Service Learning Curriculum Unit

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Abstract

This paper details the theoretical underpinnings of the curriculum unit designed. The basic structure and components of successful service learning inform the unit, which is designed in response to features of the informal learning context. One such feature is the lack of content standards in informal settings, which results in the selection of learning outcomes by the designer as part of the curriculum design process. In this case, outcomes were informed by skills demanded by the modern workforce and developmental needs of adolescents. Finally, specific themes of cooperative and collaborative learning, student choice, reflection as formative assessment, and use of authentic assessments are discussed. Some components of this paper and the curriculum unit appeared in coursework completed in Education 3620 Principles of Curriculum Design, and Education 3200 Foundations of Learning and Development.

Service Learning in Informal Learning Environments

In her seminal guide to the implementation of service learning programs, Kaye (2004) defines service learning as "a teaching method where … learning is deepened through service to others in a process that provides structured time for reflection on the service experience and demonstration of the skills and knowledge acquired" (Kaye 2004, pg. 7). Kaye's (2004) framework for the development of service learning units by educators includes a process where students engage in learning, take action, reflect on their experiences and share their successes. Kaye (2004) also emphasizes the importance of integrated learning, addressing genuine needs, incorporating youth voice and choice, working collaboratively with community members, engaging in reciprocal relationships with the people or organizations served, and civic responsibility as key elements of successful service learning. These components guide this service learning curriculum unit.

Service learning helps to maximize student motivation to learn. Schwartz et al. (1999) as cited in Bransford (2000) makes the case that social factors influence learning, particularly the sense that the learner is giving something to others. Research by Barron et al. (1998) as cited in Bransford (2000) demonstrates that students were most likely to recall learning activities that had strong social consequences. Service learning has also been linked to higher academic achievement, gains in social and behavioral skills, future civic engagement, and ability to work with others (Tannenbaum & Brown-Welty 2006; Morgan & Streb 2002; Scales, Blyth, Berkas & Kielsmeier 2000). While service learning has become widespread in primary, secondary, and postsecondary educational institutions, the adoption of service learning programs in informal learning environments is just now being more widely implemented and researched. Calls for the development of service learning

programs in camp programs (Garavaglia-Maiorano & Pile 2001) is one indicator of the growth of service learning in informal settings. Additionally, research on the effects of service learning in an after school program (Tannenbaum & Brown-Welty 2006) indicates that gains seen in academic skills, socio-emotional development, and sociopolitical awareness in formal learning environments are also possible in informal settings.

Service learning in informal learning environments differs from its implementation in schools in several ways that impact curriculum design. Participants, especially the adolescents that this unit is designed for, choose to participate in the program and their attendance is not compulsory. This choice of attendance results in higher motivation for students who participate, as they are already interested in the subject matter. As a result, the curriculum unit seeks to build upon existing interests rather than generate interest in a subject matter from the start. Another key feature of informal learning environments is that grading is not a consideration. As a result, the unit focuses primarily on performance tasks and self-assessment, and does not include rubrics that result in a score or grade. Finally, there are no content standards that need to be addressed in informal learning environments. Instead, this curriculum unit is developed around seven outcomes. The outcomes are discussed in greater depth later in this paper.

This curriculum unit was designed to be applicable to a variety of learning environments, although several hypothetical constraints guide the unit. The unit is designed for a small group of high school students who chose to participate in an extracurricular leadership program. The students would have already established relationships with one another and a set of general expectations for their involvement in the program. The individual lessons are designed for implementation in three-hour, weekly

meetings occurring over the course of about three months, with expectations that students complete assignments outside the regular meetings. The design of the curriculum was informed by Kaye's (2004) work, and one part of the curriculum, on community needs and assets, was adapted from the Service-Learning Curriculum Guide (2009) and work by Kretzmann and McKnight (1996).

Outcomes for the Unit

The work of Bransford (2000) indicates the importance of teaching for understanding as opposed to an emphasis on rote memorization. The understanding by design curriculum design framework developed by Wiggins and McTighe (2005) provides a mechanism by which educators can make understanding more likely. Wiggins and McTighe (2005) advocate for a backward design framework, in which educators select learning outcomes, desired understandings and essential questions to explore and then select assessments and learning experiences that follow from the desired understandings. As Wiggins and McTighe (2005) state, "too many teachers focus on the *teaching* but not the *learning*," (pg. 15) and their curricular framework hopes to reframe teacher focus on learning.

The distinguishing feature of Wiggins & McTighe's (2005) understanding by design curriculum model is its focus on desired understandings. In traditional settings, these understandings are traditionally derived from content standards or educator distillation of standards into core understandings. However, standards are not relevant to informal learning contexts, and as a result, informal educators utilizing the understanding by design framework must engage in a preliminary step in which they identify the understandings

they hope students will grasp. As the entire curricular design framework grows from these outcomes, selecting them is a critical step in the curriculum design process. Additionally, the emphasis of service learning on deepening student learning through service requires the informal educator to consider what that student learning should be.

Learning outcome selection was guided by skills needed in modern economies and developmental needs of adolescents. The 21st Century Skills Partnership, a non-profit organization supported by several technology corporations such as Verizon, Dell, Apple, Microsoft, and Intel, developed a set of skills to be reflected in all aspects of K-12 education, from curriculum development and instruction to school leadership. The skills chosen by the 21st Century Skills Partnership include, "mastery and understanding of civic literacy," (The MILE Guide 2009, pg. 16) "the ability to think critically, problem solve, create, innovate, and collaborate," (The MILE Guide 2009, pg. 16) and "the ability to 'learn how to learn' and application of this ability to self-monitor" (The MILE Guide 2009, pg. 16). Although designed for formal learning environments, the development of skills related to working collaboratively, problem solving and metacognition can and should be a priority in informal learning environments as well.

Many of the skills that the 21st Century Skills Partnership identifies as crucial are mirrored in literature on adolescent development. Adolescence is marked by a period of synaptogenesis followed by pruning, especially in areas of the brain that govern "attention, planning, problem solving, and decision making" (Nelson, Thomas, & deHaan 2008 pg. 38). The neurological development of these skills, which are often described as executive functions, are one of the most profound cognitive changes of adolescence (Kuhn & Franklin 2008). In light of this major feature of adolescent development, Blakemore and Frith

(2005) assert that "strengthening of internal control, for example, self-paced learning, critical evaluation of transmitted knowledge and meta-study skills" (Blakemore & Frith 2005, pg. 462) should be a primary focus of adolescent education. Additionally, Harter (2008) discusses how adolescent self-doubt is ill-served by competitive secondary school environments that emphasize individual achievement, making the case for creating group learning opportunties. These developmental principles align with the skills outlined in the MILE Guide (2009) to create a compelling case for learning centered on the development of skills related to problem solving, collaboration, metacognition, and critical thinking.

The outcomes I chose reflect the skills students need for the modern economy, developmental needs of adolescents, as well as service learning emphases on action, reflection and revision, and demonstration. They are as follows:

1. Students will know what service learning is and create projects that exemplify it.

2. Students will work collaboratively and cooperatively.

3. Students will identify gaps in their knowledge and work to address them.

4. Students will set goals and monitor their own progress in achieving them.

5. Students will evaluate their work and revise when necessary.

6. Students will deliver effective oral presentations.

7. Students will take action on the social issue of their choice.

At least two of these outcomes comprise the basis of the desired understandings for each lesson within the unit.

Specific Features of the Curriculum

In the interest of space, cooperative and collaborative learning experiences, student choice and self-regulation, reflection and revision, and authentic assessments in the curriculum unit will be highlighted as dominant themes.

Cooperative and Collaborative Learning Experiences

Both collaborative and cooperative learning experiences are used to describe group work, and are often used interchangeably. Bruffee (1995) distinguishes between the two by defining cooperative learning as centered around teacher-constructed knowledge, appropriate for primary school, and non-competitive, while stating that collaborative learning centers on student-constructed knowledge, is designed for adolescents and adults, and encourages groups to compete with one another. The adolescent age group this unit is written for makes collaborative learning the dominant mode of group work used, although some cooperative learning elements are incorporated. The incorporation of both styles of group work reflects adolescents' transition into more mature cognitive frameworks and is reflective of the continued interchange of the terms. For example, even though the 21st Century Skills Partnership is focused on K-12 education, the organization only identifies collaborative learning as the desired skill.

Harter (2008) makes the case for cooperative and noncompetitive learning environments as the best match for adolescent self-concept needs. The curriculum unit is deliberately non-competitive. For example, students will be awarded grant funding based on the strength of their group's presentation, rather than whether their presentation was

better than the presentations of the other service groups. There are also opportunities, especially at the end of the unit, for all students to share and celebrate their collective work.

Gay (2010) and Bransford (2000) discuss that cooperative learning is a skill that students must learn through deliberate teaching. Gay (2010) also emphasizes that this pedagogical strategy should pervade the learning environment. The curriculum unit reflects this work by utilizing a variety of grouping practices in the first few lessons of the unit so that students can become more comfortable working in groups. These initial experiences set the stage for the intensive group work that characterizes the rest of the unit. The unit also contains specific learning activities designed teach students to work in groups, as when students will learn about ways they can reach group consensus prior to engaging in group decision-making to determine a service action plan. There is also an opportunity for students to individually reflect on the way their group is functioning and assess the group through reflection prompts.

Mixed-ability grouping is relevant to both cooperative and collaborative learning. Gay (2010) discusses that allowing students to select the ways in which groups are composed can be a way for teachers to share power with students while also ensuring that students experience mixed ability groups. The benefit of mixed ability groups is also evident in research on adolescent social development. Rubin, Bukowski, Parker and Bowker (2008) discuss that crowds are larger groups of adolescents that function as an organizational framework to define social life for adolescents, and that affiliation with a crowd is often peer-directed rather than involving the choice of the individual. As a result, crowds "may prevent adolescents from the exploration of other identities and discourage shifts to other crowd memberships." (Rubin, Bukowski, Parker & Bowker, 2010 pg. 155)

Allowing adolescents to participate in an extended group experience in which they can try on alternate roles in a smaller setting is developmentally appropriate. As a result, students determine criteria for service group composition through a discussion scaffolded by the instructor, and service learning groups will be composed before students select a community need to address so that diversity of viewpoints is more likely.

Collaborative learning is reflected in the emphasis on student agency and creation of knowledge. Throughout the unit, students work to define their learning objectives and work in groups to create knowledge. For example, even when groups are engaging in decision making about their action plans, the discussions are predicated on student boundaries for appropriate discussions and decision making strategies. The instructor serves as an expert and guide, but student work is not directed by the instructor. This reflects the student-created notion of learning that Bruffee (1995) describes as central to collaborative learning.

Student Choice and Self-Regulation

Kaye (2004) cites the concept of youth voice and choice as a central principle of successful service learning. Intrinsic motivation, which is demonstrated when students "do activities for their own sake and out of interest in the activity." (Wigfield, Eccles, Roeser & Schiefele, 2010 pg. 409) is maximized through the use of choice. Accordingly, students are given many opportunities for choice throughout the unit, from selection of a community need to address to the development of a service action plan to address to the format they choose to showcase their work at the end of the unit. In allowing students to select the format in which they present what they learned and accomplished at the conclusion of the

project, the unit is responsive to the multiple forms that service learning projects could take and allows students to show what they know and did in a manner that students deem most appropriate.

Blakemore and Frith (2005) and the MILE Guide (2009) both highlight the importance of self-regulation and self-monitoring. Opportunities for participants to engage in self-regulation are throughout the curriculum unit. As students select a community need to address and begin to learn about that need in order to develop a service learning project, they will be asked to consider what information they have, how it is organized, and what they still need to know. Students will also develop goals in the form of a service action plan and engage in critical assessment after they have begun to implement their plans and at the conclusion of the unit. This will help students to determine if they were successful in meeting their goals and how they could make changes that would make meeting their goals more likely in light of what they have experienced.

Reflection

A key component of the service learning unit is the use of individual and group reflection, which is consistent with the cycle of service learning outlined by Kaye (2004). The process of reflection allows students to think critically about their experiences and provides opportunities for them to consider how the skills and knowledge they are learning may transfer to other contexts. As a result, each week students must individually complete a reflective exercise, either by completing a brief survey or writing in response to a reflection prompt. These reflection prompts will be submitted electronically to the instructor, who will respond to what the student wrote in order to provide feedback and

engage in dialogue. In addition to enacting the reflection component of the service learning process, the reflections serve as a form on ongoing formative assessment.

Bransford (2000) discusses the utility of formative assessments in gauging student understanding and in making student thinking visible to teachers. The individual nature of the reflection prompts ensures that although students are working cooperatively, the instructor can monitor individual learning. Bransford (2000) also advocates for teaching self-assessment skills to students, which is inherent in reflection prompts that ask students to assess themselves as learners, their contributions to the group, group performances and group functioning. Bransford (2000) cites the teaching of self-assessment as a major component of metacognitive teaching, and the ongoing nature of the reflection prompts ensures that individual learning is continually assessed.

At several points in the curriculum unit, students will also reflect in their service learning groups. Citing the research of Barron et al. (1998), Black and William (1998) and Vye et al. (1998), Bransford (2000) notes, "feedback is most valuable when students have the opportunity to revise their thinking as they are working on a unit or project. The addition of opportunities for formative assessment increases students' learning and transfer." (pg. 141) This process of reflection and revision is exemplified in Lesson 7, when students consider their initial service action plans and make revisions based on their initial action experiences in order to best ensure that the goals students initially set in their action plans are met by the end of the project. This important step in the service learning process has benefits for student learning and transfer.

Authentic Assessment

The unit deliberately utilizes authentic assessment as the primary means that student learning is measured. Wiggins and McTighe (2005) emphasize several key components of authentic assessment, including realistic contextualization, requirements of judgment and innovation, replication of key challenging situations in which adults are tested, assessment of student ability to navigate a complex and multistage task using a repertoire of knowledge and skills, and allowance of opportunities to practice, get feedback and refine performances and products. One example of an assessment from the unit that contains each of these elements is the presentation that student service learning groups will make in order to receive grant funding for their service projects.

The presentations are structured in two primary segments: a short oral presentation in the format of an elevator pitch followed by student response to critical questioning from a professional panel. An elevator pitch is a short presentation, usually under two minutes in length, in which entrepreneurs pitch their ideas to potential investors, and is a common occurrence in the workplace. To set up the performance task, students will view a YouTube clip of a winning elevator pitch from a business school competition several times in order to examine the components of the successful pitch. Using their analysis, students will construct a rubric for successful pitches that will be used to assess mock presentations by the students and their peers. Students will have a week to revise their mock presentations before the actual presentations take place.

This task replicates real-world contexts of the workplace and grant funding. The short format of the elevator pitch forces students to synthesize the information they have learned about their service learning issue area thus far and make judgments about which

information to include in such an abbreviated format. Students must also translate much of their knowledge so that it can be conveyed to someone with less expertise in their issue area in order to make a compelling pitch. In utilizing a complex set of group functioning, information synthesizing and oral presentation skills, students are using diverse skill sets to navigate a complex task. If students are unsuccessful in obtaining funding even after having the opportunity to practice their presentations and receive feedback from themselves and peers, they will have a further opportunity to refine and present so that they can experience success.

The question and answer session at the conclusion of the presentation also requires students to utilize diverse knowledge and skills in a complex task. In the lesson prior to the mock presentations, students will explore the idea of counterarguments and engage in a learning experience in which they consider counterarguments to their presentations and develop strategies to address them during the presentations and the question and answer session that will follow. The incorporation of this argumentative-making skill has been linked with the development of the evaluativist stage of epistemological thought (Kuhn, 1991; Mason & Boscolo, 2004; Weinstock & Cronin, 2003; Weinstock et al., 2004 as cited in Kuhn & Franklin 2010). This cognitive stage is characterized by sophisticated ideas about the nature of knowledge and knowing, including the idea that knowledge is subjective, even among experts.

Conclusion

This unit itself is highly flexible and responsive to the needs of individual learners. The elements of choice, group tasks, reflection and authentic assessment embody

both principles of service learning and developmental needs of adolescents. The use of student choice develops self-regulatory skills needed by adolescents and builds on students' intrinsic motivation. While incorporating elements of cooperative learning by gradually working up to group work and teaching cooperative learning skills, the unit's emphasis on student-led learning with the instructor as a guide and expert reflects cooperative learning. The use of reflection is used by the instructor as a means of formative assessments and provides a tool for students to consider the transferability of the skills they are learning and to receive individual instructor feedback. The use of authentic assessment requires students to utilize diverse skill sets in complex, realistically situated tasks and ensures their success by allowing opportunities for feedback and revision.

　　As educators prepare students to participate in the civic life and workplaces of an ever-changing world, we must equip students to think critically, work cooperatively and collaboratively, and understand their own learning. These skills allow students to be lifelong problem solvers and learners. Service learning, with its success in promoting academic and socio-emotional success, civic engagement and sociopolitical awareness, and student ability to work with others, is a vehicle that can be used to develop these skills and understandings. Although widely used in formal learning environments, informal learning environments provide highly flexible settings free from many of the constraints that characterize school environments today. The freedom from high-stakes testing and the need to quantify student learning creates opportunities for informal educators to hone in on the critical thinking, collaborative and metacogntive skills that students need.

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