to apply Service-Learning program to the traditional teaching and learning is a problem, mostly whenever new things Implementing in somewhere, there should be challenges and critical, but the model facilitates how Service-Learning can be integrated with the existing Curriculum, and steps required in implementation Stage. Moreover; if the Curriculum is overloaded the model gives suitable approach that makes easy to apply the program. The Model also consists of complete procedure used for the success of meaningful Service-Learning in a Computer Science. Actually Computer Science Students can be participated most of the services related with Information Technology such as, Developing an information system for an organization's administrators, Developing a web site for an organization or school, Developing classroom software for a school, Network an organization's

computer resources, Tutoring and other instructional activities. Therefore; this paper illustrates significant approach that the students in computer science can participate in Service-Learning activities.

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