

Start: A Framework for Service Learning Implementation for Preservice Teachers

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Abstract

This paper presents a framework for planning effective service learning projects for university coursework. The intent, based on previous research findings, was to create a format for implementation of projects that are connected to course objectives and include student driven projects that are teacher guided and authentic in nature. The power of reflection, often missing from service learning initiatives, is a centerpiece of the framework. Additionally, the importance of helping students visualize how theory can be integrated into practice with planning and preparation is also featured. Questions for guiding the projects are provided to help support preservice teachers' self-efficacy and teaching repertoire.

Keywords: service learning, self-efficacy, pre service teachers, authentic learning experiences

1. Introduction

Service learning is an initiative that has infiltrated all levels of education over the past several years. Not only has service learning been a component of many high school graduation requirements, it has now become the norm in higher education, and many universities require service learning as a part of the coursework offered to students who want those types of experiences. Service Learning situates course concepts and objectives in the context of authentic situations (Bernadowski, Perry, Del Greco, 2013). Ryan and Callahan (2002) deduce that service learning gracefully marries community service and field experiences and “offers learning opportunities that link academics to the service, so that both the students and the community benefit” (p. 128). Service learning benefits both the giver and receiver in unique ways by providing authentic learning for students involved. Service learning is essentially the integration of community service activities with academic skills, content, and reflection on service experiences (Cairn & Kielsmeier, 1999) by combining meaningful service with required curriculum goals and outcomes as mandated by departments of education.

Some universities have gone so far as to make service learning and student engagement a degree requirement. Schools of education have the unique opportunity to capitalize on this ever-growing trend for it fits exactly into what teacher education programs strive to accomplish; to engage students in authentic experiences that will benefit both the learners and those receiving the service. Belcheir (2000) found that student engagement is the greatest predictor of retention and cognitive and personal development in college students. With universities across the U.S. struggling to retain and recruit students, institutions must capitalize on service learning as a means to encourage and cultivate student engagement while learning course content. Furthermore, learning is most effective when classrooms and real world experiences are similar (Fleming & Parizzon, 2010) and courses that encourage and facilitate real-world, authentic learning experiences can produce scholars who think beyond the textbook and classroom walls and apply the content to the world in which they live.

The purpose of the paper is to present a framework for effective service learning projects for preservice teachers that encourages and cultivates students' teaching self-efficacy. The framework grew out of previous research by the authors. The previous study was conducted at a small, private university in western Pennsylvania with a relatively small education department. Unique to this previous research was the ability of faculty to offer service learning opportunities to students both as a course requirement and as an engagement requirement for graduation. Findings from the previous work found that preservice teachers' self-efficacy was elevated more when they were required to engage in service learning as part of a course and worked closely with a faculty member.

The authors' previous research found that course-connected service learning projects, those projects required for course credit, yielded higher self-efficacy in preservice teachers, more specifically mastery experiences and physiological and emotional states. In this work, comparison of two groups was used to determine if course-connected service learning, those required for course credit, was more effective than service learning not connected to a course. Both groups were given opportunities to engage in several service learning projects. "The findings verify that with a structured, course-connected assignment, preservice teachers' self-efficacy improved in the cognitive and affective domains" (Bernadowski, Del Greco, & Perry, 2013, p. xi). The group that was required to engage in service learning per the course requirements yielded higher teaching self-efficacy than the group without a course requirement.

From those findings, the researchers developed the START framework. The START for Service Learning is a framework that emphasizes; (1.) Student-driven service learning that allows students to take ownership of their learning and experience, (2.) Teacher-guided projects that are course-connected, (3.) Authentic, positive experiences for both preservice teachers and students, (4.) Reflective practices with ample opportunity to use reflection time effectively, and (5.) Application of Theory into practice. Based on the previous research study, findings suggests that these five areas could be attributed to elevated self-efficacy in students. The framework will aid college instructors in the implementation of authentic learning experiences that are teacher-guided/student driven, on-going, and allow for real life application of content knowledge. The proposed framework can adequately assist in the preparation and implementation of an effective, research-supported project for courses at the university level.

2. Literature Review

The review of related literature summarizes the areas of the START Framework. Each component is grounded in research and interrelated.

2.1 Authentic Experiences

Authentic learning experiences allow preservice teachers to engage in project-based learning that can be shared and applied in the real world. McKenzie, Morgan, Cochrane, Watson and Roberts (2002) emphasized that authentic learning must align student learning experiences with the world for which they are being prepare, and in this case, it is the alignment of

preservice teachers with real-world application of teaching situations. Therefore, it is essential that university students, more importantly, preservice teachers, participate in assignments and projects that are applied in real classrooms, and perform real world tasks that will be expected of them when they become professionals. Assignments that are connected to outcomes and are applicable to their work in classrooms will better prepare them for the tasks that lie ahead.

Authentic learning is closely related to situated learning or situation cognition. Situation cognition asserts that learning is situated in physical and social contexts and the use of that learning is affected by the context in which learning takes place (Brown, Collins, & Duguid, 1989). “Situated learning’s viewpoint suggests that individuals learn by interacting with their environment, and cognition is essentially created through the interactions between learners and situations” (Willem & Gonzalez-Dehass, 2012, p. 10). An essential element in helping preservice teachers understand how college classroom instruction is connected to “real world” application is through the implementation of effective situated learning projects that articulate instructional outcomes and course objectives. In the authors’ previous work with preservice teachers and first graders (Bernadowski, Del Greco, & Perry, 2013), course-connected assignments yielded higher ratings in preservice teachers’ self-efficacy because the assignment exposed them to the community of learners in which the information was applicable. This elevated self-efficacy could be attributed, in part, to the authentic learning that occurred during their semester-long work with struggling first grade readers. The course instructors provided the content, and the service learning provided the context.

Moreover, Santrock (2011) posits that it is important that students’ experiences are connected to the world with application of authentic learning. Herrington and Herrington (2006) identify characteristics of authentic learning based on constructivism and situated learning theory that include the ability to provide an authentic context that reflects the way in which the knowledge will be used in real life, have real-world relevance, include case-based learning, and allow for collaboration of knowledge construction among a community of learners. Authentic learning experiences naturally nurture constructivism, which emphasizes that knowledge is constructed when individuals socially interact and collaborate as a community of learners. “Teaching practices that build on the social constructivist perspective allow for social dialogue and exploration in an atmosphere of shared learning,” (Willems & Gonzalez-Dehass, 2012, p. 12) and this shared learning in an authentic-based project can help preservice teachers see the credibility, applicability, and validity of course-connected assignments (Bernadowski, Del Greco, & Perry, 2013). Preservice teachers who were given ample opportunities to share their teaching experiences viewed themselves as more prepared and better able to internalize course material as self-reported in reflective journals over the course of the semester.

2.2 Self-efficacy and Service Learning

Social cognitive theory, and more specifically self-efficacy, has emerged as an effective predictor of students’ motivation (Zimmerman, 2000) and can serve as a key indicator of the success or failure of a preservice teacher (Bernadowski, Perry, & Del Greco, 2013).

Bandura's theory of self-efficacy, situated in social cognitive theory, is essentially defined as an individual's own belief in their ability to perform a given task. Bandura (1997) theorized, that self-efficacy, or perceived self-efficacy, refers to one's ability to reach goals. It is with this self-efficacy, and perceived success, that preservice teachers have the ability to internalize course content and apply it appropriately in an authentic learning experience such as a service learning project.

Integrating service learning projects into preservice teacher's preparatory education gives students insight into the rigors of becoming a teacher. "With the increasing demands on teachers within classrooms and the No Child Left Behind Act legislation, there is a need to create teacher education programs that enhance teachers' efficacy" (Haverback & Parault, 2008, p. 237). Authentic learning experiences provide preservice teachers the opportunity to apply their knowledge in new ways (Koci, 2013) and can assist teacher candidates in the realization of the value of theoretical knowledge. Thus, preservice teachers can apply that knowledge in new and different ways. "After university, students will very rarely encounter a situation in which their theoretical knowledge corresponds exactly to the situation facing them" (Koci, 2013, p. 81) so it is of utmost importance that the connections be made during university training. Service learning can scaffold what is learned in course work and improve self-efficacy in preservice teachers as they experience success and failure in a safe environment under the direction of their course instructor and/or cooperating teacher in the field.

Since service learning is a complex pedagogical technique and requires creativity and endurance from both instructors and students alike, it is imperative that the rigors of standards required for preservice teachers be met in a meaningful and effective way. Universities must ensure students are caring individuals who hold values true to their students, and the skills to be able to teach children what is needed to be viable citizens in an every changing global world (Bernadowski, Del Greco, & Perry, 2013). Bandura's work emphasized the power of human behavior and the motivating factors that push people to attain their goals. It is within this theory that we find preservice teachers' drive to help students become successful learners and citizens. Bandura's theoretical framework of self-efficacy suggests that efficacy beliefs may be most malleable early in learning. Thus, the first few years of teacher development could be critical to the long-term development of teaching efficacy (Hoy, 2004). These early years, while students are enrolled in undergraduate teacher education programs, have immense impact on students' future teaching efficacy. The planning of effective service learning projects that capitalize on this self-efficacy window is of utmost importance.

2.3 Ownership of Learning

Another key element of preservice teacher development and teaching efficacy is ownership of learning, and though the conversations regarding ownership have been moving into the spotlight only recently, in reality the conversation began nearly 100 years ago with John Dewey. It was in his landmark *Democracy of Education* (1916) that Dewey drew the connection to, while differentiating between, student involvement and student ownership. In

Dewey's words, activities that encourage real involvement "give pupils something to do, not something to learn; and the doing is of such a nature as to demand thinking, or the intentional noting of connections; learning naturally results" (p.181). Dewey also expounded, in his subsequent work, *Experience and Education* (1938), on the value of experiential learning, where "sound educational experience involves, above all, continuity and interaction between the learner and what is learned" (p.10). He makes reference to "the organic connection between education and personal experience," (p.25), and he speaks to the critical nature of both the delicate and difficult task educators face in orchestrating quality learning experiences for their students. Dewey emphasizes that the quality of experiences is just as important as the amount of experiences. This tenet holds true in preservice teachers' abilities to engage in authentic service learning experiences that are plentiful and worthwhile.

Adam Fletcher (2008) supports this connection between student involvement and student ownership, noting that the critical piece to involvement is relevance. Students feel connected, engaged, and involved when they are involved and engaged in activities that are personally relevant to who they are as people and a generation. Pierce, Kostova, and Dirks (2003) define this as psychological ownership. Psychological ownership gives a generation a voice because they are a part of the solution to a problem they have identified. Pairing these definitions of ownership with the constructivist concept of applying prior knowledge and skills to new teaching situations, underscores the importance for teacher educators to carefully design and develop meaningful learning experiences for their student teachers, meaningful learning experiences that foster mastery, which in turn foster a sense of ownership. For as Kanfoush (2013) notes, "The adage 'nothing succeeds like success' holds true as the individual grows in confidence through achievement. This result is especially true when such success is experienced early in a learning history" (p.34).

Student ownership of learning is directly related to authentic instruction, authentic learning experiences, and authentic assessment. In support of this claim, Fleming and Panizzon (2010), in reference to facilitating students' ownership of learning in science, state that, "Learning is most effective when the scientific context used in the classroom is a transformed extension of the students' real world, and so inspires students' intrinsic motivation, encouraging students to ask meaningful questions and seek their own answers" (p.27). This concept is directly applicable to our discussion regarding the ownership of learning assumed by preservice teachers as they strive to build and add meaning to the full repertoire of teaching strategies, learning theories, and best practices that they are exposed to "in theory," in the classroom. Hence, the power of "learning by doing" cannot be overstated, nor can ownership of that learning.

Adding perspective to the discussion and drawing a definite connection between authentic instruction and ownership of learning, are the observations of Arlene Grierson in her work, "Changing Conceptions of Effective Teacher Education: The Journey of a Novice Teacher Educator" (2010). In her study Grierson explores the key components of teacher education, particularly the importance of fostering critical reflection. Grierson makes a salient point regarding the preconceptions that teacher candidates bring with them as they begin their respective journeys through teacher training, from classroom theory to practice in the field.

Grierson notes, “Robust reflection that provokes candidates to examine their tacit assumptions about teaching and learning, consider alternate perspectives, and delineate new directions is a key component of teacher education” (p. 4).

This further supports the critical need for teacher educators to add meaning and structure to teacher training instruction, activities, and in particular, field experiences. Teacher candidates, come with their own pre-conceived notions about school, teaching, and learning. These notions are based upon their own, personal, K-12 experiences, ranging from good to bad, to mediocre. Service learning projects can play such a critical role in shaping attitudes, re-directing misconceptions and, ultimately, fostering ownership while increasing teacher self-efficacy of teacher candidates.

3. Planning Service Learning

Constructivist approaches to learning have been widely accepted as effective pedagogy (Darling-Hammond & McLaughlin, 2011; Richardson, 1997), and this theoretical framework, grounded in constructivism, will guide educational pedagogy for many years to come. In the context of constructivism, the notion that learners learn by doing and building knowledge through application, preservice teachers can effectively learn through the engagement of course-connected and long-term service learning projects. Prior to planning, developing or implementing a service learning project, instructors must plan effectively by examining the goals of the course and the authenticity of the experience, establishing partnerships with institutions or organizations, and determining the overall blueprint of the project. Before such a service-learning project can be implemented, course leaders should explore the following:

3.1 Examining Course Goals

Course-connected (Bernadowski, Del Greco, Perry, 2013) service learning projects are fashioned through the creativity and initiative of stakeholders; the course leader and an organization leader from the community sector. In some instances the course leader examines his/her course goals and identifies a need for students to experience first-hand the complexities of a process in real life. This could be as simple as designing and teaching a lesson in a mathematics and then reflecting on the results.

A community organization leader may recognize a need beyond his/her current resources. For example, a school principal may need to provide tutoring for students exhibiting learning gaps. University students may have the time to meet and work with the children during their daily course schedule. Therefore both stakeholders have goals that can be satisfied.

In either case it requires the university course leader to examine the goals of the course and determine which of those goals would be best realized in a real-life situation. If an organization leader comes to the university leader with a specific need, the instructor can examine the course to determine if the need fits. The first step then begins with a needs assessment and the recognition of a mutual benefit.

3.2 Imagining an Authentic Experience

A well-conceived service learning project that gives prospective teachers the feeling of doing

something for someone else provides the motivation for personal engagement. This engagement is more than just doing something. The term “engagement” here means the student finds some personal and professional enjoyment and benefit from participating in the project. This takes imagination on the part of the course leader.

For example, an instructor may want the pre-service teachers to learn specific writing strategies that will help young students improve their writing skills. The course instructor can design a semester long project that allows the preservice teacher to solicit writing samples over a period of time, gain an understanding of a child’s needs, and have them construct specific strategies for the child’s improvement. Then have them deliver the strategies and interact with the child. The pre-service teacher investing time, energy, and thought over a period of time creates personal and professional engagement and the opportunity to develop positive self-efficacy regarding their teaching abilities.

3.3 Establishing a Partnership

Establishing a partnership for a service learning project goes beyond agreeing to show up at a particular time and place. The two parties need to come to conceptualize how the project can be mutually beneficial. Identifying common goals creates a purpose and a decisive focus for the project.

There are many organizations in communities that work with children that have learning needs and it is within their charter to provide assistance for those needs. Contact local schools, public and private, as well as local municipal agencies for student centered organizations.

3.4 Determining the Actions of All Stakeholders

For a quality service learning project all stakeholders must be actively engaged. A simple “giver” and “receiver” plan does not necessarily produce an engaging project that results in an improved self-efficacy for the pre-service teacher.

When both groups invest time and effort over a long period of time, they finish with a personal and professional connection where the results are meaningful and self-satisfying by all stakeholders. The result will be a blueprint for success of a service learning project.

In order to prepare a service learning project, the authors created a framework for the planning of service learning projects. Table 1 illustrates the START Framework of Essential Elements for a Quality Service Learning Projects that university instructors can utilize to plan and prepare long-term service learning projects.

Table 1. START Framework of Essential Elements for a Quality Service Learning Project

START Framework		
Component	Action	Guiding Questions
Student-driven	Students take ownership of their learning through active participation and planning.	<p><i>How can students add details to this project to allow them to call it their own?</i></p> <p><i>What are the students' roles and responsibilities?</i></p> <p><i>What are the needs, interests, and abilities of the students?</i></p>
Teacher-guided	Projects are course-connected through accredited standards and course goals.	<p><i>What resources do the students need to achieve the activities?</i></p> <p><i>What goals pertain to the day-to-day practice of teaching?</i></p> <p><i>What goals would be best realized in a real-life situation?</i></p>
Authentic	Positive experiences for both preservice teachers are purposefully planned through established partnerships between the school, professor, and the organization receiving the intended service.	<p><i>What are the roles and responsibilities for all stakeholders?</i></p> <p><i>What are the timelines for achieving the goals of the project?</i></p> <p><i>What resources do the students need to achieve the activities?</i></p>
Reflect	<p>Students need an opportunity for students to internalize their feelings and own perceptions of their actions during the experience.</p> <p>Students need an opportunity to internalize the reflections of the professor regarding their own actions during the experience.</p>	<p><i>What are specific questions for the students to consider as a result of the project?</i></p> <p><i>How do all stakeholders perceive the actions and consequences of the project?</i></p>
Theory	Students are presented with the principles as outlined by research and given the opportunity to evaluate what they experienced.	<i>How is what we just did make sense with the theory of what should happen?</i>

The START Framework has evolved from utilizing service learning in the university classroom to connect preservice teachers to experiences in the public and private school systems (Bernadowski, Del Greco, & Perry, 2013), and grounded in educational theory. The idea of student-driven learning has been around for some time and is rooted in the work of Dewey (1916; 1938). Furthermore, the term has also been associated with the work of Piaget (Burnard, 1999) and Friedrich Froebel, who is seen as a founder of formalized preschool education, and the designer of the kindergarten system (<http://infed.org/mobi/fredrich-froebel-froebel/>). Therefore, many terms are often used synonymously or linked to student-driven learning (O'Neil & McMahon, 2005).

Given the rich background of the term, it can often mean different things to different people.

However, there are commonalities among the definitions and the first two components of the START Framework (Student-driven and Teacher guided) reflect these commonalities while highlighting how practical classroom experiences can be rooted in long-standing educational theory. Student – driven and Teacher-guided are inextricably linked and lend themselves to the power shift from the teacher as lecturer and expert to the fully engaged student learner (Barr & Tagg, 1995). The emphasis in this relationship moves from what the teacher does to what the student achieves (Harden & Crosby, 2000). Gibbs (1995), Lea, Stephenson and Troy (2003), and Brandes and Ginnis (1986) have summarized the tenets of student directed learning and have all included: a reliance on active learning, an emphasis on deep learning and understanding, the necessity of involvement and participation for learning to occur, the view of teacher as facilitator and resource, and mutual respect among all learners. Additionally, self-directed learning occurs through experience, and by working both individually and through the building of partnership relationships (Juodaitytė & Kvedaraitė, 2010).

Utilizing the third (authentic assessment) and fourth (reflection) components of the START Framework provides the best possible learning outcomes for pre-service teachers. Black (1999) has commented that grades are overemphasized and learning is underemphasized. Learning by doing enables learners to shift their learning from formal educational settings (the college classroom) to job related and life experiences (Kvedaraitė, Jasnauskaite, Geleziniene & Strazdiene, 2013). Additionally, learning through collaboration and experience enables learners to reflect upon their experiences in “real world” activities (Kvedaraitė, Jasnauskaite, Geleziniene & Strazdiene, 2013). Reflection is an essential part of any service learning project and to effectively prepare preservice teachers for the classroom, self-reflection is often a common goal of teacher preparation programs (Moore-Russo & Wilsey, 2014). Future teachers should be able to reflect in order to gain insight into classroom preparation, planning and student learning in early childhood or elementary classrooms (Coombs, 2003). The power of reflection, whether through the use of reflective journals or the social interaction and robust discussions that can be generated through simple one-on-one exchanges between two students, among a larger group, or conversations involving the entire class, as well as student engagement in meaningful dialogue with course instructors and/or other teacher educators...the power of reflection in any or all of these forms, and its effect on the growth and development of teacher candidates, is remarkable. In order to authentically

assess preservice teachers, it is necessary to build partnerships between university faculty, public and private school faculty and administration.

4. Conclusion

All five components of the START framework overlap and help to build preservice teachers skills in the fifth area (theory). By allowing preservice student teachers to direct their own learning with the support of university faculty and early childhood and elementary classroom teachers; by assisting novice teachers in authentically assessing and reflecting upon their practice; and by providing linkages from practice to theory, university faculty and practicing teachers help to scaffold learning for novice teachers. Practicing teachers must rely on their judgment, critical thinking skills and knowledge to apply theory to real situations (Caceres, Chamoso & Azcarate, 2010). By utilizing the START framework it is possible to provide preservice teachers with experiences that closely replicate the real life classroom where they will one day teach.

Through collaboration, authentic classroom experiences may be created for the preservice teachers to act out and reflect upon. Taking the time to build a cohesive team with a variety of members, all dedicated to strengthening pre-service teachers' skills, helps to ensure the partnerships among universities, educational and community agencies will continue to grow and transition as necessary because all stakeholders are vested in the process.

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