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Enriching Teaching and Learning in a Teacher Education Course through a Field Experience Choice Assignment in Service-Learning

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Abstract

With a purpose of enriching teaching and learning in her classroom, an early childhood education professor implements a service learning option into an introductory curriculum course with 25 students (preservice teachers) enrolled. The study, using both qualitative and quantitative means, measures the attainment of course objectives in students; and compares their ratings statements and coded narrative reflections. Results indicate that the eight students engaged in service learning in their field experience did as well as the 17 students not engaged in service learning on their pre- and post-test analysis, and in their final grades. The student reflections revealed that students participating in service-learning experienced richer learning experiences than those participating in the traditional assignment. Additionally, the service-learning participants indicate a greater sense of civic responsibility, and ability to lead their P-5 students to a greater awareness of their civic responsibility. Recommendations include implementing service-learning with all preservice teachers enrolled in this course, developing appropriate strategies for assessment of effects of service-learning, and conducting further studies on servicelearning in teacher education programs.

Keywords: service-learning; scholarship of teaching and learning; preservice teacher education

1. Introduction

Service-learning in teacher education can strengthen the entire community of learners by promoting mutually rewarding learning relationships among teacher educators, education students, and the children they serve.

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Mutual learning occurs in mentoring projects when teacher and learner interact in ways that prompt new insights and growth (Swick, 2001, p. 261).

As I sought to increase the teaching and learning in an introductory curriculum course with early childhood preservice teachers, I was drawn to the methodology of service-learning based on my success as a former elementary practitioner using this methodology with my young students (Arrington, 2010). This article examines the pilot project developed to determine if preservice teachers in a curriculum course with a field experience component were able to achieve their course objectives as they designed and participated in an optional service-learning project with their P-5 students.

1.2 Purpose

Inasmuch as service-learning has not traditionally been a component in the Early Childhood Education (ECED) program at my university, one purpose of this study was to validate the use of service-learning in teacher preparation courses. Therefore, the goals of the project were (a) to identify service-learning as a viable method to cultivate deeper understandings of course objectives, and (b) to examine the impact of participating in a service-learning experience on the preservice teachers' field experience. In order to proceed, I secured service-learning designation of the course through the university's Office of Student Leadership and Civic Engagement (OSLCE) after submitting the application and course syllabus for review by a committee of Service-Learning Faculty Fellows.

The class used in this study was an introductory Curriculum course, which included two 75-minute class periods each week alongside a 20-hour field experience. The traditional assignments of the course included reflections on their activities and observations during their field experience.

In order to enrich teaching and learning in this course, I utilized servicelearning in this pilot project as an optional assignment: The students enrolled in this course were given an opportunity to plan and develop a service-learning experience based on a need they determined in their field experience, either on their own or with the assistance of the classroom teacher. Drawing from my expertise as a former elementary classroom practitioner actively involving my third- and fourth-grade students in service-learning experiences, I provided an overview of service-learning, accompanied by a slide show of actual projects that I had implemented. Introductory information and another example were also provided by a Service-Learning Student Facilitator (SLSF). The SLSF, a former Curriculum student, had been certified in a program on the campus in which university studentswere trained in leading classes in service-learning projects. She visited my Curriculum classroom and presented an overview of aservice-learning project which she had previously implemented in her field experience—enriching the experience of a first grader reading on fourth grade level. The SLSF helped kick off the semester of this pilot program by demonstrating the success of service-learning in her field experience, and presenting herself as a peer resource for their projects.

2. Review of Literature

2.1 Understanding Service-Learning

Service-learning is not a contemporary idea; it has been embraced through the years. Dewey (1938), a proponent of experiential education, believed that education should be based on a quality experience, one that has continuity and interaction—continuity meaning experience comes from and leads to other experiences; interaction meaning internal needs of a person being met. This philosophy influenced the 20th century implementation of *service-learning*, a movement which has been propelled through the decades with such public actions as (a) President Kennedy addressing the country (U.S. Congress, 1989), "...ask not what you can do for yourself, but what you can do for your country;" (b) President George Bush signing into law "The National Community Service Act" (1990); and (c) Public Law 111-13 being enacted: "The Edward M. Kennedy Serve America Act" (2009).

As a result of these public actions, service-learning has become a powerful force in universities. Campus Compact is a national coalition of higher education institutions who are committed to civic and community-based learning. They reported that the number of full-time faculty teaching service-learning courses increased threefold in the four-year period 2000-2004 (Ehrlich, 2005), and it was recently reported that membership in Campus Compact has "grown by an average of 70 campuses per year over the past five years, a trend that reflects...an increased commitment to the civic purposes of higher education..." (Campus Compact, 2013, para. 2).

Service-learning has been defined in several ways. For example, in 1994, the National Society for Experiential Education (as cited in Furco, 1996, p.2) offered "any carefully monitored service experience in which a student has intentional learning goals and reflects actively on what he or she is learning throughout the experience;" and in 1998 (as cited in Furco, 1996), the Corporation for National Service included (a) thoughtfully organized service conducted to meet the needs of a community; (b) coordinated with the school or program and with the community; (c) is integrated into the academic curriculum, and (d) provides structured time for participants to reflect on their experience.

This definition offered by Bringle and Hatcher (1995), is exemplified within this study:

Service-learning is a course-based, credit-bearing educational experience in which students (a) participate in an organized service activity that meets identified community needs and(b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility (p. 112)

2.2 Using Service-Learning to Improve Teaching and Learning

The design of this project resonates with the description of the Scholarship of Teaching and Learning (SoTL) offered by Huber and Hutchings (2005), "...viewing the work of the classroom as a site for inquiry, asking and answering questions about students' learning in ways that can improve one's own classroom and also advance the larger profession of teaching" (p.1).

Additionally, the study follows the outline of the mission of the Carnegie Foundation for the Advancement of Teaching, which includes (a) learning from each other, (b) improving on what we know works, (c) continuously creating new knowledge, and (d) taking what we learn and making it usable by others (Carnegie, 2013).

As is evident from the literature, it is creditable to combine the rich and meaningful service-learning experience for the purpose of improving teaching and learning in a classroom. Boyer (1990) applauds the use of service within the context of scholarship as he recognizes the works established with land grant institutions, and

further reminds us that service that once "energized the nation's campuses must be given new legitimacy" (p. 3).

Additionally, Erhlich (2005) shares that service-learning has three distinct directions in which it is going—enhancing student learning, promoting leadership, and increasing civic engagement.

The first direction aligns with my SoTL goal of enriching students' learning through research-based teaching: Enhance student learning. This component includes understanding of course objectives, along with enhancement of student's inquiry and critical thinking. Strage (2000) revealed that students participating in her course with service-learning requirement out performed students who previously took the course without a service-learning requirement; Astin, Vogelsang, Ikeda, and Yee (2000) found in a frequently-cited study that service-learning contributes to higher student achievement; and Shastri (1999), investigating content knowledge gains, discovered that the engagement of the students in service-learning contributed significantly to their scores on quizzes, examinations, and written assignments. Similarly Eyler, Giles, and Braxton (1997) discovered significant increases in pre-posttests, but note that more research is necessary to determine more clearly which types of service-learning experiences contribute the greatest difference. Resonating with this direction, Jameson, Clayton and Ash (2013) remind us that academic learning in service-learning is dependent on various types and levels of learning, along side aligning assessment measures appropriately to obtain optimum results. They further validate the alignment of service-learning and SoTL when using properly-designed assessments: "Using an assessment mechanism that is not ...appropriate...limits the ability of students to improve their reasoning processes, instructors to enhance courses, and scholars to build aknowledge baseon service-learning" (p.87).

The second direction given by Ehrlich (2005) is that service-learning is used "as a vehicle to promote the skills and knowledge needed for leadership" (p.2)—a highly desirable trait to instill in graduates in our early childhood teacher education program. Another finding of Astin et al. (2000) was that outcomes of a service-learning experience include its positive contribution to students' leadership. Additionally, several universities have realized that student leaders in service-learning have become very beneficial in assisting professors with implementation of projects, and their leadership skills have been further advanced through the experience

(Clayton & McClure, 2006; Hutchinson, Gurrola, Fetterly, & Fonts, 2006; Kropp, Arrington & Shankar, in press; Mitchell, Edwards, Macias-Diaz, & Weatherbee, 2006).

The third direction, asserted by Ehrlich (2005), and resounded through much of the literature (Astin et al, 2000; Eyler, et al., 1997; Felton & Clayton, 2011; Pascarella & Terenzini, 2005) is "civic engagement." Evidence for service-learning's civic learning outcomes is compelling. For example, a study by Astin, Vogelgesang, Ikeda, and Yee (2006) revealed that service-learning and other community-based experiences contributed to graduates' long-term involvement in community. Eyler's (2010) summary of studies reported that students participating in service-learning indicated a sense of connectedness to their community and civic responsibility. Similarly, in my study students became involved with their communities, and the service-learning experience potentially contributed to their awareness of the diversities and needs of their communities, and to their ability to raise awareness of civic awareness among their students.

2.3 Engaging Pre-Service Teachers in Service-Learning

Both educators and legislators agree that service-learning provides rich experiential educational experiences for all students by helping promote the students' self-esteem, assisting in the development of their higher-order thinking skills, allowing them to make use of multiple abilities, providing them with authentic learning experiences, enriching them with hands-on opportunities for learning about and valuing diversities—all of these ultimately increasing their future effectiveness as teachers(Kahne & Westheimer, 1996; Wade, Boyle-Baise, & O-Grady, 2001; Weatherford & Owens, 2000).

Service-learning has been used as pedagogy, or methodology, to teach course standards and objectives. Eyler and Giles (1999), and Anderson (1999) found that, as a result of educating students about service-learning and having them participate in a service-learning experience, students gained a greater depth of understanding of their course objectives and/or content. Additionally, they discovered that their students may have acquired a greater ability to apply what they learned. Two other studies, a longitudinal study and a study conducted by the Higher Education Research Institute, confirmed the same results: Students who participated in service-learning viewed their experiences in a positive manner, developed their academic skills, learned more about their community, and were more likely to seek out future service opportunities (Astin,

Vogelgesang, Ideda, & Yee, 2000; Hunter & Brisbin, 2000). Other findings include increased perceptions of self-efficacy, civic responsibility, and social justice (Eyler & Giles, 1999; Meaney, Griffin, & Bohler, 2009; Wade, 1997).

Service-learning has also been effectively used in character education (Creech et al., 1999). Ultimately, service-learning is used in teacher preparation programs to help the preservice teachers make real-life applications of concepts taught in the classroom (Verducci & Pope, 2001).

My subsequent pilot project shadows one of the suggestions by Anderson, Swick, and Yff (2001) regarding implementing service-learning in teacher education courses without forcing a major alteration of the curriculum:

...Use part of an initial professional education course such as Introduction to Teaching to introduce preservice teachers to service-learning and engage them in a group or individual service-learning project. The course can focus on preservice teachers working in P-12 schools to address unmet needs while learning about school and classroom organization and teachers' roles and responsibilities (p. 17).

3. Methodology

In this study Iutilized multiple methods by collectingand analyzing both qualitative and quantitative data. Qualitative data consisted of instructor's (my) field notes and preservice teachers' narrative reflections from beginning, midpoint, and ending reflections. Quantitative data included pre-post test scores, final grades, and ratings submitted with the beginning, midpoint, and ending reflections.

3.1 Participants

The participants in the Curriculum course, hereafter denoted as CUR, consisted of 24 female students and one male student. They were all preservice teachers, or teaching candidates, in the Early Childhood Education (ECED) program. All but one student was of the traditional age (21 to 22 years old) for juniors in college. The student of non-traditional age was a 34-yr-old mother of a three-year-old. The class met for two 75-minute periods weekly. Additionally, the students were required to visit a partnering elementary classroom for two hours weekly for ten weeks (a minimum of 20 hours) for the semester. These field placements, randomly

assigned, included classrooms from the Pre-K level through fifth grade, (hereafter referred to as P-5) at various partnering rural elementary schools within a 60-mile radius of the university.

The Clinical Supervisor, hereafter denoted as CS, was the classroom teacher in their placement classroom. Eight of the students (including the male and the non-traditional-aged student) elected to design and implement service-learning projects during their field experience as an optional assignment. These students will hereafter be denoted as SL. The remaining 17 students (hereafter denoted as NSL) chose to follow the traditional assignments, adhering to their CS' assignment of various tasks during their visit each week. While the NSL spent their entire weekly two-hour session performing the various tasks as assigned by the CS, the SL spent 20-30 minutes of their two-hour visit engaging in their specific service-learning project. The remainder of their time was spent observing and assisting the CS with assigned tasks. Students in both groups participated in the same CUR class instruction, activities, and assignments on campus.

3.2 Data Analysis

3.2.1 Quantitative data analysis. The quantitative data included pre- and posttests, which were based on 30 multiple-choice items related to the course objectives, and the students' final grades for the course. The final grade of the course consisted of total points earned from all the projects for a maximum of 100 points. The grading scale for the course was, as follows: A=92-100; B= 84-91.99; C=76-83.99; D=69-75.99; F=68.99-Below. Additionally, student ratings were collected with a twofold purpose—to self-assess (a) their levels of understanding of the course objectives, and (b) the extent that they agreed that the activities were contributing to their attainment of the course objectives. These rating scales were collected with their beginning, midpoint, and ending reflections, and assessed eight course objectives, as follows: (a) defining, and its organization/structure (Curriculum); (b) describing components of the learning environment (Learning Environment); (c) identifying and selecting Developmentally Appropriate Practices (DAP); (d) planning to include goals, objectives, activities and assessment (*Planning*); (e) selecting appropriate resources to meet diversity (Diversity); (f) identifying different classroom behavior management models, strategies, and techniques (Behavior Management); (g) identifying different curricular areas within the P-5 curriculum (Curricular Areas); and (h) describing the roles of collaboration, cooperation, and collegiality within the educational setting (Three C's).

The first portion of the rating scale requesting students to rate their basic understanding of each of the course objectives (at that point during the semester) included a rating scale of 1-5, as follows: 1-Extremely Poor; 2-Below Average; 3-Average, 4-Above Average, and 5-Excellent. The second portion of the scale requested students to rate the extent to which they agreed the field experience will contribute/is contributing/contributed to their understanding of each of the course objectives. The ratings, based on a scale of 1-6 included: 1-Disagree Strongly, 2-Disagree Moderately, 3-Disagree Slightly, 4-Agree Slightly, 5-Agree Moderately, and 6-Agree Strongly.

3.2.2 Qualitative data analysis.I, the instructor of CUR, kept field notes from class discussions, particularly in our sharing sessions called "Share or Be Square" in which students were required to report from their field experiences throughout the semester. Additionally, the students were required to submit three written reflections throughout the semester: Beginning, Midpoint, and Ending. The reflection prompts included (a) description of the activity(s) which have begun/been completed, including the amount of time involved in the activity(s); (b) results of the activity(s) which have begun/been completed; (c) Personal feelings/attitudesabout participating in the project/field experience; (d) Reactions of the participants; and (e) sample student work/artifacts, as appropriate.

4. Findings

4.1 Quantitative Results

A means comparison revealed that the post-test scores for the service-learning participants (SL), (M= 23.38; SD = 2.88), were similar to those of the non-service-learning participants (NSL), (M = 23.65; SD = 2.5). Results from an analysis of covariance (ANCOVA) test indicate that one group did not outperform the other on the post-test with any degree of significance, F (1, 22) = 1.62,p> .01. In other words, students participating in service-learning performed as well on their post-test as those participating in the traditional assignments. These results are shown in Table 1.

	Pre-Test/30/SD)	Post-Test/30/SD)	FinalGrade /100 <i>M(SD)</i>
L	15.38(2.20)	23.38(2.88)	95.89(3.15)
SL 7	12.65(2.62)	23.65(2.50)	93.23(5.85)

Table 1: Comparison of Means of Service-Learning Participants(SL) and Non-Service-Learning Participants(NSL)

The class distribution of final grades, also shown in Table 1, included 19 A's, 4 B's, and 2 C's. The average final grades of the SL (M = 95.89; SD = 3.15) consisted of 7 A's and 1 B; the average final grade of the NSL(M = 93.23; SD = 5.85) consisted of 12 A's, 3 B's, and 2 C's. The standard deviation demonstrates a tighter cluster of grades among the service-learning students' scores. Specifically, students participating in service-learning performed as well or better on final grades than those students who did not participate in service-learning.

Students were asked to provide beginning, midpoint, and ending self-ratings with their accompanying reflections. A mean score of each rating was derived by tallying the total points tallied in each of the ratings and dividing by the total number possible.

The mean scores of the ratings demonstrate that the SL rated their understanding of the *Learning Environment* and *Planning* similarly throughout the semester. The highest ratings of understanding were given in session three for course objectives *Curriculum* and *Behavior Management*. The lowest beginning rating by SL was for *Diversity*, which increased from 2.86 to 4.38 by the end of the semester. *Curricular Areas* rating ended with a mean score of 4.5 by the end of the semester. *DAP* ended at the same rating (4.38) as *Diversity* and *Three C's*.

The NSL rated their understanding lower at both the beginning and end on all course objectives than their SL counterparts. The lowest beginning rating by the NSL was for *Three C's*, but showed the largest gain of all ratings of the class, increasing to

4.36 by the end of the semester. Another low beginning rating (2.79), as with their service-learning counterparts (2.86), was for *Diversity*.

The NSL rated their understanding on *Behavior Management* and *Curricular Areas* at the highest level by the end of the course.

The objectives with the largest difference on understanding between the SL and NSL by the end of the semester were *Curriculum* and *Planning*; the least difference was on *Three Cs.* During the mid-point rating, the service-learning participants dropped their ratings slightly lower (-.21) on *Planning*, but ended with 4.63 as one of their highest ratings. The ratings of understanding by NSL did not drop between any of the points of collection. The SL rated higher on their understanding by the end of the semester on all objectives except *Curricular Areas* (SL-4.5; NSL-4.57). See Figures 1 and 2.

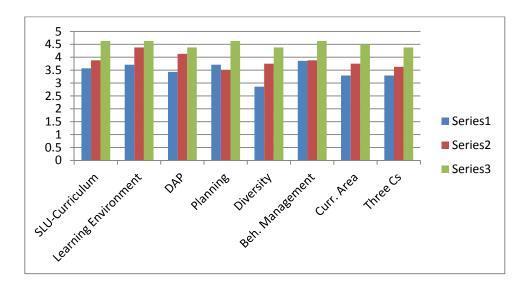


Figure 1. Mean Score Ratings for Understanding of Course objectives by Service Learning Participants; Beginning (Series1), Middle (Series 2), and End (Series 3).

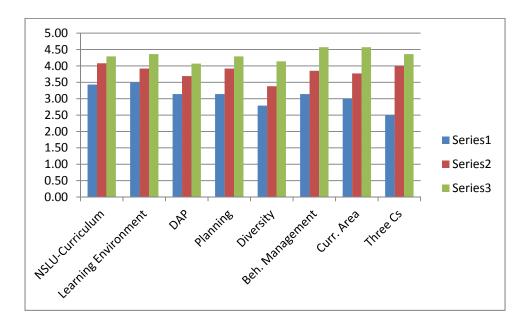


Figure 2. Mean Score Ratings for Understanding of Course objectives by Non-Service Learning Participants; Beginning (Series1), Middle (Series 2), and End (Series 3)

The second component of the ratings, using scales of 1-6, measured students' perception on the level of contribution of their field experience activities to their attainment of course objectives. The SL rated *Planning* as the highest at both the beginning and ending. The NSL rated *Behavior Management* as their highest at both the beginning and ending. Both groups dropped slightly in the mid-point on these highest-rated objectives. The lowest contribution rating at the end of the course given by the SL was on *Learning Environment*; NSL was on *Curriculum*. The most gain in contribution rating by SL was on *Curriculum*, which increased by 1 point. The NSL dropped slightly (-.04) at mid-point on *Diversity*, but ended with a .52 gain to an ending rating of 5.23. The SL students' ratings all dropped, with the exception of *Three Cs*, during the second rating period. The largest difference between the SL and NSL ratings of contribution of field experience to their attainment of course objectives was on *Learning Environment* and *Behavior Management*; the least difference was in *Curricular Areas* and *Three Cs*. See Figures 3 and 4.

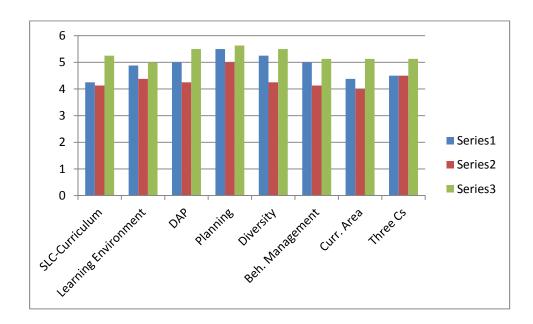


Figure 3. Mean Score Ratings for Contribution to Attainment of Course objectives by Service Learning Participants; Beginning (Series1), Middle (Series 2), and End (Series 3).

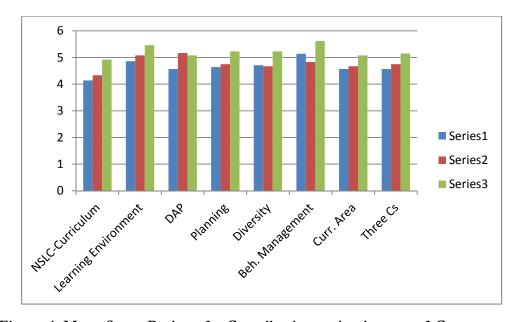


Figure 4: Mean Score Ratings for Contribution to Attainment of Course objectives by Non-Service Learning Participants; Beginning (Series1), Middle (Series 2), and End (Series 3)

4.2 Qualitative Results

The students' narrative reflections served as the primary source of qualitative data for this project. These reflections were submitted near the beginning of their field experience, at the midpoint, and at the end of the semester and coded for themes.

4.2.1 Service-Learning Participants

According to my field notes of the "Share or be Square" sharing sessions, the SL shared more details of their experiences and more positive comments in class than the non-service-learning participants. Many of the SL kept the class updated on specific P-5 student/project progress with remarks such as, "He is reading more out loud each day," or "They are not meeting their goal."

Beginning. At the beginning, the SL assessed specific needs within their field placement classroom.

The students were allowed to select to lead their classes in a service-learning project, or they could design a project to meet a need within their classroom (community). Various projects resulted, such as creating a motivational bulletin board to display writing, leading a class in a pop tab drive and graphing the results, assisting an English Language Learner (ELL) with reading, and motivating a student to complete his assignments. Beginning SL reflections:

They [5th graders] are spending their time practicing by writing letters, revising their letters, and writing a final draft. Kids this age get very bored with writing over and over so I thought this would be a good time to figure out a way to encourage them to do their best. There are two different bulletin boards in their classroom used as a spot to display the student's work. Neither one of these boards have any work displayed on them so my service learning project is to change this.... I want to encourage the students to do extremely well when writing so that their work can be put up there for everyone to see. The students need more feedback on their work (SL1 and SL2).

I look forward to individually working with these students because some of there [sic] are academically advanced for kindergarten, so (the teachers) said they will give me assignments to help these students meet their goals (SL3).

During my first visit...I recognized a need for an incentive to collect pop tabs to contribute to the Ronald McDonald House. Although community service is not incorporated in the fourth grade...standards, detailed mathematic standards are addressed.... I want my students to contribute to the cause, but ultimatelyIwant them to have the opportunity to participate in a project that otherwise would not exist without outside help. I chose this assignment because it can be a lesson to the students about children who aren't as lucky as them (SL4 and SL5).

When I first began the project I was nervous to be working with my [ELL] student....I have only observed him reading once and it was very hard to hear him because he speaks very softly and also tends to put his hand over his mouth when reading. I had a hard time getting him to read to me and I'm worried it will be a struggle every week.

I had to sit with him and chat for a moment until he felt more comfortable with me, because at first he refused to read at all.... I am excited about working one-on-one with a student, but I am also very nervous that I won't be able to help him improve with his reading (SL7).

I'm excited to begin this project. My teacher already told me there were a few students that could use some individual attention. I don't think these children are slow by any means, but I feel they are struggling to keep up in the class...In the least I would need to sit down with my teacher and discuss about the student to see what I need to do to help them....I feel it is great for the students and is the least I can do to help (SL6).

And finally, "My personal feelings about this project are very good. I am excited to get to help a student reach a goal that may not have been reachable to them [sii] before" (SL3).

Midpoint. The following are excerpts from the students' midpoint reflections:

So far in our classroom, we have created a line graph to show the progress our students have made collecting pop tabs. We also have let the students measure (by quarts) how many they have brought in and record the data on the graph. After introducing our service-learning project to the class, the students have grown in their motivation to contribute. However, their resources have been limited at home so they cannot donate countless pop tabs.... The students haven't been bringing in the amount of tabs they first said they'd like ... they unanimously agreed on changing their goal to one bucket (SL4 and SL5).

And, "...At first I felt like he didn't like working with me but then he began to see the benefits of the one-on-one work and opened up to the idea...." (SL7).

Ending. At the end of the semester successes were celebrated, as evidenced in the following ending reflections:

I was happily surprised at how happy they were....We have helped the students with their essays and got the bulletin board ready for their finished work. A few of the students have been selected to put their essays into an essay contest. .

Those students could not have been happier knowing they have a chance to win a prize in the contest....I believe that I met my expectations during this service learning project because the students became not only better writers, but also began to enjoy writing. I learned that when students do not complete their work, it does not mean they do not care. Sometimes they need an extra boost of confidence or a little bit of assistance to get it done. Students do not always get that extra support from home that they need to mount up to their highest potential so that is what the teacher is for. When the students receive that extra help, they excel beyond what they thought was possible (SL1and SL2).

I honestly had fairly low expectations for this assignment. I thought the student was going to hate having to separate from the class and work by himself. But I was pleasantly surprised when he opened up and actually had fun with me. I met my goal of getting ... to better understand math and be able to complete a worksheet without getting an answer wrong (SL6).

....A bonus I have gotten to see towards the end of my time with him is watching his AR scores improve....He also felt comfortable enough with me on our last day together to read the entire book to me (SL7).

And one last reflection: "This project exceeded my expectations. I wasn't really expecting the students to care that much, or even notice...." (SL 8).

4.2.2 Non-Service-Learning Participants

My field notes and observations indicate that the NSL shared more variety of experiences in their field experience, but did not share as many details in their reflections as the SL. The NSL participated in the CS's suggested activities, which were varied from week to week, as is evident in the reflections below. Some participants observed the teachers' actions; some circulated and helped their P-5 students complete assignments, as needed; some were given small groups for tutoring/mentoring on the current content areas being studied; and one student was caught in a situation in which the CS wanted her to observe and document actions of a student with behavior disorders.

The most positive outcome and a recurring theme among the NSL's reflections was that they were able to assist the teacher in responding to the students, allowing the young students much faster feedback when they needed help in the classrooms.

Beginning. At the beginning the NSL spent more time observing the CS and attending to various tasks. The following are excerpts from NSL reflections:

From just three visits, I can conclude that this is going to be a fun field experience for me. Not only do I love second grade, but I got put in a second grade english [sic] class which is what I have always dreamed of teaching (NSL10).

In my first *view* [sic] visits to my classroom, I have been helping students read their books so that they can take their Accelerated Reader tests every morning. I have also been helping student [sic] in their small group as the Para pro directs the small group.

This week I got to help a student that was finished their work early play a game on anonyms [sii].... I have not seen any student shut down when working with me (NSL14).

On our second visit it was reading time rather than writing time so we observed both classes reading.... Even after just three days I can tell that the students appreciate us and love having their questions answered much faster now that there are three "teachers" in the room at a time (NSL15).

Each time that I have gone so far, I have observed Mrs. (...)'s morning routine that consists of a few activities she does with her students on the reading rug.... (Today's visit) happened to fall on Valentines' Day so I also got to watch them do related activities to that (NSL16).

Midpoint. The variety of activities in which the NSL participated continued at the midpoint:

Some of the activities I have been involved in include pairing up with inclusion students and allowing them to read the AR book they're currently reading to me, assisting them during AR tests by reading aloud the questions and answers then letting them make the final answer for themselves, and pairing up with students to practice their "sight words" which are on flash cards (NSL11).

The last two visits in my kindergarten class I have been observing the classroom and taking notes on what the children at doing. When they are working in their writing/reading groups, I walk around and assist those who need help (NSL17).

Every day, Miss (...) picks one of these groups to give extra help to and assigns a reading assignment to the other two groups. This is where I come in. Aside from running a few errands, I am given the privilege to assist these kids in completing their assignments... (NSL9).

The times that I have been in her class room, many activities has taken place that I was able to participate in and observe. An activity that I was involved in was a student who struggled with reading had to read a book to me and do an AR test... She had a few mistakes but they were mainly how to pronounce a word that maybe she did not know.

When we were done reading the book she looked up at me and said, "Thank you". She walked me over to the computer area where they take the AR test and she made a 100 without my help. It warmed my heart to know that she felt good about what she accomplished for the day (NSL12).

During Morning work time, I walk around and mostly observe what the students are working on. It is usually a sheet that is a blank space for a picture and then lines underneath for them to describe what is happening in the picture...I have been surprised to see that at such a young age they are already writing sentences and drawing with detail. From time to time during morning work I help a student spell a word or get their thoughts down on paper (NSL19).

After about 10 minutes (teacher) asked me to take her iPad and record a student who had trouble paying attention and focusing on his paper. He would stare at his paper and a few times looked like he was going to write something, but ended up turning and talking to his neighbor instead. After about 15 minutes of recording, Mrs. (...) took (...) outside to show him how little he had gotten done on his paper and what he was doing instead of working (NSL13).

Ending. The NSL felt that their presence in the classroom was helpful to both the teacher and students.

They also cited observations of their CS, as is evident below:

Overall I feel that the students went on with their class routine as [sic]usually would if we were not in the classroom,[sic] I also feel that they were glad to get help from us, and to express to us whatever problems that had during the time that they were writing their persuasive essays (NSL18).

Several of the NSL reported similarly that their CS were always very willing to give them any helpful information such as educational websites, samples of their classroom behavior management plans, classroom rules, and more. Additionally, several NSL reported that the students seemed to do well while the candidates were in there because the youngsters did not have to wait for the teacher to answer their questions.

5. Discussion

The number of participants choosing an optional service-learning project was contingent on several factors, including the level of support of the CS in the project, the degree of personal motivation of the student to put forth extra effort during their field experience in planning and implementing the project, and theparticipants' understanding of service-learning. The field experience for all students enrolled in this course is, by design, an experiential learning experience, of which service-learning is one type. Therefore, it is no surprise that successes were experienced by all preservice teachers in this course.

The comparison of final grades suggests no significance in the attainment of course objectives by the students who participated in service-learning experiences vs. those who did not. Additionally, SL did as well as NSL in comparison by their preand post- test scores. Previous studies have also noted that the effects of service-learning are less significant on multiple choice questions (Strage, 2000). Therefore, it is evident that participating in a service-learning experience is not detrimental to students' achievement in CUR, and contributes to their understanding of course objectives as satisfactorily as traditional assignments.

The SL ratings of their perception of the service-learning contributions to their attainment of objectives all dropped in the mid-point ratings.

This phenomenon was also observed in an earlier study by Strage (2000), who similarly concluded that "the product of their reflection had not yet been completely assimilated into their mastery of course content" (p. 11). In this study, it could also be attributed to the fact that they were focused on one project rather than the overall classroom activities as confirmed by their reflections. During the final submission of the ratings of the overall experience, however, the SL rated their levels of understanding and contribution at levels comparable to those of their NSL counterparts.

SL reflections indicated that they had developed a greater sense of civic responsibility, and led their P-5 students to a greater awareness of their civic responsibility. An exemplary reflection of leading their young students to awareness is, as follows:

Although they are willing to supply pop tabs very eagerly, I feel the source of their motivation is the reward not making a difference in someone's life. So, (SL2) and I decided to add an additional activity to the service-learning project. On...our last day in our field placement, the class will create 'Get Well' cards for a children's hospital. Upon completing their colorful notes, we will mail them to an appropriate facility. This assignment will give students an opportunity to personally connect to the service-learning project (SL1).

Just as in a longitudinal study (Astin et al., 2000), which confirmed that students are more likely to seek out future service opportunities, the SL in this project expressed an interest in pursuing service-learning projects in their future classrooms. This is evidenced through one preservice teacher's reflection: "I would encourage all teachers and future teachers to participate in a service learning project. Not only will the students learn from doing this but you will learn so much as well" (SL2).

The qualitative results suggest that all preservice teachers were engaged throughout their field experience, but the SL were more focused on the P-5 student outcomes than the NSL. This was most likely due to the fact that the SL were engaged in a higher level of interaction with their P-5 students and had specific goals for which they were working. The overall sentiment of the SL is expressed through this reflection: ... "There is no better feeling than knowing you helped a child change for the better" (SL6).

5.1 Challenges

Throughout the semester, several challenges for incorporating the service-learning projects presented themselves. Due to the demands of the prescribed early childhood program, there was little opportunity for these teacher candidates to work outside the required hours and settings of their assigned field placement.

Some of these challenges were revealed in the SL reflections: "I loved working with the students and I wish that I was able to do more with them but my teacher had her hands full and did not have a whole lot of time to set aside for me to work with the students" (SL6); "I learned that service learning projects are hard to fit into a busy academic schedule, but the kids love them and they teach morals and social skills" (SL4); "They did not meet the goal.

I think it would have been easier to meet if we had been there more frequently to remind them" (SL5); "My service learning project hasn't fully started yet because every time I try and ask when I can start my teacher tells me, 'This week is too busy, well [sic] start it next week" (SL6);and, finally,

I would have rather had the opportunity to do this with a student during PPB (Pre-Professional Block in prior semester with 52 field hours) when I get to see the student much more. But this was a great experience and would love to get to do it again (SL7).

Additional challenges arose during the implementation of the project. Inasmuch as this is the first ECED course with field placement, the preservice teachers were limited on their knowledge of the classroom, identifying the specific needs, and setting developmentally appropriate goals for meeting the identified needs. Due to the candidates' schedule in the program, there is little time available for them to work outside the field placement setting. Additionally, there are multiple sections of this course, and the other instructor does not implement service-learning; therefore, there was no collaboration for implementing the pilot project.

5.2 Limitations

In addition to the above-named challenges, further limitations are noted regarding this study. These are the results of a pilot program, and should be interpreted with caution. The study was based on one class of 25 students, with only one-third of the students participating in the optional service-learning assignment.

There was little diversity in demographics of the participating students—the majority of whom were middle class traditional college-age females. The program requirements for our teacher education candidates are prescribed and allow little opportunity for them to participate in alternate assignments/activities. Therefore, for a more robust or rigid service-learning requirement, a program decision would have to be made.

Although the quantitative outcomes suggest relatively little differences in the grades of the two groups of participants, the qualitative reflections of the service-learning participants demonstrate a richer learning experience for both the preservice teachers and the P-5 students.

This outcome resonates with findings by Eyler and Giles (1999) that "service-learning students may not always perform better on tests of information recall at the end of a semester...but they may gain a greater depth of understanding and a greater ability to apply what they learn," and, consequently, they urge us to look for qualitative differences in understanding of academic material" (p.68).

6. Conclusions and Recommendations

The accomplishments of students participating in a service-learning option in CURwere, as follows: (a) They attained the course objectives as well as or better than their non-service-learning counterparts, (b) They experienced a rich field experience as was evident in the reflections on their projects, (c) They expressed desire to continue using service-learning with their future classrooms, and (d) They exhibited civic awareness and responsibility in their reflections. Additionally, these outcomes resonate with the goal of the service-learning course designation initiative of the OSLCE: Demonstrate how a service-learning course can advance students "from a participant in this credit-bearing volunteer project to an intrinsically-motivated-oriented citizen" (OSLCE, 2012).

Recommendations include strengthening the preparation stage for the beginning preservice teachers by providing more activities and models to aid their understanding of the context in which they will be working, and assisting in the process of matching the preservice teacher with the P-5 learners' needs.

Recommendations to improve the process include developing appropriate instruments for assessing service-learning within course requirements, continuing to measure the effects of the candidates' participation in service-learning in a pre-service CUR course, and sharing the results to support the implementation of more service-learning opportunities for the preservice teachers in subsequent practicum experiences in the early childhood program. The final recommendations include exploring options and/or conducting feasibility studies for including service-learning in our teacher education program as a means of enriching teaching and learning with our preservice teachers, and conductingresearch onthe use ofservice-learning in similar teacher education programs.

I was seeking to improve teaching in my introductory curriculum course by providing opportunity for meaningful hands-on experiences for my students. As a result of this study, Iconfirm and recommendservice-learning as a viable methodology through which preservice teachers can effectively attain course objectives and encounter rich field experiences.

References

- Anderson, J.B., Swick, J., & Yff, J. (Eds.), (2001). Service-learning in teacher education: Enhancing the growth of new teachers, their students, and communities. Washington, DC: AACTE Publications.
- Anderson, J.B. (1999). Service-learning and preservice teacher education. Learning in Deed issue Paper. Denver, CO: Education Commission of the States.
- Arrington, N.M. (2010). The effects of participating in a service-learning experience on the development of self-efficacy for self-regulated learning of third graders in an urban elementary school in southeastern United States. (Doctoral Dissertation). Retrieved from Proquest Dissertations & Theses A&I. (Order No. 3402489)
- Astin, A., Vogelgesang, L., Ikeda, E., & Yee, J. (2000). How service learning affects students. Higher Education Research Institute. University of California, Los Angeles
- Astin, A.W., Vogelgesang, L. J., Ikeda, E. K., & Yee, J.A. (2006). Understanding the Effects of Service-Learning: A Study of Students and Faculty. LosAngeles: Higher Education Research Institute, UCLA.
- Boyer, E.L. (1990). Scholarship reconsidered: Priorities of the professoriate. Lawrenceville, NJ: Princeton University Press.
- Bringle, R., & Hatcher, J. (1995). A service learning curriculum for faculty. Michigan Journal of Community Service Learning, 2, 112-122.
- Campus Compact (2013). Who we are. Retrieved from www.compact.org/about/history-mission-vision/
- Carnegie Foundation for the Advancement of Teaching and Learning. (2013) Mission statement retrieved from http://www.carnegiefoundation.org/about-us/about-carnegie
- Creech, N., Freeman, N., Kemper, R., Kent, L., Mason, J., Nesbit, B., et al. (2000). Service learning and character education Walking the talk. [Booklet] Columbia, S.C.: South Carolina Department of Education.
- Dewey, J. (1938). Experience and education. New York: Collier Books.
- Edward M. Kennedy Serve America Act. H.R. 1388. March 31, 2009.
- Ehrlich, T. (2005). Service-learning in undergraduate education: Whereis it going? Carnegie Perspectives. Stanford, CA: The Carnegie Foundation for the advancement of Teaching.
- Eyler, J. & Giles, D. (1997). The importance of program quality in service-learning. In A.S. Waterman (Ed.). Service-learning: Applications from research. (pp. 57-76). Majwah, NJ: Lawrence Erhlbaum Associates, Inc.
- Eyler, J, Giles, D.E. & Braxton, J. (1997). The impact of service-learning on college students. Michigan Journal of Community. Service-learning. 5-15.

- Eyler, J. (2010). What international service-learning research can learn from research on service-learning. In R. G.Bringle, J.A. Hatcher, and S. G. Jones (eds.), International Service-learning: Conceptual Frameworks and Research (Vol. 2, pp. 225–242). IUPU Series on Service-learning Research. Sterling, VA:Stylus.
- Felton, P. & Clayton, P. (2011) Service-learning. New directions for teaching and learning. doi: 10.1002/tl.470
- Furco, A. (1996). Service learning: A balanced approach to experiential education. In Taylor, B. (Ed.), Expanding boundaries: Service and learning. Washington, D.C.: Cooperative Education Association.
- Huber, M.T., & Hutchings, P. (2005). The advancement of learning: Building the teaching commons. San Francisco, CA: Jossey-Bass.
- Hunter, S. & Brisbin, R., (2000). The impact of service learning on democratic and civic values. PS: Political Science and Politics, 3, 623-626.
- Jameson, J.K., Clayton, P.H., & Ash, S.L. (2013). Conceptualizing, assessing, and investigating academic learning in service-learning. In P.H. Clayton, R.G. Bringle, & J.A. Hatcher (Eds), Research on service-learning (pp. 85-110). Sterling, VA: Stylus.
- Kahne, J., & Westheimer, J. (1996). In service of what? The politics of service learning. Phi Delta Kappan, 77, 592-599.
- Kropp, J., Arrington, N.M., & Shankar, V. (in press). Developing a service-learning student facilitator program: Lessons learned. Journal of Community Engagement and Scholarship.
- Marchel, C.A. & Shields, C. (2011). Preservice teachers as change agents: Going the extra mile in service-learning experiences. Teaching Educational Psychology (7)2, 3-15.
- Mitchell, T., Edwards, K., Macias-Diaz, M.C., &Weatherbee,O. (2006). (sl)2 at CSUMB: Training students for leadership in service-learning. In Zlotkowski, E., Longo, N.V., & Williams, J.R, (Eds), (pp 67-76). Students as colleagues: Expanding the circle of service-learning leadership. Providence, RI: Campus Compact.
- National Community ServiceAct of 1990. P.L. 106-170.
- National Service-Learning Cooperative (April, 1998). Essential Elements of Service-Learning, St. Paul, MN: National Youth Leadership Council.
- National Society for Experiential Education. (1994)
- OSLCE. (2012). Application for Service Learning Course Designation. Office of Student Leadership and Civic Engagement, Georgia Southern University, Statesboro, GA.
- Pascarella, E.T., & Terenzini, R.T.(2005). How college affects students. Decade of Research. San Francisco, CA:Jossey-Bass.
- Peters, K. (December 2011). Including service learning in the undergraduate communication sciences and disorders curriculum: Benefits, challenges, and strategies for success. American Journal of Audiology. S181-S196.
- Shastri, A. (1997). Investigating content knowledge gains in academic service-learning: A quasi-experience study in an educational psychology course. Paper presented at the1999Annual Meeting of American Educational Research Association. April 19-23, Montreal, Canada.
- Strage, A.A. (2000). Service-learning: Enhancing student learning outcomes in a college-level lecture course. Michigan Journal of Community Service learning. 7(1), 5-13.
- Swick, K. (May/June 2001). Service-learning in teacher education: Building learning communities. The Clearing House, 261-264.

- United States Congress. (1989). Inaugural addresses of the presidents of the United States. Washington, D.C.: U.S. G.P.O.: for sale by the Supt. of Docs., U.S. G.P.O. Retrieved from http://www.bartleby.com/124/pres56.html
- Verducci, S., & Pope, D. (2001). Rationales for integrating service-learning in teacher education. In Anderson, J.B., Swick, J., & Yff, J. (Eds.), Service-learning in teacher education: Enhancing the growth of new teachers, their students, and communities. Washington, DC: AACTE Publications.
- Wade, R. (1997). What is reflection? In R. Wade (Ed.), Community service-learning: A guide to including service in the public school curriculum (p. 112). Albany, NY: State University of New York Press.
- Wade, R.C., Boyle-Baise, M., & O'Grady, C. (2001). Multicultural service-learning in teacher education. In Anderson, J.B., Swick, J., & Yff, J. (Eds.), Service-learning in teacher education: Enhancing the growth of new teachers, their students, and communities. Washington, DC: AACTE Publications.
- Weatherford, C. G. & Owens, E. (2000). Education. In Madden, S. (Ed.), Service learning across the curriculum (pp. 125-138). Lanham, MD: University Press of America.