2021

Journal of service-learning in higher education

ISSN: 2162-6685

JOURNAL OF SERVICE-LEARNING IN HIGHER EUCATION VOLUME 13
SUMMER 2021

THE UNIVERSITY OF LOUISIANA AT LAFAYETTE | http://louisiana.edu

Journal of Service-Learning in Higher Education

Volume 13 Summer 2021
ISSN: 2162-6685

TABLE OF CONTENTS

THE JOURNAL OF SERVICE-LEARNING IN HIGHER EDUCATION IS AN ONLINE, INTERNATIONAL, PEER-REVIEWED JOURNAL FOR THE DISSEMINATION OF ORIGINAL RESEARCH REGARDING EFFECTIVE INSTITUTIONAL-COMMUNITY PARTNERSHIPS. OUR PRIMARY EMPHASIS IS TO PROVIDE AN OUTLET FOR SHARING THE METHODOLOGIES AND PEDAGOGICAL APPROACHES THAT LEAD TO EFFECTIVE COMMUNITY-IDENTIFIED OUTCOMES. THE JOURNAL OF SERVICE-LEARNING IN HIGHER EDUCATION IS A SUBSCRIPTION-FREE JOURNAL PUBLISHED BY THE UNIVERSITY OF LOUISIANA AT LAFAYETTE. THE REVIEW BOARD IS MADE UP OF EXPERIENCED RESEARCHERS FROM VARIOUS ACADEMIC DISCIPLINES OF THE MEMBER INSTITUTIONS OF THE UNIVERSITY OF LOUISIANA SYSTEM AS WELL AS OTHER NATIONALLY AND INTERNATIONALLY ACCREDITED COLLEGES AND UNIVERSITIES AND AFFILIATED ORGANIZATIONS.

Utilizing Dental Student Feedback to Enhance Service-Learning

Matthew Mara
Corinna Culler
Ana Zea
Kathleen Held
Michelle Henshaw

Boston University Henry M. Goldman School of Dental Medicine

Abstract

This paper describes the use of mid-course feedback to modify the structure and enhance student experience for a service-learning (SL) program.

Dental students completed mid-course surveys during four academic years, ranking their perceptions of level of preparedness for, and value of, the SL program components as well as suggestions for program improvement. Results were analysed for differences by academic year. Qualitative analysis was conducted for open-ended questions. Students' rankings varied by SL activity but were primarily positive for all academic years. Statistically significant increases in student value for specific program activities were observed in later years in response to course changes. Over time, student recommendations changed from an early focus on logistics to an emphasis on program content and value. Actively seeking timely and specific feedback from students enabled course faculty to make changes that lead to improvement in students' experience and a greater appreciation of the purpose of SL.

Utilizing Dental Student Feedback to Enhance Service-Learning

Student feedback is a valuable tool for educators and academic institutions. However, the utilization of feedback varies by course, program, and institution. For the evaluation of experiential learning, which takes students out of the familiar classroom setting and into the community, student feedback can be particularly meaningful. This paper describes how collecting detailed and specific feedback from students in mid-course evaluations, resulted in opportunities to enhance their experience of the service-learning program. The paper also proposes a model that can be followed by educators in other disciplines.

Review of Literature

Program Evaluation

In higher education student feedback is most commonly collected through standardized, formal, end-of-course evaluations that is often used for faculty promotion and tenure decisions (Centra, 1993). A frequent criticism of end-of-course evaluations is that they can be influenced by students' final course grades (Svanum & Aigner, 2011). It has also been suggested that timing and mode of dissemination can influence students' responses (Burton, Civitano, & Steiner-Grossman, 2012). These issues, along with low response rates, have implications for the validity of evaluation data (Jaquett, VanMaaren, & Williams, 2017). Therefore, student feedback obtained through end-of-course evaluations may not directly

reflect course or teacher effectiveness and consequently, may not provide information needed to make substantive changes to course curricula (Combs, Gibson, Hays, Saly, & Wendt, 2008). Evidence indicates that faculty-developed and course-specific midterm evaluations may provide greater insight for making effective real-time instructional changes (Harris & Stevens, 2013). It has also been suggested that mid-course evaluations may favorably impact students' perceptions of the course, instructor, and teaching process (Keurzer, 1993), and are less influenced by academic performance (Svanum & Aigner, 2011).

Service-learning

Service-learning (SL) is an experiential educational methodology that integrates community service with specific course instruction and guided student reflection. An important characteristic of SL is continued evaluation and improvement (Yoder, 2006), with goals of enhancing students' learning experiences, instilling civic responsibility, and addressing community needs (Hood 2009). Students' educational experience is enriched by allowing them to apply theoretical knowledge gained in the classroom to real world settings, thereby reinforcing didactic concepts. SL also has the potential to increase professionalism and improve communication and critical thinking skills which are important educational competencies for the health professions (Hood, 2009; Aston-Brown, Branson, Gadbury-Amyot, & Bray, 2009). Health professional students' civic engagement can be fostered by SL through improving cultural competency and providing a better understanding of social determinants of health and health disparities (Hood, 2009; Bryant-Moore, Bachelder, Rainey, Hayman, Bessette, & Williams, 2018), and preparing students to "take an active role in promoting population-based disease prevention and health promotion activities" (Henshaw, 2006). In addition to the benefits to students and the educational institution, SL strengthens communities by establishing partnerships with agencies or organizations that can help address the communities' unmet needs (Yoder 2006).

Background

Over the past several decades, both clinical and non-clinical SL experiences have been gaining in popularity in medical, dental, and allied health training programs (Henshaw, 2006; Yoder, 2006; Hood, 2009). At Boston University Henry M. Goldman School of Dental Medicine (GSDM), the experiential learning curriculum includes a SL program for first year dental students, which began in the fall of 2008. It is incorporated into a year-long, 7-credit introduction to general dentistry course (GD1). Dental students develop and present oral health education to classrooms of elementary school children attending the Boston Public Schools (BPS), a longstanding partner of GSDM. In addition to providing time for community-based rotations, the course provides the platform for faculty to provide foundational knowledge for the SL experience through lectures, workshops, and discussion.

The didactic coursework related to SL includes prevention, social determinants of health, health disparities, risk factors for oral disease, and oral health promotion/disease prevention, with a focus on how these concepts relate to BPS school children. During a workshop, students are introduced to a lesson plan template and the structure of SL and are assigned the elementary school grade level they will teach. Faculty describe specific SL program changes that have occurred based on student feedback from the previous year. Then in pairs, students create an age-appropriate lesson plan and develop educational aids and activities to use during their teaching session. Faculty provide written feedback for the students to revise their lesson plans. This is followed by a 15-minute meeting where students receive additional feedback from faculty on drafts of their educational aids, planned classroom activities, and revised lesson

plans. Students then present their finalized lesson plans to a small group of peers and faculty during a rehearsal session that is video-recorded. Using the Blackboard management system (Huff, Kernier & Schollaardt, n.d.), the faculty and peer evaluations and video recordings are shared with the students. Students review their feedback and videos and complete a self-assessment in preparation for their culminating experience, presenting oral health lessons in the Boston Public Schools.

Evaluation of the SL program was initially limited because the original assessment consisted of a single question embedded in the formal year-end course evaluation. This evaluation was designed by the GD1 course directors and administered by the GSDM Office of Academic Affairs. Students completed this course evaluation at the conclusion of the spring semester, approximately 6 to 8 months after their SL experience. The single question asked students to rate how confident they felt in developing and delivering an age appropriate lesson plan as: very much, somewhat, very little, not at all, and unsure. While the responses to this question were consistently positive, the question was general, focused only upon student confidence, and did not encourage student feedback specific to the SL component of the GD1 course. Thus, SL faculty received little data for making SL program improvements.

Methods

Survey Instrument

To better measure students' perceptions of, and experience in, SL, an expanded evaluation system was created which addressed each component of the SL program as well as its overall goals. This new SL evaluation tool was piloted in 2014 for a sample of students and was fully implemented in 2015. In the new system, program evaluation surveys were sent electronically to students immediately following their classroom presentations at BPS via an anonymous link. While students were allowed to skip individual questions, submission of the evaluation surveys was required within 48 hours

Surveys completed during four academic years from 2015-2018 were included in the analysis. Responses could not be linked to individual students. However, they were identified by academic year to assess change over time and because evaluation questions were altered slightly each year to reflect program development.

Quantitative Questions and Analysis

The students were asked to rank, on a 10-point scale, their perceived level of preparedness as they entered the elementary classroom (0=not at all prepared to 10=optimally prepared). They were also asked to rank how valuable (0=not valuable to 10=extremely valuable) they found various aspects of the SL preparation process including creating a lesson plan, rehearsing lesson delivery, and faculty feedback. Students were then asked to rank their agreement with three statements using a five point scale (1= strongly agree to 5= strongly disagree). These statements included: 1. I enjoyed my experience in the classroom, 2. I am certain the students in my classroom learned, and 3. I have a solid understanding of what service-learning is.

Differences in means in student rankings were examined using omnibus ANOVA with Bonferroni corrected pairwise comparisons for each activity by academic year using SPSS version 25. Data from the earliest survey year, 2015, was used as the baseline for comparison to other years. In cases where a question was added to the survey later than 2015, comparison was made to the earliest year in which that question was included.

Qualitative Question and Analysis

The final evaluation item asked students to respond to the question "What feedback would you give the program as we strive to continue to make changes for future years?" An open-ended question was included to convey to students that the faculty valued their feedback and to provide them with an unrestricted opportunity to share any thoughts they had about the SL program. For the analysis of this question, four content experts from SL faculty individually reviewed each comment and developed a list of recurring themes. These themes were then compared, and the categorization of themes was agreed upon. To ensure consistency before final coding, each coder piloted the codebook using 20 random responses. For final coding, one content expert served as master coder for all items. The remaining content experts each coded one-third of the open-ended responses. The coding results were evaluated by comparing the master coder's response to those competed by the three additional coders individually, producing three Cohen's Kappa's per code. The three Cohen's Kappa results were averaged to determine the mean between the coders. The mean Cohen's Kappa determined the overall agreement of the coders. Interpretation of Kappa scores less than zero was considered poor agreement, those from 0.0-0.2 were slight agreement, 0.21-0.40 fair agreement, 0.41-0.60 moderate agreement, 0.61-0.80 substantial agreement, and 0.081-1.0 almost perfect agreement (Landis & Koch, 1977).

This SL program evaluation plan was reviewed by the institutional review board of the Boston University and determined to be exempt from human subjects' research approval.

Results

Quantitative Results

Program evaluation surveys were completed by 468 first-year dental students. The overall mean of the students' ranking for perceived level of preparedness (n=365) upon entering the classroom was 8.53 (SD 1.14). Pairwise comparisons indicated statistically significant differences in the means for this question by year (Table 1). When compared to 2015 (8.07), the means of student rankings were significantly higher in 2017 (8.95) and 2018 (8.72).

Table 1. Student Rankings for Perceived Level of Preparedness, 2015-2018 (0=not at all prepared to 10=optimally prepared).

Year (n)	2015 (n=118)	2016 (n=105)	2017 (n=87)	2018 (n=83)	2015-2018 (n=365)
Mean (SD)	8.07 (1.58)	8.54 (1.14)	**8.9** (1.43)*	**8.72** (1.28)*	8.53 (1.41)

*statistically significant when compared to 2015

Mean student rankings for perceived value of SL activities are shown in Table 2. Among program components included during all four years, students consistently reported high (mean >8) perceived value for lesson plan development, faculty feedback on lesson plans, and a 15-minute meeting with faculty.

There were no significant differences in means of student responses for value of any of the SL components between 2015 and 2016. Two components were ranked as only moderately

valuable during that time, a home video rehearsal requirement, and faculty feedback on that video.

Statistically significant differences in means were noted for two components during 2017 and 2018 when compared to earlier years; students' perceived value of faculty feedback on their lesson plan (2017 only) and use of standardized nutrition and prevention learning objectives.

Table 2. Mean Student Rankings for Perceived Value of SL Activities, 2015-2018

(0=not valuable to 10=extremely valuable).

	2015	2016	2017	2018
Lesson plan development	8.60 (n=118)	8.80 (n=116)	9.19 (n=117)	8.53 (n=114)
Standardized nutrition & prevention learning objectives		8.04 (n=115)	**8.76**** (n=118)	**8.67**** (n=113)
Faculty feedback on lesson plan	8.22 (n=106)	8.42 (n=116)	**9.03*** (n=117)	8.76 (n=114)
At-home rehearsal & video	5.39 (n=102)	5.63 (n=115)		
Faculty feedback on home video	5.49 (n=104)			
Group rehearsal & video			9.16 (n=117)	8.68 (n=114)
15-min. meeting with faculty	8.93 (n=111)	8.90 (n=115)	9.23 (n=117)	8.96 (n=114)
E-mail communication with faculty	7.92 (n=109)	8.07 (n=114)	8.65 (n=116)	8.55 (n=114)

*statistically significantly different compared to 2015

**statistically significantly different compared to 2016

The means and standard deviations were calculated for students' level of agreement with each of three evaluation statements by year (Table 3). Means were consistently positive, ranging from 1.31- 1.64 (1= strongly agree) for all questions and years, however, there were no statistically significant means for agreement with the evaluation statements across years.

Table 3. Student Agreement with Evaluation Statements, 2015-2018 (1=strongly agree, 2=agree, 3=neither agree nor disagree, 4=disagree, 5=strongly disagree).

	2015 (n=121) Mean (SD)	2016 (n=116) Mean (SD)	2017 (n=117) Mean (SD)	2018 (n=114) Mean (SD)	2015-2018 Mean (SD)
I enjoyed my experience in the classroom.	1.38 (0.64)	1.39 (0.27)	1.38 (0.68)	1.35 (0.78)	1.37 (0.67)
I am certain students in my classroom learned.	1.57 (0.64)	1.61 (0.56)	1.57 (0.81)	1.57 (0.66)	1.58 (0.67)
I have a solid understanding of what SL is.	1.38 (0.58)	1.36 (0.52)	1.35 (0.58)	1.31 (0.59)	1.35 (0.57)

Qualitative Data

Nearly three quarters of the students (335/468) responded to the question asking for suggestions for program improvement. The average inter-rater reliability score (Cohen's Kappa) for the creation of the response codebook was 0.81, which is on the border of substantial agreement (0.61-0.80) and almost perfect agreement (0.81-1.0) as defined by Landis & Koch (1977).

Analysis of survey responses resulted in the creation of 12 major codes, some of which were further subdivided for a total of 35 codes and sub-codes. These were ranked by relevance to program goals and potential for program improvements (Figure 1). Many students commented about the value of the SL program, while others provided comments about working with faculty and about their experiences with the preparation required for presenting their classroom lessons. These were categorized as the more relevant and useful comments because they highlighted areas of success and areas for potential improvement. Comments regarding workload, scheduling, and working with partners were ranked lower because they were less amenable to program changes. The least useful comments were those that were non-specific, either positive or negative, because they provided no means for making improvements. An example of this type of comment was "SL was a great event."

Figure 1. Codebook: Suggestions for program improvement.

Suggestions for Program Improvement – Resulting Codes
1. Finds service-learning (SL) to be valuable
2. Requests for additional SL opportunities
3. Faculty related comments
a. Calibration between faculty
b. Communication with faculty
c. Grading
d. Working with teaching assistants
4. Preparation related comments
a. Lesson plan objectives & template
b. Script of lesson
c. At-home rehearsal (video)
d. Faculty feedback lesson plan & teaching
e. Requests for sample lesson plans
f. Request for additional practice/preparation
g. Elementary student behavior management
h. Request videos of effective presentations
i. Teaching aids & supplies
5. Rehearsal related comments
a. Ability to watch and learn from peers
b. Ability to re-watch your own rehearsal video
c. General positive comments about rehearsal
6. Logistics related comments
a. Info about school/classrooms/teachers
b. Transportation
c. Day of unexpected issues
7. Scheduling related comments
a. Close to exams
b. Timing between SL components
c. Length of presentations
d. Timing within curriculum
e. Time of day of elementary school presentation
8. Stress and workload related comments
a. Last minute changes in age group assigned
b. General stress/work burden of activity
c. Grading of SL assignment
9. Classroom presentation related comments
a. Pre- and post- lesson questions
b. Request to teach older kids
c. General enjoyment, fun
10. Working with peers
11. Non-specific positive comments
12. Non-specific negative comments

Qualitative analysis revealed that, over time, there was a noticeable shift in student responses. Thorough analysis revealed the following three major themes: 1. A change over time from comments related to the logistical operation of the program to more meaningful comments about program content, 2. Increased recognition of the usefulness of the rehearsal and video recordings, and 3. An increase in meaningful feedback aligned with program goals.

Discussion

During the four years that the student survey has been implemented students have consistently indicated that they felt prepared to teach an oral health lesson when they entered elementary school classrooms. They also consistently agreed that they enjoyed the experience, had an understanding of what SL is, and were confident the children learned. However, the questions asking students to rank the value of specific components of SL and their suggestions for program improvement resulted in important programmatic changes (see Figure 2). For example, based on feedback in 2015, students were provided with a list of standardized learning objectives to choose from when creating their lesson plans. This addition allowed students to focus planning educational aids and in-class activities. The system for video recording of rehearsals was also changed as a result of student feedback. Initially students rehearsed on their own and submitted a video to faculty for comment. Student value rankings and comments revealed that they did not find this activity to be helpful. Following a change to small group rehearsals with immediate faculty and peer feedback, as well as a self-assessment, students indicated that the rehearsal was very valuable to their preparation. The major themes extracted from student comments following program changes demonstrate the success of those modifications.

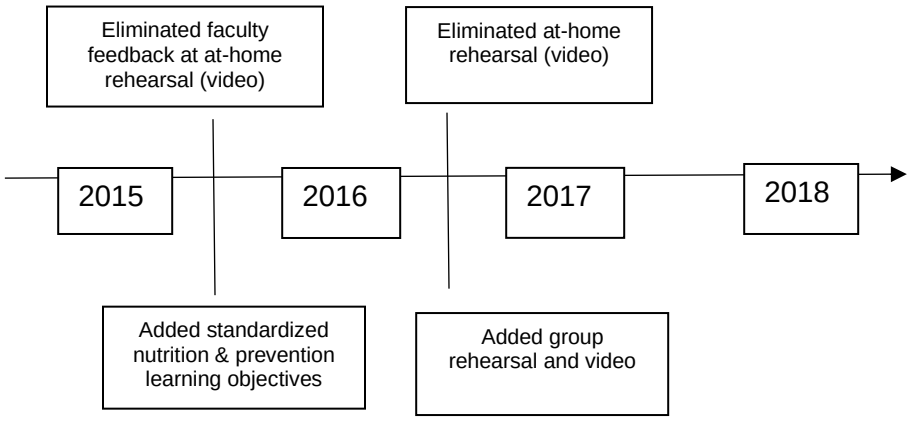


Figure 2. Timeline of Service-learning Program Changes as a Result of Mid-course Evaluation.

Theme #1 - A change over time from comments related to the logistical operation of the program to more substantial comments about program content

Since SL takes place it the community, it is, by definition, complex to organize and carry out (Bringle & Hacher, 1996; Muwana & Gaffney, 2011). During the 2015 and 2016 academic years, student comments were frequently focused on logistical operation of the SL program. For example, students commented on difficulties they encountered when traveling to and from

elementary schools. Several stated that they felt disrupted by unexpected events during some of the school visits, such as a fire drill, or the class arriving late for their scheduled lesson. Students also noted that times and dates of SL were inconvenient to their class schedule. Some changes could be made in response to student concerns about these administrative details. For example, public schools located closer to the dental school and thus requiring less travel time were prioritized for SL. Many issues could not be modified because they involved the operation of public elementary schools. Faculty were able to reduce the negative impact of these concerns upon students' experience by coaching them and managing their expectations regarding the unexpected challenges they might encounter while at schools, and describing the role of each party in the SL collaboration (school administration, nurses, teachers, as well as school-based programs staff).

As a result, responses shifted during 2017 and 2018 away from logistics to more substantive issues, such as the desire for additional information about classroom set-up (Will children be seated at their desks or on a rug?, Will they have access to a white board?), and information about the children (Will they be bilingual?, Will any have special needs?). Students also indicated that they would like to design more complex lessons and practice additional classroom management techniques. Examples of the type of comments made more recently are; (I would like to) "be able to spend more time in the classroom, especially to answer questions (2017)," and (faculty should) "give (dental) students more training on how to deal with elementary school students (2018)"

Experiential learning faculty can utilize students' feedback to become aware of concerns regarding program logistics that may otherwise remain unknown. Sometimes changes can be made to reduce the distraction created by students' perceived logistical burden. When modifications are not possible, managing student expectations can reduce the negative impact of perceived problems. When logistical complaints are addressed, student feedback becomes more thoughtful and more relevant to program content.

Theme #2 -Increased recognition of the usefulness of rehearsal and video recordings

The use of video recordings is common when preparing students for oral presentations (Hamilton, 2011). Students were initially required to practice presenting their lesson at home while recording a video that was submitted directly to faculty for comment. It was also suggested, but not required, that students watch and learn from their videos. In 2015 and 2016, numerous students requested that the video submission requirement be eliminated, while others noted that the "video was a little redundant and very different than the actual situation in the classroom." Student feedback also included suggestions for solutions, specifically opportunities to rehearse with peers, resulting in programmatic change. The at-home practice requirement was replaced with a small group rehearsal session that was also video recorded. The change required students to practice later in the lesson development process and in front of peers. Following rehearsal, students gave and received immediate oral and written feedback. They were then required to watch their recording and submit a self-evaluation.

Student comments following this change showed greater appreciation for their rehearsal efforts, their videos, and the feedback received. "The feedback and critique from faculty and other students was also very helpful seeing as we have never done this before!" and, "It was nerve wrecking to watch myself speak on a recording, but I felt it was the best way for me to improve my lesson." A thematic representation of the changes seen in student feedback on this topic is represented in the flow chart (Figure 3) below.

The change in the nature of student comments in this case can be explained by literature supporting peer-to-peer feedback as an educational methodology. In some cases,

student peer review has been shown to be more impactful than teacher-provided feedback, and can have the additional benefit of proving students with a greater sense of accountability (Topping, 2009). Ritchie (2016) reports that when self-assessment is added to peer and faculty feedback, the result is an even greater improvement in presentation skills. The opportunity to give and receive peer feedback has also been shown to enhance the quality of students' reflections (Wilkins, Shin & Ainsworth, 2009), which in turn enhances students' ability to construct meaning and value from their SL experiences (Sturgill & Motley, 2014). Therefore, SL faculty can enhance student engagement and performance outcomes by incorporating, wherever possible, multiple levels of feedback into students' SL preparations.

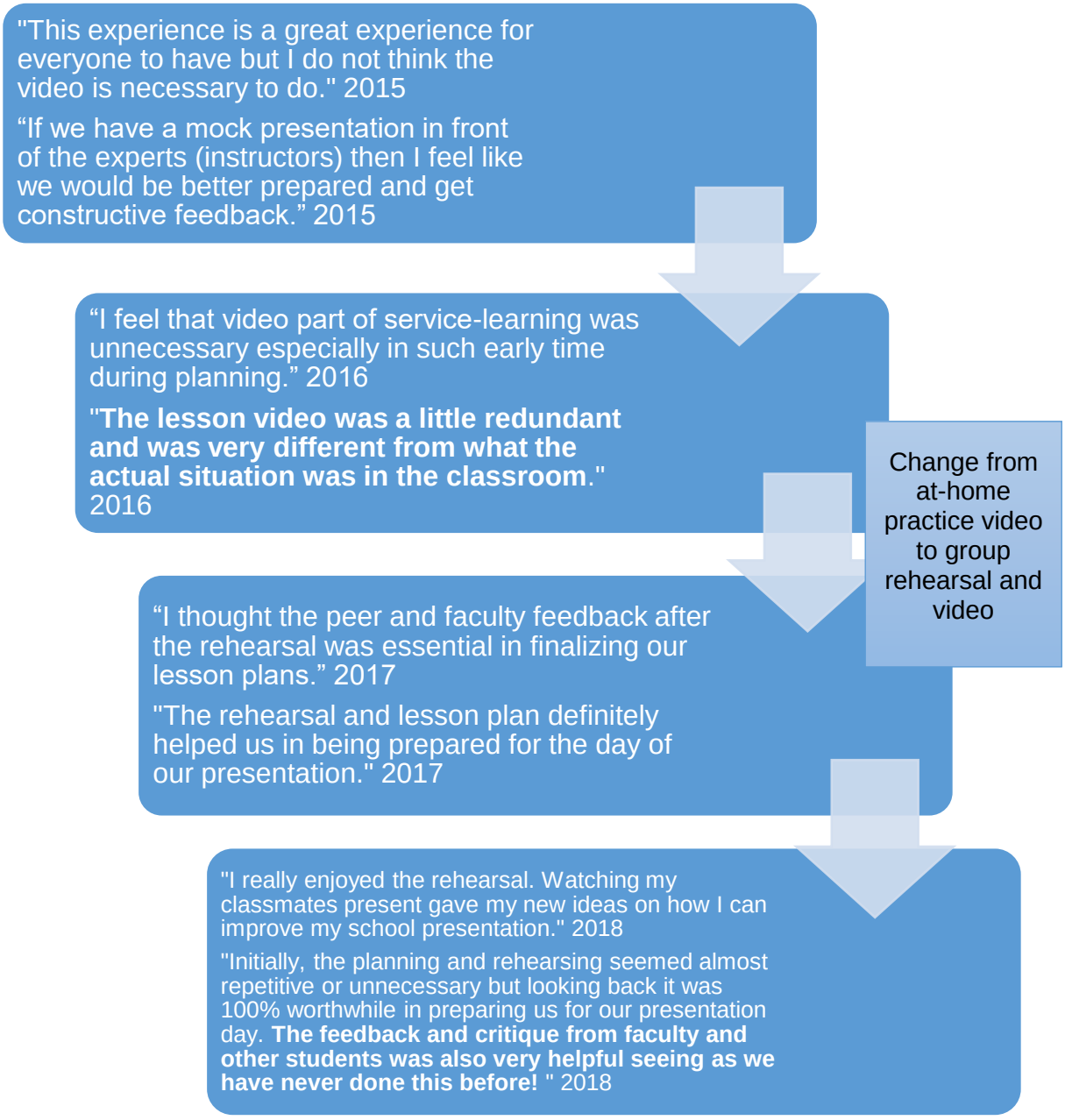


Figure 3. Change in Student Comments are the Result of a Programmatic Change (at-home practice and video to group rehearsal & video)

Student feedback that solicits ideas for improvement can be extremely valuable, especially when an activity or assignment is not having the desired impact on learning. Students can provide informed and creative suggestions for improvement based upon their experiences. By being open to student input, by viewing students as collaborators, and

therefore modifying student behavior and thinking, faculty can improve the experiential program structure (Fluckiger, Vigil, Pasco,& Danielson, 2010), ensuring student satisfaction and improved learning (Celio, 2011).

Theme #3 -Increase in meaningful feedback aligned with program goals

Positive comments were provided by students throughout all four years of program evaluation. However, during the later years, positive student comments were more insightful and revealed an understanding of the SL goals of enhanced learning, civic responsibility, and community service. For example, comments shifted from superficial "Continue the program" and "It was great" in 2015 and 2016 to more meaningful "It … allowed you to explore how to communicate with different populations…" and "… it's a two way street of teaching and learning, we learned a lot as we taught" in the later years. Other examples of goal-oriented comments specific included "I think that oral health promotion is such an important part of dentistry" and "… we are more than just professionals you see in a clinical setting. It is really important for us to work on our interpersonal skills and to immerse ourselves in the diverse culture of the community that surrounds us."

This situation is similar to that found with the first theme, where somewhat trivial comments were exchanged for more pointed suggestions for improvement. SL faculty should recognize that changes that lead to greater enjoyment and engagement for students can, more importantly, also result in greater understanding and appreciation for SL program goals. When distractions and complaints are reduced through thoughtful and responsive modifications, real value emerges.

Conclusion

Before implementing a timely student evaluation of SL that focused on identifying areas for program improvement, course evaluation results, while positive, were limited to the fact that students felt confident planning and delivering classroom education. By actively encouraging student feedback immediately following the SL experience, course faculty were able to identify and continue effective SL components and ascertain those areas that could be improved. The changes made in response to students' feedback led to enhancements in their experience, greater recognition of the purpose of SL, and increased attainment of SL goals. The analysis of both quantitative and qualitative student mid-term survey results revealed that even a successful and popular program can be improved when students provide specific feedback. SL faculty can use this model of student input to ensure that students feel like the experience is collaborative, are not distracted by minor administrative logistics, and internalize SLs' important aims.

References

Aston-Brown, R., Branson, B., Gadbury-Amyot, C., & Bray, K. 2009. "Utilizing public health clinics for service-learning rotations in dental hygiene: A four-year retrospective study." *Journal of Dental Education, 73*(3), 358-374. https://doi.org/10.1002/j.0022-0337.2009.73.3.tb04708.x

Bringle, R., & Hatcher, J. 1996. "Implementing service-learning in higher education." *The Journal of Higher Education, 67*(2), 221-239. http://dx.doi.org/10.2307/2943981

Bryant-Moore, K., Bachelder, A., Rainey, L., Hayman, K., Bessette, A., & Williams, C. 2018. "Use of service-learning to increase master's-level nursing students' understanding of social determinants of health and health disparities.' *Journal of Transcultural Nursing, 29*(5), 473-479. http://dx.doi.org/10.1177/1043659617753043

Burton, W., Civitano, B., & Steiner-Grossman, A. 2012. "Online versus paper evaluations: Differences in both quantitative and qualitative data." *Journal of Computing in Higher Education,* 24(1), 58-69. http://dx.doi.org/10.1007/s12528-012-9053-3

Celio, C. I., Durlak, J., Dymnicki, A. 2011. "A meta-analysis of the impact of service-learning on students." *Journal of Experiential Education*, 34, 164-181. https://doi.org/10.1177/105382591103400205

Centra, J. A. 1993. Reflective faculty evaluation: enhancing teaching and determining faculty effectiveness San Francisco, CA: Jossey-Bass.

Combs, K. L., Gibson, S. K., Hays, J. M., Wendt, J. T. 2008. "Enhancing curriculum and delivery: linking assessment to learning objectives." *Assessment & Evaluation in Higher Education*, 33(1), 87-102. https://doi.org/10.1080/02602930601122985

Fluckiger, J., Vigil, Y., Pasco, R., & Danielson, K. 2010. "Formative feedback: Involving students as partners in assessment to enhance learning." *College Teaching, 58*(4), 136-140. http://dx.doi.org/10.1080/87567555.2010.484031

Hamilton, E. 2012. "Video as a metaphorical eye: Images of positionality, pedagogy, and practice." *College Teaching, 60*(1), 10-1. http://dx.doi.org/10.1080/87567555.2011.604803

Henshaw, M. 2006. Service-learning, oral health disparities and the shift in dental education in J. Welie, *Justice in Oral Health Care Ethical and Educational Perspectives* (pp. 261-283). Milwaukee, WI: Marquette University Press.

Hood, J. 2009. "Service-learning in dental education: Meeting needs and challenges." *Journal Of Dental Education, 73*(4), 454-463. Retrieved from https://doi.org/10.1002/j.0022-0337.2009.73.4.tb04716.x

Huff, K., Bernier, J., & Schollaardt, C. n.d.. Blackboard learning management system. Retrieved from http://www.blackboard.com/

Jaquett, C., VanMaaren, M., & Williams, V. 2017. "Course factors that motivate students to submit end-of-course evaluations." *Innovative Higher Education, 42*(1), 19-31. http://dx.doi.org/10.1007/s10755-016-9368-5

Keutzer, C. 1993. “Midterm evaluation of teaching provides helpful feedback to instructors.” *Teaching of Psychology, 20*(4), 238-240. http://dx.doi.org/10.1207/s15328023top2004_12

Landis, J., & Koch, G. 1977. “The measurement of observer agreement for categorical data.” *Biometrics, 33*(1), 159-74. http://dx.doi.org/10.2307/2529310

Muwana, F., & Gaffney, J. 2011. “Service-learning experiences of college freshmen, community partners, and consumers with disabilities.” *Teacher Education and Special Education, 34*(1), 21-36. http://dx.doi.org/10.1177/08884064103713544

Ritchie, S. 2016. “Self-assessment of video-recorded presentations: Does it improve skills?” *Active Learning in Higher Education, 17*(3), 207-221. http://dx.doi.org/10.1177/1469787416654807

Sturgill, A., & Motley, P. 2014. “Methods of reflection about service-learning: Guided vs. free, dialogic vs. expressive, and public vs. private.” *Teaching and Learning Inquiry: The ISSOTL Journal, 2*(1), 81-93. https://doi.org/10.2979/teachlearninqu.2.1.81

Svanum, S., & Aigner, C. 2011. “The influences of course effort, mastery and performance goals, grade expectancies, and earned course grades on student ratings of course satisfaction.” *British Journal of Educational Psychology, 81*(4), 667-679. http://dx.doi.org/10.1111/j.2044-8279.2010.02011.x

Topping, K. 2009.” Peer assessment.” *Theory into Practice, 48*(1), 20-27. http://dx.doi.org/10.1080/00405840802577569

Wilkins, E., Shin, E., & Ainsworth, J. 2009. “The effects of peer feedback practices with elementary education teacher candidates.” *Teacher Education Quarterly, 36*(2), 79-93. Retrieved from https://pdfs.semanticscholar.org/1df9/7b4f5d85a3d7dad05cafc938a76a34574214.pdf

Yoder, K. 2006. “A framework for service-learning in dental education.” *Journal of Dental Education, 70*(2), 115-23. Retrieved from https://doi.org/10.1002/j.0022-0337.2006.70.2.tb04067.x

About the Authors

Matthew Mara, DMD, EdM is an Assistant Professor of General Dentistry at Boston University Henry M. Goldman School of Dental Medicine. You can contact Dr. Mara by email at maramb@bu.edu or though his mailing address, Boston University 560 Harrison Ave, Third Floor Boston, MA 02118.

Corinna Culler, RDH, DrPH is an Assistant Professor of Health Policy and Health Services Research and is the Director School-based Programs at Boston University Henry M. Goldman School of Dental Medicine. cculler@bu.edu.

Ana Zea, DDS, DrPH is a Clinical Associate Professor of General Dentistry and the Director Community-based Education at Boston University Henry M. Goldman School of Dental Medicine.

azea@bu.edu

Kathleen Held, MEd is an Assistant Professor of General Dentistry and Director Global Initiatives at Boston University Henry M. Goldman School of Dental Medicine.

kheld@bu.edu

Michelle Henshaw, DDS, MPH is a Professor of Health Policy and Health Services Research and the Associate Dean of Global and Population Health at Boston University Henry M. Goldman School of Dental Medicine.

mhenshaw@bu.edu

Layering Small Group Dynamic and Service-Learning Pedagogies: Weaving Curricular Strategies to Strengthen Outcomes

Leigh Z. Gilchrist
Vanderbilt University

Tamar Anna Alexanian
University of Michigan

Abstract

Service-learning literature regularly recommends small group activities as a learning tool but rarely examines the use of a broader application of a small group dynamics framework into a service-learning course. In this research, we explore the integration of small group dynamics frameworks into a service-learning classroom; this pedagogical layering enhances the desired outcomes of service-learning. This intentional layering aims to reinvigorate research and practice in the areas of curricular design, theoretical framing, and pedagogical approaches.

Although small group dynamics pedagogy and service-learning pedagogy have individually been researched for a number of years, research has rarely attempted to understand the impact of layering these pedagogies. Even though many higher education service-learning courses regularly utilize small group activities, few utilize, teach, and implement the vast literature and research that more robustly informs the field of small group dynamics. Although service-learning literature acknowledges that service-learning courses can be difficult for both students and teachers, the current service-learning literature does not consider how small group dynamic pedagogy may strengthen a service-learning course. In this study, we layered small group dynamic frameworks into a service-learning course to determine how weaving these two curricular strategies could strengthen outcomes. This study emphasizes theoretical applications of small group dynamics as a way to structure course design and enrich outcome realization. As faculty are increasingly utilizing pedagogical approaches that incorporate components of service-learning, understanding this intersection and the implications for student learning is essential. Integrating these bodies of research can establish a new direction where both are applied to more effectively develop course-related experiences.

Theoretical Background and Rationale

The Importance of Service-Learning for Students

Today in higher education, service-learning is considered an instructional approach that enhances learning and bridges gaps between the classroom and the community (Conley & Hamlin, 2009; Eyler & Giles, 1999; Fiske, 2001; Hickey, 2016; Yeh, 2010). Numerous studies have compared the outcomes of service-learning and non-service-learning courses: Students in service-learning courses see improvement in grades (Brail, 2016; Markus et al., 1993; Mpofu, 2007; Strage, 2004), in written testing (Kendrick, 1996; Strage, 2000) and written work (Brail, 2013; Osborne et al., 1998), in critical thinking skills (Ash et al., 2005; Conway et al., 2009), and in deep learning (Hahn & Hatcher, 2015). Importantly, several research studies have discovered that students in service-learning courses better understand course material than their peers in non-service-learning courses (Brail, 2013; Eyler & Giles, 1999; Steinke & Buresh, 2002).

Additionally, as noted by Reeb and Folger (2013, p. 404), "Extensions of the self-efficacy construct make it even more pertinent to service-learning," since self-efficacy improvements in one situation can "produce a *transformational restructuring of efficacy beliefs*… manifested across diverse realms of functioning" (Bandura, 1997, p. 53). The existing research that indicates that service-learning has the potential to improve students' sense of self-concept and self-efficacy (Reeb, 2006; Reeb et al., 2010), their capacity to challenge assumptions, and their ability to recognize multiple perspectives (Astin et al., 2000; Simons & Cleary, 2006; Smith, 2008; Stewart, 2008) is, therefore, important in a larger social context.

Service-Learning by Design

At their core, service-learning courses challenge the status quo of higher education teaching; service-learning courses involve learning processes that are "messier, more self-critical, and more open-ended" than the learning processes that most students and instructors have encountered (Clayton & Ash, 2004, p. 61). Service-learning requires students to "connect theory and practice, to learn in unfamiliar contexts, to interact with others unlike themselves, and to practice using knowledge and skills" (Ash & Clayton, 2009, p. 25). Above all, this type of learning requires reflection that is grounded in the belief that experience does not exist solely in action, but also requires consideration and re-framing (Dewey, 1916). Because of the "messiness" inherent in service-learning, in order to design and implement a successful service-learning course, the course instructor must attend to multiple pedagogical elements that consider the service-learning program design characteristics of management, application and curriculum, evaluation, placement quality, reflection, diversity, and community voice (Eyler & Giles, 1999; Gilchrist et al., 2003). To be successful, service-learning relies on the strategic alignment of course content and meaningful community engagement (Astin, et al., 2000; Conley & Hamlin, 2009; Cumbo & Vadeboncoeur, 1999; Gibson et al., 2001; Stukas et al., 1999; Vernon & Ward, 1999; Yeh, 2010).

The Difficulty of Service-Learning

Despite the documented benefits of service-learning, recent research has acknowledged the difficulty of instructionally creating and maintaining a strong service-learning course and framework. The quality of service-learning teaching - and therefore, service-learning itself - varies substantially (Hollander, 2010). This is partially due to the differences between traditional teaching and service-learning pedagogies: faculty are often challenged by the "knowledge,

skills, support, or motivation needed to engage" in the necessary changes between traditional pedagogical approaches and service-learning pedagogies (Pribbenow, 2005, p. 25). Both instructors and students must cognitively and purposefully push against a lifetime of educational experience that encourages and favors largely passive learning techniques and strategies (Złotkowski, 2007). Despite initial excitement, both students and instructors may be overwhelmed by the time and energy required for effective service-learning, often ignoring or misinterpreting the stark and fundamental differences between service-learning and traditional learning and teaching strategies (Butin, 2010; Clayton & Ash, 2004).

Although reflection is a key component of any well-designed service-learning course (Eyler & Giles, 1999; Hatcher et al., 2004; Jacoby, 2015; Sturgill & Motley, 2014), quality reflection may be "the most challenging component" of service-learning (Ash et al., 2005, p. 50). These challenges largely stem from the difficulty in developing and implementing effective structures to guide reflection as well as meaningful strategies to evaluate and deepen the relationship between reflection and learning outcomes (Ash & Clayton, 2004; Ash et al., 2005; Rogers, 2001). Yet without them, student potential and growth cannot be fully realized.

Curriculum development is not the only obstacle service-learning instructors face. On the whole, institutions have often focused on the "outcomes" of service-learning in an attempt to prove that service-learning is more than "curricular fluff" (Kiely, 2005a, p. 5). This institutional pressure is evident when considering that the vast majority of service-learning research has focused on measuring the impact of service-learning on students' personal, civic, and cognitive development (Astin et al., 2000; Eyler, 2000; Eyler et al., 2001; Kiely, 2005a; Steinke & Buresh, 2002). In doing so, research and institutions have often overlooked community and institutional impacts (Jacoby & Associates, 2003; Strand et al., 2003), learning processes (Kiely, 2002, 2005b), theory development (Bringle, 2003) and service-learning values (Harkavy, 2004; Hecht, 2003). However, as an instructional approach that focuses primarily on the development of and then reflection on a *product* (outcome of an experience) (Rutti et al., 2016), there is often little or no consideration given to the *process* components that make up that experience and influence the outcomes of a service-learning course. While outcomes may be important, their prioritization often results in lost opportunities to help students effectively recognize the role that the process played in developing an increased understanding of the materials, themselves, and their service-learning communities (Moely & Ilustre, 2014; Rutti et al., 2016; Warren, 2012).

Gaps in Service-Learning Research

Key characteristics of service-learning have been designed to support learning experiences and community engagement (Eyler & Giles, 1999). Still, a gap between the intent of service-learning and the enactment of those characteristics in the classroom remains (Furco, 1996; Mooney & Edwards, 2001). Opportunities for additional research exist to help us better understand how principles of service-learning intersect with other teaching pedagogies and how service-learning can more effectively support student learning and community engagement (Butin, 2005; Maddrell, 2014).

Service-learning educators have repeatedly expressed concern about and a desire "to better understand, improve, and substantiate the theory, practice, and value of service-learning" (Kiely, 2005a, p. 5). But experience alone can be a problematic teacher (Ash & Clayton, 2009; Conrad & Hedin, 1990; Hollander, 2010; Hondagneu-Sotelo & Raskoff, 1994; Stanton, 1990; Strand, 1999). Left unchecked, experiential learning can allow students to "reinforce stereotypes about difference, to develop simplistic solutions to complex problems, and to generalize inaccurately based on limited data" (Ash & Clayton, 2009, p. 26). Weak or poorly-managed reflection can lead to "haphazard, accidental, and superficial" learning rather than integrative

and critical thinking, openness to new ideas, ability to adopt new perspectives, and problem-solving skills that come from well-designed and intentional reflection (Stanton 1990, p. 185).

Purpose of Our Research

The purpose of this study is to address the aforementioned gap by examining the intersection of service-learning and small group dynamics through instructor design. Purposeful integration of fundamental principles of small group dynamics has the ability to develop students' collaborative skills by providing opportunities to both practice and talk about group experiences, goals, and processes in various group and instructional settings. These components are designed to have a long-term, ripple effect on both the individual and on the group. This study emphasizes theoretical applications of small group dynamics as a way to address problems in course design and outcome realization, since these problems may detract from and even prove unfavorable to the service-learning approach. As faculty are increasingly utilizing pedagogical approaches that incorporate components of service-learning (Hollander, 2010), understanding this intersection and the implications for student learning is essential.

Research in the fields of service-learning and small group dynamics is well established, but, having largely developed in separate spheres, there is little literature from either side that takes into consideration the benefits of the other. Service-learning literature does regularly recommend the use of small groups as a means for facilitating activities in the classroom context; however, this is only the most superficial use of small group dynamic principles and is inadequate in comparison with a broader application of a small group framework. Strong integration of small groups provides an opportunity for deliberateness, as instructors are able to more effectively predict the needs of small groups in their classes, allowing them to enhance their classroom learning and to more quickly respond to assumptions and misconceptions. Integrating these bodies of research can establish a new direction where both are applied to more effectively development course-related experiences. This re-visioning points toward a new curricular approach where the components of service-learning and of small group dynamics are woven throughout the fabric of a course in order to apply the benefits of each to both classroom and individual contexts.

To date, examinations into the integration of small group dynamics in the undergraduate service-learning context are primarily descriptive in nature and not empirically based. These descriptive accounts explore service-learning courses whose primary content stresses the learning and application of small group dynamic-based skills such as group communication (Krause, 2008; Littlefield, 2006; Minei, 2016). In these cases, faculty have devoted upwards of seven weeks of instructional time to teaching the skills underlying small group dynamics, leaving the second half of the semester to application of said skills to the service-learning initiative. However, faculty outside these small group dynamics content domains do not have the luxury of taking this much time just to set up the structure of an experience. If instructors could actively incorporate principles of small group dynamics throughout a service-learning course, students' learning and community partnerships could greatly benefit.

Small Group Dynamics

Small group dynamics and the corresponding literature go beyond small group activity work. Small group dynamics "are the influential interpersonal processes that occur in and between groups over time. These processes not only determine how members relate to and engage with one another, but they also determine the group's inherent nature and trajectory: the actions the group takes, how it responds to its environment, and what it achieves" (Forsyth, 2019, p. 18). Small group dynamics additionally include interpersonal interaction, perception of

membership, structured relationships, mutual influence, and motivation (Johnson & Johnson, 2013). By considering all of these factors, we can more fully consider how small group learning might be manipulated and used effectively in the classroom.

The instructional benefits of collaborative learning - such as small group dynamics - have been well documented (Johnson et al., 2000; Laal & Ghodsi, 2012; O'Donnell & O'Kelly, 1994; Springer et al., 1997; Terenzini et al., 2001). These benefits include increased academic achievement, a greater capacity to communicate and work through problems, an ability to consider and incorporate multiple perspectives in decision-making processes, and a more in-depth understanding of course content (Oakley et al., 2004). The crux of this pedagogical approach requires an understanding of the basic components of small group dynamics as well as intentional integration of opportunities to develop related skills. Researchers and practitioners emphasize that if intentional collaborative methods like small groups are to be utilized effectively, attention needs to be placed on the *structures* and *processes* that are foundational to small group development (Oakley et al., 2004). It is, therefore, not enough to merely incorporate small group work into class projects or assignments; this pedagogical approach requires intentional integration and instructor guidance as students experience the often-difficult structures and processes of small group dynamics.

Tuckman's stages of group development is one of the most well-known and frequently applied theories in this field (Tuckman & Jensen, 1977). Each of the five stages of group development is met by a distinct set of tasks and challenges that, on an individual level, describe general patterns of group members' behavior and, on the group level, describe the structures and processes that affect the overall group experience (Forsyth, 2019; Tuckman & Jensen, 1977).

Figure 1

Tuckman's Model of Five Stages of Group Development

	Forming	**Storming**	**Norming**	**Performing**	**Adjourning**
The stage is characterized by…	Introductory and superficial establishment of norms, roles, and communication networks.	Process of identifying and developing strategies for managing conflict.	Heightened understanding of what is best on a group level	An ability to perform difficult tasks at a high level using established collaborative skills	Building tensions due to ending; increased uncertainty & solidarity
Key tasks of the stage are…	Norms, roles, & communication networks mostly established by group members' assumptions	Informal and often individual reevaluation of initial roles, norms and communication structures	Communication structures become open & task focused, increasing ability to identify, address, & manage conflict	Culture defined at group-level influences decision-making and direction	Depends upon stage at which adjourning occurs; addressing stress around closing
The group must…	Be focused on inclusion, acceptance, and agreement driven by fear of exclusion	Realize conflict is present at structure-process levels and need a process to manage it	Address faulty and inaccurate structures and develop new and innovative processes	Maintain and manage mature group-level developed processes	Address increased tension over ending; Determine best approach to closing
The nature and sources of conflict are...	Developing structures and processes and not yet identified	Roles, norms, communication Networks and power and status implications. Subgroups	Adjusting group structures; subgroups can continue but less an issue of trust	Issue clarification, member interests; conflict can be frequent but brief	Unified Interests and business; conflict decreases

		develop	and dissention		
The role of "leader" is viewed as…	Those who are holding benevolent power; most roles housed in only a few members	A source of role conflict due to power and status allocation – may become a target of conflict	Fluid and needing to be redefined based on talent, skills, and needs	Dynamic and respond to the tasks and needs at hand. Fluid and responsive	Dependent upon stage at which adjourning occurs
A stage shift is caused by…	Challenge of inefficient/ ineffective norms, roles, and communicatio n networks	Members identifying conflict & initial discussion of conflict management and decision-making *or* enter a holding pattern of continued storming	Focused group-level work to question, test, & redefine structures & processes. Group has consistent mechanisms to function & respond	Time with immense change in resources, dynamics, or membership	An ending or disintegration of the group

Note. Adapted from Tuckman & Jensen (1977) and Wheelan (2005).

Tuckman's sequential stage model provides a valuable tool for researchers and practitioners. This model predicts the trajectory of all small groups and enables group members and faculty to anticipate when and how group-level structures and processes will emerge. This provides groups the opportunity to confront challenges in an informed and successful manner at every stage of the group's development. Equally important, faculty can also gain a stronger understanding of the tasks and challenges encapsulated within each stage, enabling them to work alongside groups to better promote development and learning. Students who understand the relational aspects of learning, especially in small group settings, are able to more successfully use principles of structure and process to establish a context where rich learning can occur. Teachers who understand the relational aspects of learning, especially in small group settings, are able to support student learning by providing space where those relationships can form and by acting as advisors.

Students who understand the relational aspects of learning, especially in small group settings, are able to more successfully use principles of structure and process to establish a context where rich learning can occur. Teachers who understand the relational aspects of learning, especially in small group settings, are able to support student learning by providing space where those relationships can form and by acting as advisors. Service-learning classes have the potential to make coursework application in the real world by moving beyond textbooks, case studies, and examples to build capacities such that students can become agents of change. It is important to consider some of the effects of specific pedagogies and their related processes - such as small groups – in enhancing class material to better prepare students to engage in service learning. Moreover, student reflections on what and how they learn may provide insight into the influence of small groups as a practical instructional tool in such classes.

Research Questions

Informed by the above Theoretical Background and Rationale, this study examines the following research questions:

1. Are student learning outcomes affected when a small group dynamics pedagogy is incorporated in a service-learning course as compared to when such a pedagogy is not included? If so, how and why?

2. Do student reflections differ when service learning is taught in small groups as compared to when such a pedagogy is not included? If so, how and why?

Methods

The current study compares and contrasts the possible effectiveness of a small group approach on student learning outcomes. Thus, one of the sections continued to engage in the pre-existing, traditional service-learning course design (referred to hereafter as the TSL Section). The second section implemented an integrated service-learning/small group course design (referred to hereafter as the ISLSG Section) but maintained the objectives, content, and assignments of the original service-learning course. This analysis will assess the potential effect and outcome changes when these fundamental principles and features of small group dynamics are included.[1]

Course Summary, Sample Size, and Student Demographics

This comparative study is based on data collected during the fall semester of an undergraduate Human and Organizational Development course at a Research I University in the southeastern United States. Since its inception in 1991, the focal course - *Health Service*

[1] In some instances, this study may be considered a quasi-experimental design. The critical aspects of the courses (course content and course deliverables) remained consistent across sections. The primary variation in this study was the small group approach integrated into the ISLSG Section of the course.

Delivery to Diverse Populations - has utilized service-learning as a pedagogical tool to enhance learning objectives, strengthen community-university partnerships, and expose students to community-based health issues. The course aims to contribute to students' understanding of those health and policy issues that affect diverse populations and help develop deeper understandings of social justice in health issues. The course incorporates various pedagogical approaches such as lectures and discussions, site visits, and guest speakers. Service-learning is a critical instructional component to: combine course content and community-based health delivery efforts; enhance students' knowledge of self, their immediate and extended communities; and, facilitate the development of effective and engaged community participants.

Forty-five (n=45) students enrolled in the two sections participated in the study; over 90 percent of these students were classified as juniors and seniors. 35 students (78 percent) were female, 23 students (51 percent) were departmental majors, and 31 students (69 percent) were White. Seventeen students were enrolled in the TSL Section and 28 students were enrolled in the ISLSG Section. Each section was taught by a White, female full-time college professor, both of whom were individually supported by one female teaching assistant. One teaching assistant was a person of color, the other was White. In an attempt to unify efforts, build capacity, and support sustainability, the two sections shared a common service-learning initiative. However, there was a significant level of autonomy between sections, allowing each instructor to determine how he/she approached content delivery and management.

This study is based on course-related activities designed for educational or teaching purposes; data were collected as part of class exercises to improve services and programs for students. As framed in the study's Institutional Review Board (IRB) human subjects approved protocol, all student materials utilized in this study were collected after the conclusion of the course; final student course grades were assigned prior to the collection of student assignments for analysis. Steps were taken, in accordance with IRB study protocol, to ensure student privacy, and student participation was voluntary. These features were honored and protection was maintained as outlined in the Institutional Review Board (IRB) human subjects approved protocol.

Data Sources and Collection

Students worked with a community-based organization whose mission is to help build a more livable city. In each section, students were divided into teams of four and charged with completing two tasks. Task I included conducting bicycle and pedestrian counts and interviews. Teams monitored specific intersections to track levels of active transit. During multiple shifts, the teams tracked bicyclists, pedestrians, and vehicles to better understand community activity. They also conducted interviews with walkers and bikers in their assigned area about transportation challenges. Task II included research and report writing on active transit. The community partners asked students to develop research reports detailing the "best practices" of active transit demonstrated by major cities in the U.S. Each group reviewed a specific city to consider central influencers and gauge the transit effectiveness. Both sections shared the same service-learning initiative and community partner, but the course design diverged. Integrating small group features into the ISLSG Section meant including core features in this field of study and practice. Attention was given to group composition, room and seating design, and reflective journals to embed small group dynamics into course content and process. Each of these components is summarized below.

Group Composition and Room and Seating Design

Several design elements were intentionally integrated into the ISLSG Section to both inform group membership and shape the groups' ability to connect and address developmental demands as the semester progressed. Moreland (2013) suggests that groups may be more than the sum of their parts, but each part defines the whole. With this in mind, group composition emerged early as a key factor in the ISLSG Section. Small group research tells us that smaller groups will likely exhibit different structures and processes than larger groups; in turn, this size impacts areas such as norm development, role clarity and role conflict, social ties, and communication networks (Forsyth, 2019). Informed by this literature, we utilized groups of four for both class sections (Burke, 2011; Chou and Chang, 2018; Davis, 1993). Shared goals, interests, and motivations spurs group unity which allows members to work collaboratively and adjust as demands and features shift (Dion, 2000; Pociask et al., 2017). At the start of the semester, students completed a survey to explain why they were taking the class, their specific interests in health services, as well as any previous service-learning and/or small group experiences. They were later asked to highlight perceived skills, interests, and areas of desired development. Groups were first divided by shared professional interests in health services and then students were placed in groups of four based on varying talents, interests and experience. The goal was to provide both group commonality and variation to influence group cohesion.

Small group literature notes the benefits of sociopetal spaces or spaces designed to bring people together; how a group defines membership and distinguishes their space from other groups can strengthen group cohesion (Forsyth, 2019). Even more significant, these special efforts positively impact the groups' ability to address structure- and processes-based conflict early in the formation stage of group development. Within the ISLSG Section, group space and member seating were considered at every stage of the course and were continually altered based on the course activity. During each session, the ISLSG professor developed a specific seating plan to align with the session goals. Also, round tables were used to provide a clear line of sight between members, enabling members to hear verbal communications and easily interact. In comparison, the TSL Section used long, rectangular tables already present in the classroom; the professor nor students physically altered tables or seating arrangements.

Reflective Journals

Some collected data were used to help manage and implement course design and included initial questionnaires to establish a baseline of understanding at the beginning of the semester and group composition, observations of each class by members of the research team, and student/faculty interactions. Data collected to analyze the course included course assignments and journal entries. Both sections required students to submit three reflective journals. Based upon small group development research (Tuckman & Jensen, 1977; Wheelan, 2005), the reflective journal prompts focused on central issues during the forming stage or when transitioning into the storming stage of small group development; therefore, much of the attention was placed on the interplay between developing group structures and ensuing group processes which represent the source and nature of emerging conflict in the early stages of group development. The first reflective journal was intentionally assigned early in the service-learning group process to prompt discussion and reflection on the role of stereotypes, biases, and assumptions in health care delivery to our own work in the service-learning initiative. Each student identified personal assumptions, misconceptions, and biases influencing the early stages of their group's planning process. Students then had to develop a plan to redefine their group's planning process with these reflections in mind.

The second reflective journal was assigned midway through the service-learning initiative when conflict around group structures (roles, norms, and communication networks) was expected to emerge. The prompt for this journal focused on the groups' decision-making processes. Students identified how the structures unique to their group were possibly shaping group decision-making and discussed structural shifts impacting group cohesion and effectiveness. The final reflective journal was assigned at project conclusion. The journal prompt addressed the continual challenge of managing multiple and varied perspectives, considering member contributions and voice, and incorporating diverse member approaches. The ability to reflect deeply on what has occurred and then to consider what these insights mean for new, future experiences is a critical developmental feature for effective service-learning (Hatcher et al., 2004; Moely & Ilustre, 2014) and effective small group dynamics (Pociask et al., 2017). The third reflective journal aimed to address this cyclical necessity.

[see Appendix A]

Embed Small Group Dynamics into Content and Process

The ISLSG professor intentionally incorporated and discussed the importance of small group dynamics into course content and content delivery. This included explaining the process of defining group composition and the rationale for class seating arrangements. Students were informed about how their initial survey information would be used to create small groups. This high level of transparency allowed students to consider how and why aspects of the course were designed and how these factors informed what they were learning. Like the TSL professor, the ISLSG professor provided feedback on the students' reflective journals. And the ISLSG professor also offered extensive feedback and guidance on the small group dynamics that emerged in the reflective journal entries. This multilayered feedback approach aimed to encourage movement in student consideration of the role and impact of structures and processes on group function and effectiveness. Over time, these reflective journals revealed how group-level interactions and decision-making influenced their approach to aspects of the service-learning collaboration. Per Wilson, Goodman, and Cronin (2007), group members tend to attribute responsibility of group success and failure to individuals rather than considering the influence of group-level dynamics. This level of feedback assists students in understanding the role of the individual and the group in the group development process, bridging the gap between individual-based changes and group-based movement.

Analytical Approach

The data were based on students' experiences and responses to the instructional strategies being implemented in both sections. Analysis came primarily from the three journal submissions throughout the semester. In addition to describing changes in students' interactions, experiences, and commentary, content analysis was used to identify emergent themes and patterns based on exposure to small group dynamics. The data were systematically examined to broadly identify and categorize concepts and patterns. This process allowed us to identify and highlight frequently used phrases by students as they experienced the same service-learning project, but based on two distinct teaching/learning approaches. Thus, thick descriptions of student experiences in their own voices as well as comparisons and contrasts across groups were possible. Representative quotes were also identified. Validity and reliability are not common criteria for qualitative analyses; yet the multiple reviews of the data provide confidence in the regularly occurring emergent themes. Both emergent themes and representative quotes are provided in the next section.

Findings

In looking at the patterns of participation of both the ISLSG section and the TSL Section we identified four specific areas of group engagement and learning that were especially affected by integrating strategies that are designed to support intentional, distinct and healthy development of groups in the class. These areas include: (1) group formation and relationship development; (2) decision making, planning and project design by groups; (3) communication and engagement in conflict within the group; and (4) awareness of and responses to bias.

Group Formation and Relationship Development

While the quality of group experience did result in more robust opportunities of communal learning, all aspects of the group experience for the ISLSG Section were not necessarily smooth. In engaging in the group formation process, some common bumps were present. For example, students talked about their discomfort as they divided themselves into sub-groups "based solely on a piece of behavior" or choosing to work with specific individuals. For example, Brook, a senior in the ISLSG Section, admitted making decisions about how to form collaborative sets because she "already had a relationship with her and knew that she was dependable and trustworthy." These arguments aligned with the TSL Section students who also talked about choosing to work with specific people. For example, Christine, a junior in the TSL Section, chose to work with her partner "because I already knew [her] from previous classes and did not have to worry about sitting in a car with her for two hours to do an audit."

Effective or not, both sections identified these decision-making strategies for group formation as less than desirable, and both groups talked about possibilities for improving this process in the future. While these similarities did exist, the intentional group formation of the ISLSG Section led members to have early conversations discussing similar interests that initially served as a foundation for the group decision-making process and encouraged group members to identify common ground. Members of ISLSG groups talked about discovering "common thread[s]," "overarching themes," and similar passions that were shared with other group members. Students used these conversations to learn whether, "each member would have a vested interest and [be] passionate enough about the topic" and found themselves using this information to inform how to make sub-group partnerships, many describing a choice of grouping based on "common interest" that would "complement each other's strengths." This process of discovery pushed the students to more deeply talk about their backgrounds, providing the students with more information that could inform their decisions. Additionally, some students responded to these conversations by expressing a new appreciation for their group members' specific areas of interest. For example, Alston, a sophomore in the ISLSG Section, noted, "I made the assumption that all nurses were the same… I am now realizing that this is a bias that I have that does an incredible disservice to nurses."

While groups in the TSL Section did get to know each other over time, there were few clear conversations that were geared toward shared interests. Instead of using these connections as a foundation for decision making, decision making was largely based on the most efficient way to complete the task at hand. For example, when reflecting on assigned project tasks, Kelsey, a junior in the TSL Section, talked about "plann[ing] on counting individually then coming together after the two hours to compare the amount of walkers and bikers…" while Nichole, a sophomore in the same section, wrote about making "an intentional effort to delegate specific tasks to each member…"

Throughout the semester, ISLSG students referred to purposeful, structural groupings more often in their journal reflections. After controlling for the number of students in each class section, Journal #1 shows that ISLSG students discussed purposeful student-defined groups 16 times more than TSL students, and ISLSG students discuss non-purposeful student-defined groups 3 times more. In Journal #2 and #3, both sets of students discussed structural groupings less, which illustrates the establishment of group relationships. These results show that although TSL students were relatively consistent in their lack of group formation discussion, ISLSG students discussed groupings most frequently during Journal #1. This trend is in line with early stages of group formation. The high frequency of ISLSG students' comments regarding structural groupings illustrates a healthy understanding of and concern with small group development.

From the analysis of the TSL Section, we saw that students were able to work together in efficient ways in order to complete the tasks that were assigned to them. However, by adding an intentional element of structured groups within the group formation process and providing an opportunity for students to reflect on their membership to that group, students in the ISLSG Section were able to build a foundation of commonality that informed the development of their project and their group experience through the semester. The students' changes in language, discussed below, further emphasized these findings.

Changes in Language

Over the course of the semester, a marked divergence appeared between ways that students in the two classes were engaging in the service-learning component of the course. Overall, there was a general shift in the language and conversation patterns of the ISLSG Section, including a shift in the pronouns that they were using when talking about their work in the class. For the ISLSG Section, initial "I" and "me" statements tended to shift toward more "we" and "us" statements by the end of the semester. For example, Sara, a senior in the ISLSG Section, said, "we had to be honest with each other and actually tell each other which topics we thought were better…" while Madeline, a junior in the same section, said, "we were then able to discuss the pros and cons of each before making our decision." Similarly, Monica, a senior, wrote, "[w]e chose our topic initially because we were all somewhat interested in the impact mental health had on the topic."

This differed from members of the TSL Section who were more likely to reflect on their experience from an individualized perspective. For example, Wenting, a senior, commented, "[s]ome of the procedures that I intended to do for the service-learning is that I would…." Similarly, Carly, a junior, wrote, "[w]hen I arrived at the intersection, I was unsure of my strategy of counting all the possible things I would have to…" and "I may have planned for the project differently if I had considered the possibility that he may not have cared about success on the assignment to the extent that I did."

The shift in language for the ISLSG Section also indicates a general shift in the students' perception of the project and the way that they fit together as a group. For the ISLSG Section, the groups began to consider the experience of the project not just from a perspective of their own learning, but from the perspective of the communal learning that was taking place. From the TSL Section, we saw typical group interactions that indicated clear engagement with and benefit from the project, but from a much more individualized perspective that inhibited opportunities for the communal learning that the ISLSG section was able to experience.

Decision Making, Planning, and Project Design

As time progressed and the students in the TSL Section and ISLSG Section engaged in more in-depth decision making and project planning, the group approaches became increasingly divergent. For the TSL Section, students talked about the importance of understanding topic content, but there was little consideration of the role that other group members would play in achieving this aim. More specifically,

TSL students focused on individual orientation/planning 2.5 times more than their ISLSG peers in Journal #1 and 1.5 times more than their peers in Journal #2.

For example, Jasmine, a senior in the TSL Section, wrote, "[i]f we end up working with immigrants/refugees, I will make sure that I do research on … I have some background on what draws immigrants from that country to Nashville…" while Stephanie, a junior in the TSL Section, said, "I plan to focus specifically on infant mortality and contribute my findings to the collaborative paper." Comments like this were coupled with strategies for completing tasks that emphasized a division of tasks rather than collaboration; Stephanie followed up by saying, "I think it would be best if the three of us worked individually to research our specific subtopic, and then come together collectively to present our findings" and Jasmine followed up by saying, "If I know that illiteracy rates are low, I can ask every person if they would like me to fill out the information for them as they dictate it or they would like me to explain what the pamphlet is about…to them." These comments indicated that group members were aware of each other as people who they needed to interact with and as people who needed information on a given topic, but the responsibility that they had for achieving the project outcome was one that was primarily the responsibility of the individual. TSL students rarely discussed intersections between their shared aims.

In comparison, the ISLSG students were more likely to adopt strategies of decision making that were collaborative in nature. In Journal #1, ISLSG students focused on group orientation/planning almost 1.5 times more; in Journal #2, ISLSG students focused on group orientation/planning more than 2.7 times more; and in Journal #3, ISLSG students focused on group orientation/planning more than 1.8 times more than their TSL peers. Further, ISLSG students were 2.5 times more likely to comment on both individual and group decision making in Journal #1 while TSL students discussed decision making more frequently in Journal #3. This affirms that ISLSG students moved into group development more quickly than the TSL students.

One ISLSG group described their process for initiating project tasks by saying, "after we hear of a project being assigned, we will stay for a moment after class to hold a short conversation about scheduling a meeting time to discuss the assignment and distribute roles." While not all groups used a process that was as formal, other classmates like Bonnie, a junior in the ISLSG Section, talked about using strategies where everyone "seemed to end up with a section that they were happy to write…" Similarly, Sara, a senior, and her group used strategies to ensure that "other group members know about [decisions] and were in agreement with [them]." Whether collaborating in person, by email, over Google Docs, or some other strategy, in the case of the ISLSG Section, the aspect of this decision-making process that was especially important was that group members engaged in a process of determining what strategy was responsive to the needs of each of the members of their group. While not always successful in this process, this communal consideration was quite different from the TSL Section whose group members tended to focus primarily on what would work for them as individuals.

Communication and Engagement in Conflict Within the Group

Conflict can be a healthy aspect of group development; when conflict is worked through in a meaningful way, the formation of group norms results (Maltarich et al., 2016). Although short, many of the teams in the ISLSG Section did have the opportunity to work through situations of conflict. In Journal #1, ISLSG students were 3.2 times more likely to discuss group roles - both individual and shared roles - than TSL students. By Journal #2, ISLSG and TSL students were equally likely to discuss individual roles; however, ISLSG students were nearly 2.6 times more likely to discuss shared or cooperative group roles.

As Tabitha, a senior in the ISLSG section, noted, the conflicts in the ISLSG section were often the result of "different ideas about what needed to be done and how it needed to be done," or timing and engagement with deadlines. Some conflicts were also the result of opposing perspectives and ideas related project topics. The process of working through these conflicts was largely facilitated within the groups themselves. As they reflected on their work as groups, members of the groups discovered that conflict was happening because, as Tabitha noted, "the way we communicated with each other did not allow for everyone to voice their honest opinions," in addition to an uneven workload and a general failure to listen to each other. However, as students discussed these frustrations, they were able to begin to, "recognize[e] the role that we played in the problem" and develop strategies for improving the group dynamic. By Journal #2, these healthy strategies for conflict resolution became evident. In Journal #2, ISLSG students were nearly 8 times more likely to discuss and demonstrate healthy conflict resolution.

In contrast, the TSL Section discussed fewer conflicts, but also indicated more private desires and concerns regarding their group experience. In Journal #2, the TSL students were twice as likely to discuss and demonstrate unhealthy conflict resolution. For example, Holly said, "I told my partners that I did not have a preference regarding which paragraph I would be assigned…, I was secretly hoping it would be the relevancy paragraph because I felt the most comfortable writing that one." Similarly, Stephanie, a junior, mentioned "hesitancy to speak up on issues that may be bothering us," while Maggie, a junior, expressed the difficulty some group members had "express[ing] their true opinions."

Comments about remaining silent in the face of disagreement were much more common among students in the TSL Section and seem to have led to frustration. While conflict for the ISLSG Section was not easy, many groups were able to emerge with new strategies to more effectively engage with their group as they worked to complete their project. And although TSL students did begin discussing healthy conflict resolution in Journal #3, these findings further illustrate how the ISLSG Section moved into group development more quickly.

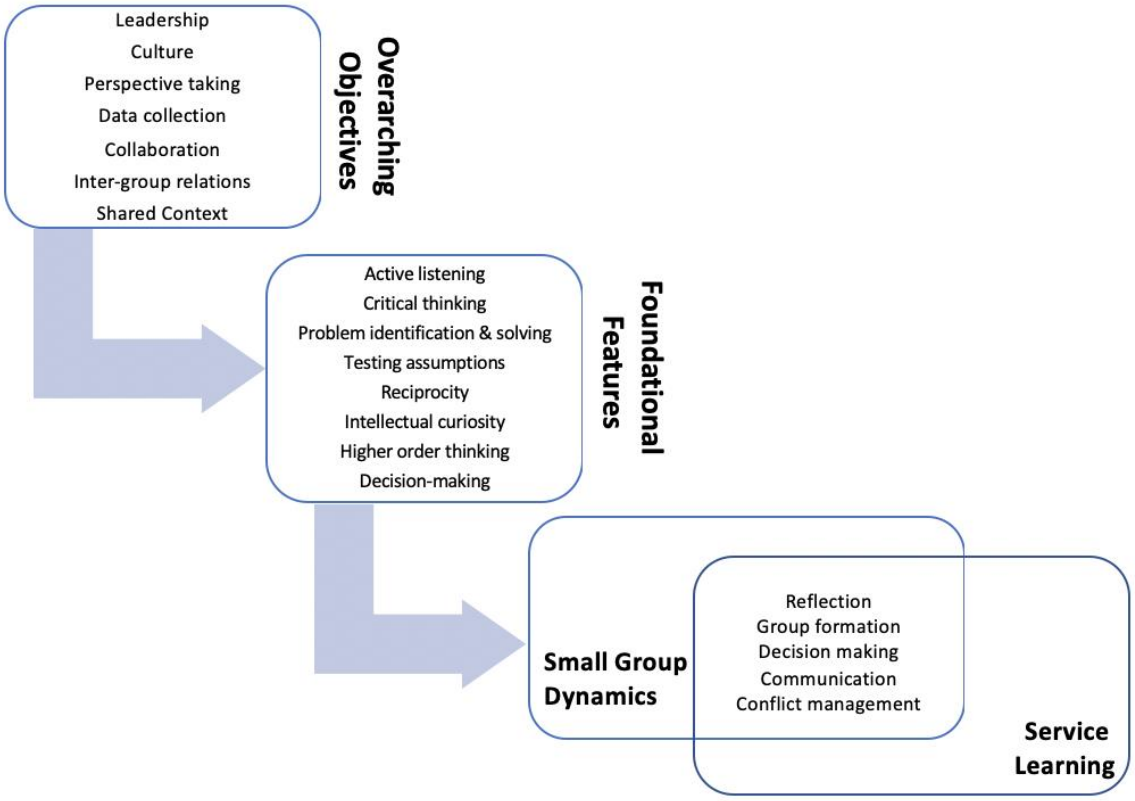
Discussion

For service-learning researchers and practitioners, the layering of small group dynamics upon service-learning offers a wealth of information. This information is crucial to understanding the possible avenues for utilizing complementary pedagogical approaches to strengthen the desired structures, processes, and outcomes of service-learning. Much of the student feedback about the joint course design revealed the presence of enriched and supported reflection practices, examination of student assumptions, consideration of individual- and group-based influence within collaborative efforts, and promotion of effective group processes (such as decision-making and conflict management) and group development. As surfaced in this study, integrating small group dynamics and service-learning pedagogies can provide practitioners an expanded opportunity for students to reflect not only on the content of a service-learning project but also on the process in which they are engaging.

Integrating small group dynamics into one section of a well-established two section service-learning course more intentionally shaped student considerations regarding small group factors as they inform and are informed by service-learning and course learnings. For students, having the opportunity to work through aspects of small group dynamics helped to shift their understanding of the content from a primarily individual perspective to a primarily communal perspective. The role of group development became a vital, informative feature to the student groups' movement forward within the service-learning context. For this course, this shift in learning opened up opportunities for students to engage with the content of the course in new ways, taking on perspectives of their peers and challenging assumptions that they had previously established. In doing this, students were able to put into practice skills and dispositions - such as challenging personal bias - that were discussed as a theoretical part of the course curriculum. Supported through course design, students enrolled in the ISLSG Section were encouraged to surface group-level factors that challenged and enhanced course-related learning and collaborative efforts.

Figure 2

Process of Integrating Small Group Dynamics and Service-Learning



Note. Small group dynamics and service-learning share foundational features as well as overarching objectives. The differences between these pedagogies lie in their method: group dynamics prioritizes process and structure while service learning prioritizes outcome. By layering these pedagogies, our research found that certain desired processes were enhanced.

While the design of this course did require new pedagogical considerations, the new design did not detract from the service-learning content of the course and, in many ways, required that students delve more deeply into the knowledge and ideas presented in the service-learning curriculum. In drawing from both service-learning and small group literature and best practices, faculty can more effectively use service-learning in higher education. In fact, this study indicates that this sort of instructional strategy - one that purposefully emphasizes the processes required to achieve objectives and outcomes - has the potential to deeply enhance the student reflective process and strengthen collaborative efforts. However, this requires that course design look beyond superficial group work and aim to develop intentional opportunities for students to examine and understand the developing group dynamics and how these dynamics contribute directly and indirectly to the effectiveness of collaborative service-learning. This conceptual framework grounds new efforts in pedagogical design while underscoring the necessity of redefining the scope of research efforts through the examination of two separate bodies of literature.

Conclusion

Although research in the fields of service-learning and small group dynamics is well established, there is little work that takes into consideration how one might benefit and inform the other. However, this work suggests an opportunity to more deeply explore the role that group dynamics might play in the field of service-learning. With a shift of defining small group dynamics in its more comprehensive form - rather than solely small group activities - researchers and practitioners significantly widen the possibilities for inquiry and application. In this deeper framing, future inquiry can focus on how this pedagogical layering influences desired service-learning outcomes and explore how adjustments in these pedagogical approaches can impact course features.

It is clear that continued research is necessary to examine how this expanding pedagogical understanding influences service-learning characteristics and stakeholder experiences. Given the limited size, scope, and focus of this study, we hope the theoretical framing, findings, and discussion presented in this article spur further inquiry to not only deepen the findings revealed here but to also emerge new understandings. Though we did not examine it as deeply in this article, a feature central to service-learning is effective collaborative engagement. In a recent review of service-learning in higher education literature, Salam et al. (2019) highlighted emerging challenges of delivering effective service-learning. According to this review (2019), researchers and academicians recognized that the inclusion of “third party involvement in service learning projects… is quite challenging to facilitate proper interaction between all three participants (i.e. students, instructors and community members), without a smooth communication channel” (p. 581). Such revelations illuminate the potential benefit of this pedagogical layering. Moreover, there are opportunities to explore the involvement of these key stakeholders (as community partners) in supporting and understanding principles of process and the benefits and challenges that result. Additional opportunities exist for integration of these ideas into other contexts such as pre-service teacher preparation, medicine, organizational dynamics, and community development.

As service-learning courses steadily become entrenched in higher education (Hollander, 2010) and continue to receive significant attention from both academicians and researchers throughout college and university communities (Salam et al., 2019), we are presented with a valuable opportunity to elaborate our understanding of service-learning course design. The

active exploration of pedagogical layering represents one such opportunity and may allow instructors, students, community partners, and institutions to better achieve service-learning goals. This design approach appears to create an environment of mutually beneficial interactions where the principles of small group dynamics support and are supported by the characteristic embedded in service-learning pedagogy. The active exploration of pedagogical layering represents a fruitful line of inquiry that may allow instructors, students, community partners, and institutions to better achieve service-learning goals.

References

Ash, S. L., & Clayton, P. H. (2004). The articulated learning: An approach to reflection and assessment. *Innovative Higher Education, 29*, 137-154. https://link.springer.com/article/10.1023%2FB%3AIHIE.0000048795.84634.4a

Ash, S. L., & Clayton, P. H. (2009). Generating, deepening, and documenting learning: The power of critical reflection in applied learning. *Journal of Applied Learning in Higher Education, 1*(1), 25-48. http://hdl.handle.net/1805/4579

Ash, S. L., Clayton, P. H., & Atkinson, M. P. (2005). Integrating reflection and assessment to capture and improve student learning. *Michigan Journal of Community Service Learning, 11*(2), 49-60. http://hdl.handle.net/2027/spo.3239521.0011.204

Astin, A. W., Vogelgesang, L. J., Ikeda, E. K., & Yee, J. A. (2000). How service-learning affects students. Higher Education Research Institute, University of California, Los Angeles. https://www.heri.ucla.edu/PDFs/HSLAS/HSLAS.PDF

Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.

Brail, S. (2013). Experiencing the city: Urban studies students and service learning. *Journal of Geography in Higher Education, 37*(2), 241-256. https://doi.org/10.1080/03098265.2012.763115

Brail, S. (2016). Quantifying the value of service-learning: A comparison of grade achievement between service-learning and non-service-learning students. *International Journal of Teaching and Learning in Higher Education, 28*(2), 148-157. https://files.eric.ed.gov/fulltext/EJ1111129.pdf

Bringle, R. (2003). Enhancing theory-based research in service-learning. In S. Billig & J. Eyler (Eds.), *Deconstructing service-learning: Research exploring context, participation, and impacts* (pp. 25-50). Information Age.

Burke, A. S. (2011). Group work: How to use groups effectively. *Journal of Effective Teaching 11*(2), 87-95. https://uncw.edu/jet/articles/vol11_2/burke.pdf

Butin, D. W. (2005). Preface: Disturbing normalizations of service-learning. In D. W. Butin, (Ed.), *Service-learning in higher education: Critical issues and directions* (pp. vii-xx). Palgrave Macmillan.

Butin, D. W. (2010). *Service-learning in theory and practice: The future of community engagement in higher education*. Palgrave Macmillan.

Chou, P., & Chang, C. (2018). Small or large? The effect of group size on engineering students' learning satisfaction in project design courses. *Eurasia Journal of Mathematics, Science, and Technology Education, 14*(10), 1-9. http://doi.org/10.29333/ejmste/93400

Clayton, P. H., & Ash, S. L. (2004). Shifts in perspective: Capitalizing on the counter normative nature of service-learning. *Michigan Journal of Community Service Learning, 11*(1), 59-70. http://hdl.handle.net/2027/spo.3239521.0011.106

Conley, P. A., & Hamlin, M. L. (2009). Justice-learning: Exploring the efficacy with low income, first-generation college students. *Michigan Journal of Community Service Learning, 16*(1), 47-58. http://hdl.handle.net/2027/spo.3239521.0016.104

Conrad, D., & Hedin, D. (1990). Learning from service: Experience is the best teacher or is it? In Jane Kendall and Associates (Eds.), *Combining service and learning* (pp. 87- 98). National Society for Internships and Experiential Education.

Conway, J. M., Amel, E. L., & Gerwien, D. P. (2009). Teaching and learning in the social context: A meta-analysis of service-learning's effects on academic, personal, social, and citizenship outcomes. *Teaching of Psychology, 36*, 233-245. https://doi.org/10.1080/00986280903172969

Cumbo K. B., & Vadeboncoeur, J. A. (1999). What are students learning?: Assessing cognitive outcomes in K-12 service-learning. *Michigan Journal of Community Service Learning*, *6*(1), 84-96. http://hdl.handle.net/2027/spo.3239521.0006.108

Davis, B. G. (1993). *Tools for teaching*. Jossey-Bass Inc.

Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education.* The Free Press.

Dion, K. L. (2000). Group cohesion: From "field of forces" to multidimensional constructs. *Group Dynamics: Theory, Research, and Practice*, *4*(1), 7-26. https://doi.apa.org/doiLanding?doi=10.1037/1089-2699.5.1.2

Eyler, J. (2000). What do we most need to know about the impact of service-learning on student learning? *Michigan Journal of Community Service Learning*, [Special Issue], 11-17. http://hdl.handle.net/2027/spo.3239521.spec.102

Eyler, J., & Giles Jr., D. E. (1999). *Where's the learning in service-learning?* Jossey Bass Publishers.

Eyler, J. S., Giles, Jr. D. E., Stenson, C. M., & Gray, C. J. (2001). At a glance: What we know about the effects of service-learning on college students, faculty, institutions and communities, 1993-2000 (3rd ed.). Vanderbilt University. http://www.compact.org/wp-content/uploads/resources/downloads/aag.pdf

Fiske, E. B. (2001). *Learning in deed: The power of service-learning for American schools.* W. K. Kellogg Foundation.

Forsyth, D. R. (2019). *Group dynamics* (7th ed.). Thomson-Wadsworth.

Furco, A. (1996). Service-learning: A balanced approach to experiential education. *Service Learning, General, 128*, 9-13. https://digitalcommons.unomaha.edu/slceslgen/128

Gibson, M. K., Kostecki, M., & Lucas, M. K. (2001). Instituting principles of best practices for service-learning in the communication curriculum. *Southern Communication Journal*, *66*(3), 187-200. http://doi.org/10.1080/10417940109373198

Gilchrist, L. Z., Mundy, M. E., Felten, P., & Shields, S. L. (2003). Course transitions, midsemester assessment, and program design characteristics: A case study. *Michigan Journal of Community Service Learning, 10*(1)*,* 51-58. http://hdl.handle.net/2027/spo.3239521.0010.105

Hahn, T. W., & Hatcher, J. A. (2015). The relationship between enrollment in service learning courses and deep approaches to learning: A campus study. *PRISM: A Journal of Regional Engagement, 4*(2), 55-70. https://encompass.eku.edu/prism/vol4/iss2/1/

Harkavy, I. (2004). Service-learning and the development of democratic universities, democratic schools, and democratic good societies in the 21st century. In S. Billig & M. Welch (Eds.), *New perspectives in service-learning: Research to advance the field* (pp. 3-22). Information Age.

Hatcher, J. A., Bringle, R. G., & Muthiah, R. (2004). Designing effective reflection: What matters to service-learning? *Michigan Journal of Community Service learning, 11*(1), 38-46. http://hdl.handle.net/2027/spo.3239521.0011.104

Hecht, D. (2003). The missing link: Exploring the context of learning in service-learning. In S. Billig & J. Eyler (Eds.), *Deconstructing service-learning: Research exploring context, participation, and impacts* (pp. 25-50). Information Age.

Hickey, M. G. (Ed.). (2016). *Reflecting on service-learning in higher education: Contemporary issues and perspectives*. Lexington Books.

Hollander, E. (2010). Foreword. In Butin, D. W. *Service-learning in theory and practice: The future of community engagement in higher education* (pp. vii-xii). Palgrave Macmillan.

Hondagneu-Sotelo, P., & Raskoff, S. (1994). Community service-learning: Promises and problems. *Teaching Sociology, 22*, 248-254. http://doi.org/10.2307/1319139

Jacoby, B. (2015). *Service-learning essentials: Questions, answers, and lessons learned*. Jossey-Bass.

Jacoby, B., & Associates (Eds.) (2003). *Building partnerships for service-learning.* Jossey-Bass.

Johnson, D. W., & Johnson, F. P. (2013). *Joining together: Group theory and group skills*. Pearson Education, Inc.

Johnson, D. W., Johnson, R. T., & Stanne, M. E. (2000). *Cooperative learning methods: A meta-analysis.* University of Minnesota Press. https://www.researchgate.net/profile/David_Johnson50/publication/220040324_Cooperative_learning_methods_A_meta-analysis/links/00b4952b39d258145c000000.pdf

Kendrick, J. R. (1996). Outcomes of service-learning in an introduction to sociology course. *Michigan Journal of Community Service Learning, 3*(1), 72-81. http://hdl.handle.net/2027/spo.3239521.0003.108

Kiely, R. (2002). Toward an expanded conceptualization of transformational learning: A case study of international service-learning in Nicaragua. *Cornell University Dissertation Abstracts International, 63*, 09(A).

Kiely, R. (2005a). A transformative learning model for service-learning: A longitudinal case study. *Michigan Journal of Community Service Learning*, *12*(1), 5-22. http://hdl.handle.net/2027/spo.3239521.0012.101

Kiely, R. (2005b). Transformative international service-learning. *Academic Exchange Quarterly, 9*(1), 275-281.

Krause, T. (2008). Facilitating teamwork with Lean Six Sigma and web-based technology. *Business Communication Quarterly*, *72*(1), 84-90. https://journals.sagepub.com/doi/abs/10.1177/1080569908330374

Laal, M., & Ghodsi, S. M. (2012). Benefits of collaborative learning. *Procedia – Social and Behavioral Sciences, 31*, 486-490. https://doi.org/10.1016/j.sbspro.2011.12.091

Littlefield, H. (2006). Service-learning in business communication: Real-world challenges develop real-world skills. *Business Communication Quarterly, 69*(3), 319-322. https://doi.org/10.1177/108056990606900311

Maddrell, J. (2014). Service-learning instructional design considerations. *Journal of Computing in Higher Education, 26*(3)*,* 213-226. http://doi.org/10.1007/s12528-014-9085-y

Maltarich, M. A., Kukenberger, M., Reilly, G., & Mathieu, J. (2016). Conflict in teams: Modeling early and late conflict states and the interactive effects of conflict processes. *Group & Organizational Management, 43*(1), 6-37. https://doi.org/10.1177/10596011166 81127

Markus, G. B., Howard, J. P., & King, D. C. (1993). Integrating community service and classroom instruction enhances learning: Results from an experiment. *Educational Evaluation and Policy Analysis, 15*(4), 410-419. http://doi.org/10.2307/1164538

Minei, E. M. (2016). Teaching small group communication: A do good project. *Journal of Scholarly Teaching, 11*, 73-80. https://files.eric.ed.gov/fulltext/EJ1110136.pdf

Moely, B. E., & Ilustre, V. (2014). The impact of service-learning course characteristics on university students' learning outcomes. *Michigan Journal of Community Service Learning, 21*(1), 5-16. http://hdl.handle.net/2027/spo.3239521.0021.101

Mooney, L. A., & Edwards, B. (2001). Experiential learning in sociology: Service learning and other community-based learning initiatives. *Teaching Sociology, 29*(2), 181-194. http://doi.org/10.2307/1318716

Moreland, R. L. (2013). Composition and diversity. In J.M. Levine (Ed.), *Group process* (pp. 11-32). Psychology Press.

Mpofu, E. (2007). Service-learning effects on the academic learning of rehabilitation services students. *Michigan Journal of Community Service Learning, 14*(1), 46-53. http: //hdl.handle.net/2027/spo.3239521.0014.104

Oakley, B., Felder, R. M., Brent, R., & Elhajj, I. (2004). Turning student groups into effective teams. *Journal of Student Centered Learning, 2*(1), 9-34. https://www.engr.ncsu.edu/wp-content/uploads/drive/1ofGhdOciEwloA2zofffqkr7jG3SeKRq3/2004-Oakley-paper(JSCL).pdf

O'Donnell, A. M., & O'Kelly, J. (1994). Learning from peers: Beyond the rhetoric of positive results. *Educational Psychology Review*, *6*, 321-349. https://doi.org/10.1007/BF02213419

Osborne, R. E., Hammerich, S., & Hensley, C. (1998). Student effects of service learning: Tracking change across a semester. *Michigan Journal of Community Service Learning, 5*(1), 5-13. http://hdl.handle.net/2027/spo.3239521.0005.101

Pociask, S., Gross, D., & Shih, M. (2017). Does team formation impact student performance, effort and attitudes in a college course employing collaborative learning? *Journal of the Scholarship of Teaching and Learning, 17*(3), 19-33. https://files.eric.ed.gov/fulltext/EJ1151565.pdf

Pribbenow, D. A. (2005). The impact of service-learning pedagogy on faculty teaching and learning. *Michigan Journal of Community Service Learning*, *11*(2), 25-38. http://hdl.handle.net/2027/spo.3239521.0011.202

Reeb, R. N. (2006). The community service self-efficacy scale: Further evidence of reliability and validity. *Journal of Prevention & Intervention in the Community, 32*, 97-113. http://doi.org/10.1300/J005v32n0107

Reeb, R. N., & Folger, S. F. (2013). Community outcomes of service learning: Research and practice from a systems theory perspective. In P. Clayton, R. Bringle, & J. Hatcher (Eds.), *Service-learning research: Conceptual models and assessment* (pp. 389-418). Stylus Publishing.

Reeb, R. N., Folger, S. F., Langsner, S., Ryan, C., & Crouse, J. (2010). Self-efficacy in service-learning community action research: Theory, research, and practice. *American Journal of Community Psychology, 46*, 459-471. http://doi.org/10.1007/s10464-010-9342-9

Rogers, R. R. (2001). Reflection in higher education: A concept analysis. *Innovative Higher Education, 26*, 37-57. https://doi.org/10.1023/A:1010986404527

Rutti, R. M., LaBonte, J., Helms, M. M., Hervani, A. A., & Sarkarat, S. (2016). The service learning projects: Stakeholder benefits and potential class topics. *Education and Training, 58*(4), 422-438. https://doi.org/10.1108/ET-06-2015-0050

Salam, M., Iskandar, D. N. A., Ibrahim, D. H. A., & Farooq, M. S. (2019). Service learning in higher education: A systematic literature review. *Asia Pacific Education Review, 20*, 573-593. http://doi.org/10.1007/s12564-019-09580-6

Simons, L., & Cleary, B. (2006). The influence of service learning on students' personal and social development. *College Teaching, 54*(4), 304-319. https://doi.org/10.3200/CTCH.54.4.307-319

Smith, M. C. (2008). Does service learning promote adult development? Theoretical perspectives and directions for research. *New Directions for Adult and Continuing Education, 118*, 5-15. https://doi.org/10.1002/ace.291

Springer, L., Stanne, M. E., & Donovan, S. (1997). *Effects of small-group learning on undergraduates in science, mathematics, engineering, and technology: A meta-analysis.* National Institute for Science Education.

Stanton, T. K. (1990). Liberal arts, experiential learning and public service: Necessary ingredients for socially responsible undergraduate education. In Jane Kendall and Associates (Eds.), *Combining service and learning* (pp. 175-189). National Society for Internships and Experiential Education.

Steinke, P., & Buresh, S. (2002). Cognitive outcomes of service-learning: Reviewing the past and glimpsing the future. *Michigan Journal of Community Service Learning, 8*(2), 5-14. http://hdl.handle.net/2027/spo.3239521.0008.201

Stewart, T. (2008). Community service, self-efficacy and first-year undergraduate honors service learning. In M. A. Bowdon, S. H. Billig, & B. A. Holland (Eds.), *Scholarship for sustaining service-learning and civic engagement* (pp. 29-53). Information Age Publishing.

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. http://hdl.handle.net/2027/spo.3239521.0007.101

Strage, A. (2004). Long-term academic benefits of service learning: When and where do they manifest themselves? *College Student Journal, 38*(2), 257-263. https://eric.ed.gov/?id=EJ704958

Strand, K. J. (1999). Sociology and service-learning: A critical look. In J. Ostrow, G. Hesser & S. Enos (Eds.), *Cultivating the sociological imagination* (pp. 29-37). American Association for Higher Education.

Strand, K., Marullo, S., Cutforth, N. J., Stoecker, R., & Donohue, P. (2003). *Community-based research in higher education: Principles and practices.* Jossey-Bass.

Stukas, A. A., Clary, E. G., & Snyder, M. (1999). Service learning: Who benefits and why. *Social Policy Report: Society for Research in Child Development, 13*(4), 1-19. https://doi.org/10.1002/j.2379-3988.1999.tb00039.x

Sturgill, A., & Motley, P. (2014). Methods of reflection about service-learning: Guided vs. free, dialogic vs. expressive, and public vs. private. *Teaching and Learning Inquiry: The ISSOTL Journal, 2*(1), 81-93. https://doi.org/10.20343/teachlearningu.2.1.81

Terenzini, P. T., Cabrera, A. F., Colbeck, C. L., Parente, J. M., & Bjorklund, S. A. (2001). Collaborative learning vs. lecture/discussion: Students' reported learning gains. *Journal of Engineering Education, 90*(1), 123-130. https://doi.org/10.1002/j.2168-9830.2001.tb00579.x

Tuckman, B. W., & Jensen, M. C. (1977). Stages of small group development revisited. *Group & Organizational Studies, 2*(4), 419-427. https://doi.org/10.1177/105960117700200404

Vernon, A. & Ward, K. (1999). Campus and community partnerships: Assessing impacts and strengthening connections. *Michigan Journal of Community Service Learning, 6*(1), 30-37. http://hdl.handle.net/2027/spo.3239521.0006.103

Warren, J. L. (2012). Does service-learning increase student learning?: A meta-analysis. *Michigan Journal of Community Service Learning, 18*(2), 56-61. http://hdl.handle.net/2027/spo.3239521.0018.205

Wheelan, S. A. (2005) *Group processes: A developmental perspective* (5th ed.). Pearson.

Wilson, J. M., Goodman, P. S., & Cronin, M. A. (2007). Group learning. *Academy of Management Review, 32*(4), 1041-1059. https://www.jstor.org/stable/20159355

Yeh, T. L. (2010). Service-learning and persistence of low-income, first-generation college students: An exploratory study. *Michigan Journal of Community Service Learning, 16*(2), 50-65. http://hdl.handle.net/2027/spo.3239521.0016.204

Złotkowski, E. (2007). The case for service learning. In L. McIlrath & I. MacLabhrainn (Eds.), *Higher education and civic engagement: International perspectives* (pp. 37-52). Ashgate Publishing.

Appendix A

Reflective Journal Prompts

In order to write effective responses to your journal prompts, it is first important to really take some time to think about what the prompts are asking. Each prompt includes multiple components that should be addressed. Consider how each component of the prompt connects and keep this in mind as you respond. While all aspects of the prompts should be addressed thoughtfully, each journal should be ***no longer than three typed pages****. This will require careful use of words and organization of ideas.*

Journal Entry #1: Collaborative planning

During the first few class sessions, our class has looked at biases and stereotypes from various perspectives (i.e., personal, historical). As you begin working on the service-learning components of the course, these biases and stereotypes shape how we work and plan with our group. As a member of your group you're preparing to collect data for the service-learning project and started planning for the Health Topic Report and Organizational Review portion of the course. Now that you've completed these initial steps you have the benefit of hindsight in considering the effectiveness of your planning process.

Think back to your planning process and describe it. What was your purpose for the plan that you developed? What were some of the things you intended to do? How did the plan function/work? From this process, what are some insights that you've drawn about the process of planning and how might those impact your approach to planning in the future? How did you observe biases and stereotypes influence (directly or indirectly) you, your group, and the planning process?

Journal Entry #2: Collaborative decision-making

As a group, you've spent the last few weeks engaged in making a variety of collaborative decisions. What is your group's current strategy for coming to a decision? How has your decision making process changed from the strategy that you adopted at the beginning of the semester to the one you are using now? What is something that is working when you approach the decision making process with your group and why is it working? What is something that is not working (or not working as well as it could) and why is it not working? As you consider the effectiveness of your decision making process, what is one thing that you can do now with your group to improve this process? How will you approach setting up a collaborative decision making structure in the future?

Finally, consider the issues/topics we have been examining thus far in the course. Discuss how the content you have been studying influenced the decisions your group made (directly or indirectly). How did the content you have been studying impact the criteria you have used in making decisions in your group? Just select the content areas that resonate most with you and your group as you think about decisions made and discussion you have had.

Journal Entry #3: Managing a collaborative experience

This semester you've had the opportunity to work with others who have many different perspectives about [life, the world, personal and professional purpose, etc.). Engaging with these many perspectives can be a challenge, especially when you are attempting to create a specific outcome to a problem or project.

As you think back on your experiences this semester, what have you learned about the process of bringing many people, who share many, varied points of view together? What kinds of strategies might a group (and you within that group) use to manage multiple perspectives, and to ensure that everyone has a voice and is heard? What kinds of strategies might you use as you manage your own perspectives, particularly in situations where your perspective is in the minority? In cases where your perspective aligns with the majority, how might you engage with members of your group in a way where people with perspectives that do not align with the majority feel heard?

Author Biographies

Leigh Z. Gilchrist
Vanderbilt University, Peabody College | PO Box 90, Peabody College, Nashville, TN 37203
615.335.4865 | leigh.z.gilchrist@vanderbilt.edu

Leigh Z. Gilchrist is an Associate Professor and serves as the Director of Undergraduate Studies in Human and Organizational Development (HOD) in the HOD Department at Peabody College of Vanderbilt University. Her research examines the impact of service-learning and community engagement on student development, community partnerships, and teaching practices within the context of Higher Education and K-12. She incorporates service-learning and community engagement into her teaching and service and views the campus and broader communities as vital components to her professional identity.

Tamar Anna Alexanian
University of Michigan Law School
847.331.1492 | tamar.alexanian@gmail.com

Tamar A. Alexanian is a recent law school graduate from the University of Michigan Law School and is currently a Skadden Fellow at the Children's Law Center of California, where she represents LGBTQ+ foster youth. Prior to law school, she graduated from Vanderbilt University (2016), served as a Fulbright English Teaching Assistant in Taiwan, and served as an AmeriCorps member in Chicago.

Community-Engaged Learning: addressing gaps in medical education through a service-learning curriculum

Peter Averkiou
Nirmala Prakash
Briana Paiewonsky
Sara Twadell

Charles E. Schmidt College of Medicine, Florida Atlantic University

Abstract

Medical student engagement within their community fosters physicians that are better equipped to meet the needs of their local residents. Service-learning is an approach to community engagement that offers students the chance to prepare, engage, and reflect on service work. Additionally, a service-learning project supplements medical curriculum with experiential social awareness regarding topics that may not otherwise be taught in the classroom. A required 20 hour (minimum) service-learning curriculum instituted at a small public medical school thus demonstrates an effective method of medical student engagement within their local community that bridges gaps in medical education curriculum. . Over the course of a semester, students engaged in a project at their assigned institution, ultimately producing a deliverable to benefit their community far into the future. Students formally reflected on their experience, which demonstrated sentiments including strengthened community partnerships and enlightened perspectives on areas of social justice that are otherwise undertaught in medical curriculum. An unintended consequence of this curriculum also included additional research opportunities and academic writing opportunities for

Introduction

The Liaison Committee on Medical Education (LCME) requires that allopathic medical school programs provide opportunities for service-learning and/or community service activities for students.[1] The movement towards community involvement in higher education is aimed at fostering relationships between communities and health-professional schools, preparing community-responsive physicians, and achieving social change.[2] Since service-related work is also considered on the American Medical College Application Service and the Electronic Residency Application Service Applications, for AOA designation, and on CVs, engagement can also greatly impact residency and career trajectory for students.[3] While community service activities are required to be offered by medical schools, the institution of a required service-learning curriculum can have greater impacts for students, community partnerships, and advancement of medical education. Since the LCME also sets a curriculum standard which ensures instruction on topics regarding societal problems, cultural competence, and recognizing health care disparities[1], a service-learning curriculum can address these necessary components of a medical curriculum as well.

Service-learning projects are structured learning experiences that use a pedagogical approach to combine community service with planning (based on the assessment of community needs), preparation, engagement and reflection.[4,5] The projects involve not only volunteering to

help the organizations with community-identified concerns, but these experiences provide a learning opportunity for students wherein they can reflect on their experiences and consolidate new insights.[3] Students learn about the context in which the service is provided, the connection between their service and their academic coursework, and their roles as citizens. Ultimately, service learning may allow students to reconnect with their altruistic reasons for studying medicine, which can often be obscured by the rigorous science curriculum that underlies pre-clerkship education.

The traditional medical curriculum involving two years of didactic work must be carefully structured to incorporate advances in medical research as well as evolving insights related to social justice. Often, important topics such as autism identification, sex trafficking, LGBT sexual health, addressing the needs of caretakers, and other topics may be undertaught to medical students. Service learning projects offer a method of addressing gaps in medical education. For example, Florida reports a large percentage of human trafficking cases in the United States every year, however there were not many opportunities in our curriculum directed at teaching students how to recognize human trafficking cases and its clinical significance. Thus, by working on a service learning project with a local organization that educates the community about sex trafficking, students are then exposed to this important topic in medical education. Addressing gaps in medical education through service learning opportunities can thus supplement an evolving pre-clerkship curriculum.

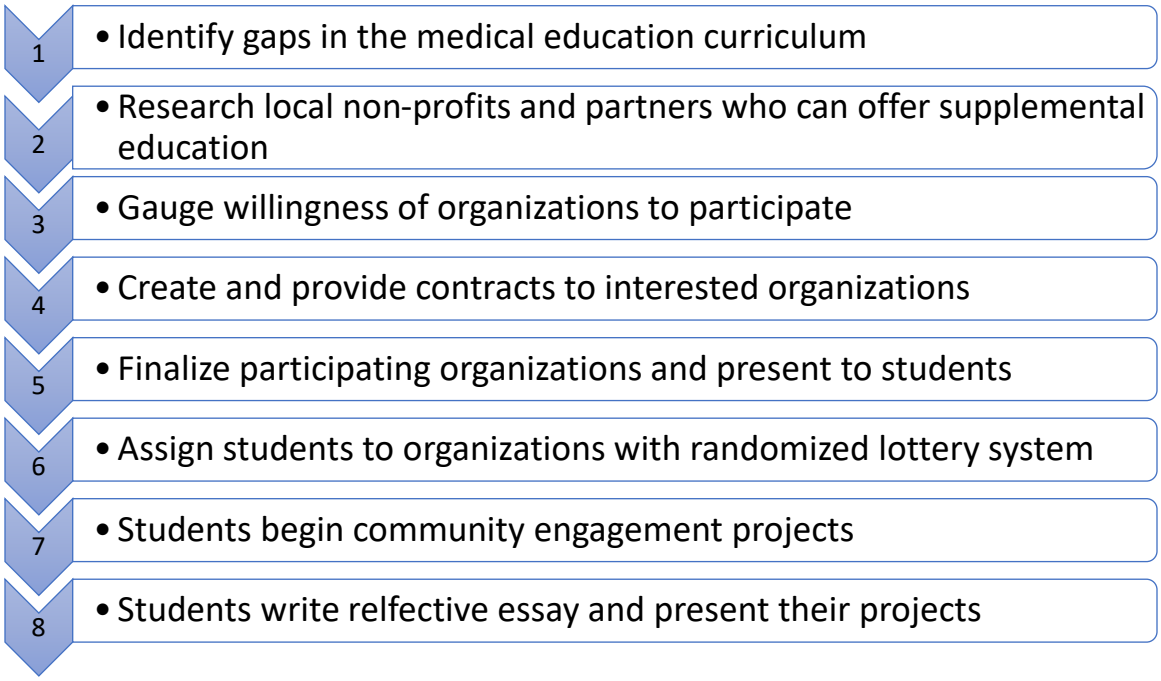
The institution of a required service learning curriculum at a small public medical college demonstrates an emphasis on the importance of service, engagement, and reflection for second year medical students. With this curriculum, students institute a project in a non-clinical, local organization for 20 hours over the course of a semester. The projects that students implement at their assigned locations are aimed at fostering a “deliverable” that the organization can continue using and benefit from after the students complete their required hours. Such deliverables may include medical education or mentorship. At the end of the semester, students write a reflective essay describing their experience and prepare a presentation regarding their organization for the entire medical school. The participating nonprofits organizations are also invited to attend this presentation and are invited to advocate for their organization in addition to describing how their organizations and their clients benefited from medical student participation. Given the heterogeneity and overall effectiveness of service learning curriculum within medical education,[6] this paper serves as a model for effectively (1) recruiting appropriate organizations for participation (2) assigning students to selected organizations, (3) implementing a student-lead project over the course of a semester and (4) reflecting on their experience. This model is further impacted by first identifying gaps that exist within a given institution’s curriculum, and then pairing with local communities that shed awareness on these topics. Together, this service-learning curriculum represents a method of revamping the LCME requirement for service/volunteer opportunities for students while also furthering the requirement for students to address various topics of social justice.

Methods

The implementation of a service-learning curriculum can be divided into four important steps (1) Recruit organizations within the community to participate, (2) Present and assigning students to the participating organizations, and (3) Students engage with their designated organization over the course of the semester and (4) Student reflect regarding their overall

experience. From the first informational session to the final wrap up, the service-learning curriculum spans 12 months. Supporting these steps are medical education gap identification and the contracting of organizations that may help to supplement student awareness and education. Roadmap to Implementation demonstrates this process of implementing a service learning curriculum that best supplements medical education.

Roadmap to Implementation:



Goals:

- Develop an understanding of the local community and their needs
- Implement a project that addresses the needs of the non-profit organization/community
- Gain knowledge of societal issues people of different populations face
- Collaborate and communicate with an interprofessional group

Non-profit organizations related to social topics that would supplement student education in the community were researched. Their likelihood for hands-on student involvement as well as physical proximity of the organization to the school were also considered. As many medical students participated in volunteer work prior to matriculation, organizations with which students had previously volunteered with were included. Emails were then sent to the local non-profit organizations to explain the goals of the service learning project and gauge willingness to

participate. Those that agreed to have medical student participation were asked to complete a community service- learning agreement:

COMMUNITY SERVICE-LEARNING AGREEMENT BETWEEN
FLORIDA ATLANTIC UNIVERSITY BOARD OF TRUSTEES AND

[*AGENCY*]

This Community Service-Learning Agreement (the "Agreement") is entered into by Florida Atlantic University Board of Trustees, located at 777 Glades Road, Boca Raton, FL 33431 ("FAU"), and *[Agency]*, located at [ ] ("Agency"), each a "party" and collectively the "parties".

WHEREAS, FAU conducts a medical education program (the "Program") for students enrolled or seeking a medical doctorate degree ("medical students") from the FAU Charles E. Schmidt College of Medicine (the "College of Medicine"), which program has received full accreditation by the Liaison Committee on Medical Education ("LCME");

WHEREAS, as part of the 4-year M.D. curriculum, medical students are required to complete a Service-Learning Project with a local non-profit or community-based organization;

WHEREAS, Agency is a non-profit or community-based organization that engages in or conducts [*insert description*];

WHEREAS, the purpose of this Agreement is to provide educational and community service opportunities for medical students to complete their Service-Learning Projects and contribute to the effectiveness and improvement of the Agency's operations while doing so; and

WHEREAS, FAU and Agency agree that this Agreement will be to their mutual benefit.

NOW, THEREFORE, the parties agree as follows:

A. SERVICE-LEARNING PROJECT

1. Each Service-Learning Project is intended to be a six month endeavor for the medical students during their second year of their M.D. curriculum. Service-learning is a structured community service and learning experience that combines community service with learning objectives, preparation and reflection.

2. The Service-Learning Project shall be developed, implemented and evaluated in collaboration with the Agency, taking into account the needs of the surrounding community. It will, ideally, respond to community-identified concerns and attempt to emphasize the community service that is provided while simultaneously advancing learning objectives for the medical students. Its goal is to extend learning beyond the

classroom, enable medical students to offer service through the application of developing knowledge and skills, and offer an opportunity for critical reflection on service-learning.

3. M1 medical students will be assigned to their Service-Learning Projects during the spring semester in groups of two (2) to five (5) medical students to each Agency. During the M2 year, the service-learning project shall, to the greatest extent practicable, be collaboratively designed with the Agency and implemented accordingly. The Agency and surrounding community should, ideally, be able to continue using and benefiting from the project deliverable(s) (e.g., educational materials, website development, etc.). A final reflective essay shall be written by each group of medical students and shared within the College of Medicine.

4. The Service-Learning Project shall NOT involve clinical care or the use of clinical skills by medical students.

5. The Agency will not be required to provide any supplies or funding to the medical students. The Agency shall provide access to its programs, personnel and facilities for purposes of facilitating the Service Learning Project. The Agency shall retain ultimate responsibility for the operations of its program and its facility.

6. Medical students will be responsible for their own housing, food, books, travel and related expenses while engaging in the Service-Learning Project. No compensation will be paid hereunder to the medical students.

7. Each medical student group shall have an FAU College of Medicine faculty advisor who shall be permitted to periodically visit the Agency as necessary for oversight and evaluation of the medical students. The Agency shall designate a representative to participate with the FAU faculty member in the planning, implementing, coordinating and evaluating the Service Learning Project. Conferences, as necessary, will be held to review and evaluate the medical students, review this Agreement, and resolve specific challenges that may interfere with the achievement of the objectives of the Service Learning Project. Agency will provide evaluations and feedback on the medical students' performance to FAU on forms to be provided by FAU. FAU shall be ultimately responsible for the educational experience and evaluation of the medical students.

8. Medical students shall be required to comply with the established rules and regulations of the Agency. Any problem or disciplinary situations involving the medical students will be subject to FAU's regulations, policies and procedures. Agency will provide notice to FAU as soon as possible of any situation or problem that may threaten a student's successful completion of the Service-Learning Project. Additionally, Agency will keep FAU informed of any academic or disciplinary problems or matters affecting a medical student, as permitted under applicable law.

B. GENERAL PROVISIONS

1. Non-Discrimination: Discrimination against any individual involved in this program because of race, color, religion, sex, national origin, age, disability, veteran's status,

marital status, sexual orientation, or any protected basis is prohibited by Agency and FAU, and if practiced by either party shall be cause for terminating this Agreement.

2. Institutional Policies and Regulations: Agency and FAU shall inform medical students of the website (if applicable) or other location that sets forth each of its policies, rules and regulations. All medical students will be informed by FAU and Agency that they are expected to abide by their respective institutional policies, rules and regulations.

3. To the extent applicable, Agency shall reasonably cooperate in the LCME's evaluation, and other applicable accrediting body requirements, of FAU's medical training program.

4. Use of Name: Neither party shall use the name, logo, likeness, trademarks, image or other intellectual property of the other party for any advertising, marketing, endorsement or any other purposes without the specific prior written consent of an authorized representative of the other party as to each such use. Each party may refer to its affiliation with the other party in its catalog and in other public information materials regarding the Service-Learning Project and collaborations hereunder.

5. Amendment and Assignment: Amendments to the terms and conditions of this Agreement shall be effective only upon the mutual written agreement of the parties hereto, signed by a person authorized to approve such amendments. Neither party may assign this Agreement or any rights hereunder without the prior written consent of the other party.

6. Notice: All notices required in this Agreement will be provided in writing by either party and forwarded by certified mail, addressed as follows:

If to FAU:	Florida Atlantic University Phillip Boiselle, MD Dean and Professor Charles E. Schmidt College of Medicine 777 Glades Road, Bldg. 71 – Room 239 Boca Raton, FL 33431
If to AGENCY:	[ ]

7. Independent Contractors: It is expressly understood and agreed that this Agreement is not intended and shall not be construed to create the relationship of agent, servant, employee, partnership, joint venture or association between FAU, the Agency and the medical students, but is rather an agreement by and between independent contractors, these being FAU and the Agency.

8. Non-exclusive Agreement: This Agreement is non-exclusive and both parties have the right to enter into similar agreements with other institutions.

9. Compliance with Law: The parties specifically intend to comply with all applicable laws, rules and regulations as they may be amended from time to time. If any part of this Agreement is determined to violate federal, state or local laws, rules or regulations, the parties agree to negotiate in good faith revisions to any such provisions. If the parties fail to agree within a reasonable time to revisions required to bring the entire Agreement into compliance, either party may terminate this Agreement upon thirty (30) days prior written notice to the other party. Both parties agree to maintain the confidentiality of student records to the maximum extent required by law, including the Family Educational Rights and Privacy Act ("FERPA").

10. Severability: The provisions of this Agreement are severable, and if any provision of this Agreement is found to be invalid, void or unenforceable, the remaining provisions will remain in full force and effect.

11. Waiver: The waiver of any breach of any term of this Agreement does not waive any subsequent breach of that or another term of this Agreement.

12. Diplomas, Certificate and Other Documents: Neither the name of FAU nor the Agency nor the signature of its officials shall appear on the diplomas, certificates and other such documents that might be produced by the other institution without the written permission of the coordinator for the institution whose name is being invoked.

13. Entire Agreement: This Agreement shall constitute the entire agreement and understanding between Agency and FAU as to the subject matter hereof and supersedes all prior discussions, agreements and undertakings of every kind and nature between them, whether written or oral, with respect to such subject matter.

14. Governing Law and Term: This Agreement shall be governed by the laws of the State of Florida and shall be effective for an indefinite duration commencing upon the date of the latest signature by the parties. This Agreement may be terminated by either party by giving ninety (90) days' written notice to the party. Upon a termination, the parties will make best efforts to allow medical students currently involved in a Service-Learning Project at the Agency to complete such project. FAU may terminate this Agreement immediately if it fails to maintain full or provisional accreditation with the LCME.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their respective duly authorized representatives as of the last date signed below.

[AGENCY]

FLORIDA ATLANTIC UNIVERSITY BOARD OF TRUSTEES

By: _____
Name: _____
Title: _____

By: _____
Name: Russ Ivy, Ph.D.
Title: Senior Associate Provost

Division of Academic Affairs

Date: _____ Date: _____

ACKNOWLEDGED BY CHARLES E. SCHMIDT COLLEGE OF MEDICINE

By: _____ By: _____
Name: _____ Name: Phillip Boiselle, MD
Title: _____ Title: Dean and Professor
Charles E. Schmidt College of Medicine
Date: _____ Date: _____

The agreement includes basic information about the service learning project's guidelines, as well as, pertinent general provisions. Examples of accepted organizations included a local day center for adults with disabilities, a childhood cancer foundation, a memory and wellness center, a child development center, an after-school program, among others.

Students attended a preliminary meeting during their MS1 spring semester where the participating organizations were presented and their requirements for involvement were explained. The requirements consisted of attending an initial meeting with their organization's representative, dedicating a minimum of 20 hours to their designed project, and writing a formalized reflection essay after completing their project. Following the preliminary meeting, students ranked the available organization by preference and were assigned by a randomized computer lottery system. Based on their preferences, they were later assigned into groups of 2-5 students per organization.

During the MS2 year, each group of students met with their assigned organizations to discuss the needs of the organization and associated community. Together, they developed a project idea that the students could then implement over the course of one semester. The projects were to ideally culminate in a deliverable that the organization could continue using and benefit from after the students completed their 20-hour requirement. Examples of implemented projects include organizing and running a health fair and/or food and clothing collection drive, providing age-appropriate medical education, creating informational pamphlets and newsletters for the organizations, and advising, tutoring and serving as role models for disadvantaged youth. It is important to note that the designed project did not involve clinical care or the use of clinical skills by medical students.

At the conclusion of these projects, each student group wrote a 500-word essay reflecting on their experiences, and how they feel these experiences will impact their future and the future of the population they served and will serve throughout their medical career. Students also presented their projects to an audience consisting of their peers, pre-medical students, faculty, staff, directors and other representatives of the participating organizations, and the

community at large. This presentation occurred the month following the completion of the service-learning project reflection essay.

Results

The results and effectiveness of the service-learning project was evaluated through a 500 word reflective essay written by the medical students. A scoring rubric was used to grade the reflective essay as a tool to assess the students' efforts. The students were graded in their corresponding organizational groups. The rubric appraises the degree to which the students collaborated with the organization and community, applied knowledge learned in medical school, and actively reflected on their service experience.

Service-Learning Project Scoring Rubric

The Service-Learning Project is graded through evaluation of an essay. Below are the expectations for key areas to address in each essay.

	Not meeting expectations	**Some deficits in activity**	**Meets expectations**	**Exceeds Expectations**
Collaboration with organization and community	No communication with organization or community members with regards to project and its progress.	Organization or community members are partially informed of project progress.	Organization or community members act as consultants in the project development and are informed of progress.	Organization or community members actively and directly collaborate in the project.
Use knowledge learned in medical school in real world settings	No active service experience.	Application of knowledge planned, but not implemented.	Some application of knowledge to benefit organization and/or community members.	Direct application of skill or knowledge in service to an organization and/or community members.

Active Reflection	No reflection. Cannot appreciate impact of activity.	Limited reflection, more of a summary of events. Can describe impact of activity, but unable to appreciate importance.	Able to produce and share what was learned and applied with organization and/or community members. Reflection shows some understanding of importance of service.	Describes deep understanding of the importance of service and the ability to make a difference. Student describes how the experience impacted them, and how it will impact their care of future patients and/or the community they will serve.

These reflective essays also provide the opportunity for course directors to gain insight into how students spent their time at community sites, which could influence if these partnerships are sustainable for future classes.

From these reflective essays, a number of noteworthy sentiments were shared by students. Below are selected excerpts shared by students that demonstrate their expanded understanding of community needs and how it has impacted the way in which they hope to practice:

- "It's lessons like these that go beyond the scope of our standard curriculum to really teach us what is involved with caring for our patients and for members of our community in need."
- "Our experiences in service-learning through cooperation with Big Brothers Big Sisters of Broward County enabled us to more intimately connect with local communities and better understand their needs. We saw firsthand the importance of mentorships programs in learning institutions. Through most of our education we learn knowledge and skills we will need to serve our future patients in a very specific way. This project helped broaden our horizons while serving our community."
- "Through this experience we learned about what happens outside of the hospital room after a diagnosis of cancer is made and a treatment given. We saw firsthand the emotional, physical, and economical strain that is placed not only on the parents but also on the other family members. It was surprising at first that, not only were the services offered at the foundation available for the child with cancer, but also for all their siblings as well. The emotional stress felt by the siblings was something that our group had not thought of prior to our experience. As physicians we will now be able to take the

information and lessons we learned through our volunteering experience and help better serve this patient population in the future."

- "We have gained significant experience and knowledge to utilize in providing better care for our future patients: We know that in order to effect positive change in a person we must first understand him or her. We have become especially well aware of the role of socioeconomic status and living conditions on a person's health and on his or her access to care. The four of us will view our patients more holistically, taking into account the personal and societal struggles impacting their physical health and general well-being."
- "We learned about different environments in the community instead of only seeing people in our environment as patients. We benefit because when we see our patients as people first and patients second, our bedside manner improves."

Additionally, a number of projects were enacted by students at their organization over the course of 5 years.

- Creation of a pamphlet that outlines the updated names and locations of health and dental clinics in all of Broward and Palm Beach County offering free and much-needed services to the homeless.
- Organization of a group dance session for adults with developmental challenges to promote social interaction, fun and exercise.
- Development of hands-on lesson plans integrating "basic anatomy and physiology to get the students excited about science, while also exposing them to clinical medicine."
- Organization of a tour of the undergraduate school and medical school for at-risk youth to encourage an interest in science and medicine, as well as encourage better behaviors both in and out of the classroom.
- Creation of a cookbook for children with diabetes including healthy recipes that are easy to make and of interest to children.

While these reflections and organized projects are specific to our institution, the examples of strengthened partnership between local organizations and the medical school are evident. The service learning project proved to advance medical education to new bounds, fruiting many unintended benefits.

Goals Achieved:

- Developed an understanding of the local community and their needs
- Implemented a project that addresses the needs of the non-profit organization
- Gained knowledge of societal issues people of different populations face
- Collaborated and communicated with an interprofessional group

Unintended Benefits:

- Developed lunch and learn sessions regarding Autism and Human Trafficking education with participating organizations to formalize supplemental education
- Implemented adjustments to curriculum including adding LGBTQ discussion panel and standardize patients
- Created research and presentation opportunities for students

- Conceptualized and honed skills taught in didactic lectures
- Developed a foundation of how to become engaged with the local community that can be utilized during residency and practice

For example, certain groups sought to incorporate their service-learning projects and the knowledge gained from their community engagement into the medical school curriculum. Faculty, students, and a local non-profit organization collaborated to create a “lunch and learn” talk specific to human trafficking, in order to address the lack of formal instruction regarding this topic. Additionally, the LGBTQ community from the organization SunServe were invited to participate in formal panels and standardized patient activities to teach students how to best address their medical needs. These activities aimed at further expanding medical student awareness were made possible through the community partnerships established by service-learning.

Many students were also able to engage in scholarly activities after completion of the service-learning curriculum, including publishing research papers and presenting posters related to their organizations and projects. For example, a student who worked with the organization Autism After 21 created a research project that assessed how a 12 day residential program at FAU would affect self-determination in young adults with Autism Spectrum Disorder in order to develop sustainable employment.

Discussion

The variety of service-learning curriculums that exist within medical education reflect the broad range of community needs as well as the learning objectives students should achieve throughout their training.[7] In this service learning curriculum for second year medical students, establishing partnerships and deliverable projects with community organizations results in long term benefits for both the organization and for students. Specifically, students are exposed to demographics, social challenges, and disparities within healthcare that may otherwise be neglected in a standard medical curriculum. In student reflections, the common sentiment of witnessing patient needs “first-hand” demonstrates how engagement within the community expands their primarily textbook-driven education that encompasses pre-clerkship medical education.

The service learning curriculum requires a minimum of 20 hours of engagement, but after forming strong partnerships with these organizations, many students chose to extend their involvement through continued volunteer work and engagement in subsequent semesters. Expansion of these service-learning projects into supplemental learning opportunities also manifested in medical curriculum such as by developing “lunch and learn” seminars and series stemming from the work completed during the service-learning project. These opportunities further broaden the impact of the community partnership, as students who did not participate with their organization are still able to learn from them in a more formalized setting. Through these examples of meaningful involvement, students have also reported how their experiences have influenced their medical specialty decision. For example, students who were placed with youth organizations have oriented their passion for working in pediatrics. Additionally students whose projects served the disabled have established interests in exploring rehabilitation medicine, a field they may otherwise not have had much exposure to in standard medical education.

Another potential benefit of this curriculum lies in the option for students to engage in research and academic writing related to their projects. Presenting posters or publishing journal articles related to witnessed healthcare disparities is one way of advancing students' academic research competencies. The option for students to submit a "letter to the editor" to advocate for their organizations also offers an option for further reflection. Two student groups have had their "letters to the editor" published in local newspapers, which spreads greater awareness about their organization to the greater community. It is known that service-related work is highly valued by residency programs, as altruism is a necessary trait in a physician. However, this additional aspect of academic writing related to their service work can add an additional benefit that may be valued by residency program and future career opportunities as well. Future service- learning curriculum may consider the possibility of beginning involvement on these projects during the summer between MS1 and MS2 year, thus allowing greater time to engage in research, academic projects, and scholarly writing related to their organization later in the semester.

After witnessing these unmeasured benefits of service-learning curriculum impacting medical education, future programs may consider collecting quantitative measures to denote success of their service-learning programs. The service-learning curriculum also has the opportunity to analyze the long term effects on the participating medical students and how these projects have influenced their medical practice. The impact of this curriculum on community partners could also be assessed, such as by analyzing whether or not the projects implemented by students remain useful to the local organizations after years pass. This feedback would allow for further modification of the curriculum to better suit the community partners and medical students alike.

Some students expressed dissatisfaction with being unable to attend events hosted by their organization due to curricular obligations, which demonstrates the challenge of balancing a medical education with other responsibilities. However, this service-learning curriculum's design of incorporating 20 hours of service over the course of the semester allows greater flexibility in scheduling for both students and their organization. By having students schedule their service-learning schedules autonomously, the option for engagement on nights and weekends is also possible. Incorporate a mandatory service learning project into medical school curriculum is thus not only possible, but adds an additional layer of depth to curriculum that is necessary for promoting well-rounded physicians.

References

Functions and Structure of a Medical School: Standards for Accreditation of Medical Education Programs Leading to the MD Degree. Washington, DC: Liaison Committee on Medical Education; 2019.

Faller HS, Dowell MA, Jackson MA. Bridge to the future: nontraditional clinical settings, concepts and issues. *J Nurs Educ*. 1995; 34(8):344-349. http://www.ncbi.nlm.nih.gov/pubmed/8558279. Accessed October 25, 2019.

Hunt JB, Bonham C, Jones L. Understanding the goals of service learning and community-based medical education: A systematic review. *Acad Med*. 2011; 86(2):246-251. doi:10.1097/ACM.0b013e3182046481

Seifer SD. Service-learning: community-campus partnerships for health professions education. *Acad Med*. 1998; 73(3):273-277. Doi: 10.1097/00001888-199803000-00015

Deans T. Service-Learning in Two Keys: Paulo Freire's Critical Pedagogy in Relation to John Dewey's Pragmatism. *Michigan J Community Serv Learn*. 1999:15-29.

Stewart T, Wubbena Z. A Systematic Review of Service-Learning in Medical Education: 1998–2012. *Teach Learn Med*. 2015:115-122.

Wubbena Z, Steward T. An overview of infusing service-learning in medical education. International Journal of Medical Education. 2014; 5:147-156.

About the Authors

Peter Averkiou, MD is an Assistant Professor of Integrated Medical Science, Charles E. Schmidt College of Medicine, Florida Atlantic University

Nirmala Prakash, PhD is an Assistant Professor of Integrated Medical Science, Charles E. Schmidt College of Medicine, Florida Atlantic University

Briana Paiewonsky is a second-year medical student at the Charles E. Schmidt College of Medicine, Florida Atlantic University

Sara Twadell is a second-year medical student at the Charles E. Schmidt College of Medicine, Florida Atlantic University

Correspondence:

Peter Averkiou, MD
Assistant Professor of Integrated Medical Science,
Charles E. Schmidt College of Medicine, Florida Atlantic University
777 Glades Road
Boca Raton, FL 33431
(561) 297-4570

paverkiou@health.fau.edu

The Effects on Student Outcomes of Service-Learning Designated Courses: An exploratory Study

Jibril Solomon
Bridgewater State University

Jing Tan
Bridgewater State University

Abstract

Service-learning is integral to most American higher education institutions' mission in fostering community and civic engagement in a democratic society. Service-learning designation courses are mechanisms used to link courses to communities and to integrate experiential learning into education. This exploratory study endeavors to investigate post service-learning course effects on student outcome indicators like connection of limited time community volunteering to academic course material; awareness of self and community needs; impacts on academic and career goals at a four-year public university in the United States. This research, which aims to boost the knowledge-based of service-learning designation courses' impacts on students, theorized that to predict and measure the outcomes of service learning on students and courses the characteristics of student participants are critical indicators. The findings revealed that gender (female), age (older) and no prior community civic engagement students benefited the most from service-learning designation courses. The study highlights the significance of (a) diverse student characteristics like age and gender; and (b) experiential learning of younger students like freshmen and sophomores and those with no prior community service experiences in the design and development of service-learning designated courses.

The engagement of citizens in a democratic society is an ideal many modern societies aspire for in the enactment of their political, social, and educational programs, activities, laws, and policies. In higher education institutions, especially in the United States, teaching and learning have been one of the mechanisms through which active and democratic citizenship are exercised. Opazo and McIlrath (2019) posit "service learning is one such mechanism to achieve the ideals associated with the democratic citizen and the promotion of active citizenship." (p.2) The concept of service learning in higher education is not new as it dates to the late 1800s with the social reform movements birthed by Jane Adams in the 1800s; and the education reform revolution spurred by John Dewey in the 1900s (Flecky, 2011).

Service-learning gained momentum in the United States' educational system, in the 1980s, as a system for integrating experiential learning into the classroom experiences. Its primary aim was to engage students in active learning enterprise in schools and community settings. De facto, colleges and universities in the 1990s launched service-learning programs to enroll students in course-based learning projects where they can apply academic knowledge to social and community concerns. Service learning has since become one of the hallmark instruments used in higher education institutions to accomplish a civic service mission and to fulfill a historical commitment to public good in a democratic society (Opazo, H., McIlrath, L., 2019).

The philosophy and practice of service learning in higher education institutions are aimed at achieving a variety of teaching and learning goals and objectives

including: “improving students’ academic learning and educational success, to enhancing students’ personal development, to furthering students’ social and intercultural understanding, to strengthening students’ career development, to nurturing students’ civic responsibility and participation, to centering students’ ethical and moral compass.” (Opazo, H., McIlrath, L., 2019, p. 13) Notwithstanding, there remains some misconceptions of the term service learning with potential implications for how its effects and impacts on students, courses and faculty are determined.

Opazo and McIlrath (2019) explained “the widespread misunderstanding of the term is due primarily to the fact that service learning is inherently a highly contextualized practice, [which] looks very different across institutional and community contexts.” (p.13) Thus, to contribute to the knowledge-based regarding the implications of service learning on students and course-based outcomes, this study investigated post service-learning course effects on student outcome indicators like connection of community engage learning to academic course material; awareness of self and community needs; and impacts on academic and career goals at a four-year public university in the Southeastern region of the state of Massachusetts in the United States.

The definition and analysis of the effects of service learning on student experiences and course-based outcomes are multifaceted and sometimes in incongruities. Some definitions focused on the connection service learning creates between educational environments and community settings. “It is a practice that links community service with learning activities and learning activities with community service.” (Opazo, H., McIlrath, L., 2019, p. 13) Expanding on this principle, Novelle et. al (2020) declared “service-learning is a pedagogical practice promoting active learning for students. Its overall goal is to connect classroom content to real-world experience while partnering and engaging with the community.” (p.3) Furthermore, Khan and VanWynsberge (2020) explained service learning as “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.2).

Other concepts of service-learning highlight deeper ideals of civic and experiential engagement and learning. Flecky (2011) posit that service learning is “a philosophy of service and learning that occurs in experiences, reflection, and civic engagement within a collaborative relationship involving community partners,” (p.1) that centers on students, faculty, and community partners’ endeavor to conspire to specific educational and community feat. Therefore, it is “a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development” (p.2).

To this study, service learning is conceptualized as “a pedagogy wherein students engage in providing a service to the community that is linked to the academic objectives of a course” (Rinaldo et al. 2015, p. 2). Notwithstanding, whether service-learning fosters linkages between community and educational systems or serves as real-world laboratory for student civic engagement and public service, its impacts on

learning activities and course-based outcomes require further investigation and understanding.

The effects of service learning on students and course-based outcomes have been studied in the past few decades with mixed results. Gao, G. et al. (2020) argued that service learning has positive outcomes on students' academics like testing and applying classroom knowledge to community issues, test scores, attendance, critical thinking, and communication skills; personal growth such as self-confidence, moral character and personal competencies for life and career success; civic engagement and social responsibility. Culminating, S. Ellerton, et al. (2016), in a study to investigate post-service-learning differences between two control groups of community college students, found statistically significant positive impacts of service learning on academics and general education skills, such as writing and teamwork, for service-learning participants compared to their counterparts. They also uncovered a faculty perspective of "deep learning and skill development strengthen the contention that community college students receive many benefits from participation in service-learning" (p.19).

Further research revealed some ongoing concerns with service-learning outcomes. Jones et al (2016) argued that although most students develop a high level of "community literate" insights during their service-learning, significant gaps were noticed in community literacy needs for students, academics, and professionals. Community literacy refers to "having the cognitive and social skills which determine the motivation and ability of [students], academics, and professionals to gain access to, understand, and use community knowledge and information that enable them to be "community intelligent." Being "community intelligent" mitigates ways for students and faculty to promote and maintain good community engagement practices that reflect and respond to community contexts, needs, priorities and expectations" (Jones et al, 2016, p. 193).

Thus, the lack of knowledge about "community intelligence" for students and faculty alike may have potential impacts on the outcomes of service-learning activities, learning goals and course-based objectives. Further investigations on the hidden effects of faculty and students' lack of "community intelligence" are warranted to fully grasp the effects of service-learning activities on academics, civic engagement, and personal growth. Furthermore, Martin et al (2017), in a study that assessed the emotions experienced by faculty while teaching service-learning courses, reported on the emotional lows of some faculty teaching service-learning courses. These include some faculty "experiencing negative emotions such as frustration, anger, anxiety, and disappointment" caused by problems linked to service-learning course elements like logistics; unpredictability of community partnership; and difficulty collaborating with community partners. The ability to maintain "a constructive relationship with community partners in order to adequately perform service" is vital to students' service-learning experiences and outcomes (Martin et al, 2017, p. 7). In effect, they posit that "understanding service-learning faculty emotions is important since they often relate directly to students' classroom [service-learning course] experiences (p. 11).

Therefore, faculty emotional predispositions, to deliver service-learning courses, are another aspect of community engagement course design and implementation that

concealed drawbacks on the impacts that service-learning activities may have on student outcomes. Expanding on Martin et al. (2017) concerns, Olson, and Brennan (2017) examined service-learning program design approach and documented challenges related to defining, planning, and assessing community engagement programs. They offered a "holistic program design approach to curricular-based engagement [that] uses concepts and principles from interactional field theory to frame curricular-based engagement as a venue for interaction and a means to achieve student and community development outcomes." The aim of their study was to "help institutions of higher education rethink their role in local development and move them from a mindset of community engagement to one of community emergence" (p. 12). Olson and Brennan (2017) study offered a new concept of service-learning grounded in emergence versus engagement in community.

The above studies highlight ongoing issues with service-learning that have significant implications for student outcomes. What about the students immersed in limited time community service volunteering hours embedded in service-learning required courses? Seider et al (2012), in a study that examined differential outcomes for American college students engaged in community service-learning involving youth and adults, argued that "college students engaged in adult-oriented service demonstrated larger shifts in public service motivation and belief in a just world than their peers engaged in youth-oriented service…even when the academic components of the Serve Program were identical for the two sets of students" (p.447-458). This study revealed that students who experience service-learning activities as meaningful and worthwhile are not always the ones who acknowledge gaining higher learning outcomes.

Beyond the discrepancies between service-learning activity impacts and learning outcome gains on students, lays another issue related to the number of community service hours required for meaningful effects on participants. Berger and Milem (2002), in a study that investigated how community service involvement affected the development of undergraduate students' self-concept, found that "higher levels of involvement in community service did not have a positive effect on student self-concept" (p.13). This was a surprising discovery, considering how previous research asserted high levels of benefits of service-learning on student experiences. Berger and Milem (2002) then argued that the number of hours devoted to service-learning, or "a certain threshold of effort," is critical to the effects of service-learning on student outcomes.

In brief, over the past almost two decades most research studies on service-learning have argued the benefits of the experiences on student outcomes. Astin et al (2000), in a higher education report study on service learning, supported that service-learning courses have positive effects on "academic performance (GPA, writing skills, critical thinking skills), values (commitment to activism and to promoting racial understanding), self-efficacy, leadership (leadership activities, self-rated leadership ability, interpersonal skills), choice of a service career, and plans to participate in service after college" (p. 4).

The Bridgewater State University (BSU) service-learning programs aim to foster students, staff, and faculty connections to local and national communities especially in the Southeastern regions of the state of Massachusetts. The programs endeavor to

promote students to become life-long engaged citizens in our regional, national, and global communities through courses and self-reflective service-learning activities that strengthen their personal and professional development in civic engagement. The university values service-learning as an effective teaching method that uses community service to help students gain a deeper understanding of course objectives. Service-learning designated courses are thus considered high impact teaching practices designed to improve the success and retention rates of students (retrieved on June 20, 2019 from https://www.bridgew.edu/student-life/community-service-center). The courses include, both first year and upper-level classes, requiring a range of 10 to 45 to over 200 hours of limited time volunteering field work in each semester. The courses are vetted through an application process by a faculty board of members and identified through a course registration system. Faculty who teaches a service-learning designated course will be eligible to receive one additional faculty workload credit.

The rationale for this study is to contribute knowledge to the discussion of the incongruities found in the literature review regarding service-learning impacts on students in higher education institutions. The paper investigates student outcomes post limited time required service-learning volunteering experiences in five service-learning designated undergraduate courses at BSU. Understanding what and how the students themselves viewed the process and experienced its direct effects might shed some light on the relevance and meaningfulness of service-learning embedded courses. The purpose was to develop an exploratory study to examine post service-learning designated course effects on student outcome indicators like connection of community engage learning to academic course material; awareness of self and community needs; and impacts on academic and career goals.

Methods

This study is a cross-sectional design. An online survey was created using Qualtric, consisting of demographics questions, questions about students' service-learning experiences, and student learning outcome indicators like connection of community engage learning to academic course material; awareness of self and community needs; and impacts on academic and career goals. The content of the survey questionnaire was developed based on literature review on common questions, which in the survey, examine service-learning course outcomes.

Through registrar's records five courses designed as service-learning embedded courses from the academic year 2017-2018 were identified. These courses require students to perform limited time (e.g., ten hours or more in a semester) community services volunteering for the course requisite. Faculty members who taught these five service-learning designated courses were asked to distribute the online survey link to students who completed these courses. Participation of the survey was completely voluntarily, and no identifiable information was collected. The online survey remained open for 8 weeks (from November 28, 2018, to January 14, 2019), and totally 113 responses were recorded. However, the recorded 113 responses contain missing data and completed answers to questions range from 73 to 113. Data collected through the online survey software Qualtrics was exported and analyzed using SPSS.

Results

Sixty-two percent of respondents were younger than 25 years old. Across the entire sample, three quarter of respondents (75.7%) were female and 23.3% were male. More than half of respondents were white (58.6%), followed by Black or African American (17.1%), Cape Verdean (10.8%), Hispanic/Latino(a) (7.2%), and other races.

Although all five courses are social work courses, the Introduction to Social Welfare course is open to all majors. The largest percentage of respondents majored in Social Work (67.3%), followed by Psychology (14.2%), and a variety of other majors, such as Sociology, Political Science, Criminal Justice, and others. In terms of academic years, about half (52.4%) of respondents were seniors, 29.5% were juniors, 12.4% were sophomores and 5.7% were freshmen. Across the entire sample, there were about a slightly more transfer students (52.4%) than non-transfer students (47.6%).

Table 1: Demographic Characteristics

	Frequency	Percentage (%)
Age (n=103)		
Younger than 25	64	62.1
25-29	20	19.4
30-34	8	7.8
35-39	7	6.8
40-44	1	1.0
45-50	2	1.9
Older than 50	1	1.0
Gender (n=103)		
Male	24	23.3
Female	78	75.7
Non-Binary	1	1.0
Race (n=111)		
American Indian or Alaskan	1	0.9
Native	3	2.7
Asian	19	17.1
Black or African American	12	10.8
Cape Verdean	8	7.2
Hispanic/Latino(a)	65	58.6
White	1	0.9
Azorean	1	0.9
Brazilian	1	0.9
South American		
Major (n=113)		
Anthropology	1	0.9
Criminal Justice	3	2.7
Elementary Education	1	0.9
Management	1	0.9

Political Science	6	5.3
Psychology	16	14.2
Social Work	76	67.3
Sociology	5	4.4
Other	4	3.5
Academic year (n=105)		
Freshmen	6	5.7
Sophomore	13	12.4
Junior	31	29.5
Senior	55	52.4
Transfer status (n=105)		
Transfer students	55	52.4
Non-transfer students	50	47.6

When respondents were asked if they participated in community service-learning experiences prior to the course, the answers were about half and half (Yes-49%, No-51%). There were a considerable variety of community service respondents who volunteered with different community partners for the course including but not limited to Father Bill's and Main Spring (13.1%), School on Wheels (10.1%), My Brother's Keeper (9.1%), Gifts to Give (6.1%), Old Colony YMCA mentoring (5.1%), 100 males to college (3%), and others.

Table 2: *Service-Learning Experience*

	Frequency	Percentage (%)
Participated in Community Service before? (n=102)		
Yes	50	49.0
No	52	51.0
Type of community service volunteer with for the course (n=99)	13	13.1
Father Bill's and Main Spring	6	6.1
Gifts to Give	9	9.1
My Brother's Keeper	5	5.1
Old Colony YMCA mentoring	10	10.1
School on Wheels	1	1.0
Sharing the Harvest	55	55.6
Others		

Overall, respondents evaluated post service-learning course effects on outcome indicators positively. 68.9% respondents indicated that the community services had influence their understanding of the relevance of the course material and information to everyday life "a great deal" or "a lot." 83.8% respondents indicated that the community services experiences had influence their awareness of the needs of surrounding

communities “a great deal” or “a lot.” 74.3% respondents indicated that the community services experience had influenced their knowledge about applying learning to community issues “a great deal” or “a lot.” About half (51.3%) respondents indicated that the community services experience had helped change their thoughts about a career path “a great deal” or “a lot.” Similarly, 57.6% respondents indicated that the community service had influenced their decision about major choice “a great deal” or “a lot.” 58.9% respondents indicated that community services experience had impacted their thinking and feeling about finishing college or graduating “a great deal” or “a lot.”

Table 3: *Service-Learning Outcome Indicators*

	Frequency	Percentage (%)
Influenced understanding of the relevance of the course material and information to everyday life (n=74)		
A great deal	30	40.5
A lot	21	28.4
A moderate amount	18	15.8
A little	3	2.6
None at all	2	1.8
Influenced awareness of the needs of surrounding communities (n=74)		
A great deal	40	54.1
A lot	22	29.7
A moderate amount	9	12.2
A little	3	4.1
None at all	0	0
Influenced knowledge about applying learning to community issues (n=74)		
A great deal	30	40.5
A lot	25	33.8
A moderate amount	15	20.3
A little	4	5.4
None at all	0	0
Helped change thoughts about a career path (n=74)		
A great deal	22	29.7
A lot	16	21.6
A moderate amount	13	17.6
A little	13	17.6
None at all	10	13.5
Influenced decision about major choice (n=73)	21	28.8

A great deal	21	28.8
A lot	11	15.1
A moderate amount	6	8.2
A little	14	19.2
None at all		
Impacted thinking and feeling about finishing college or graduating (n=73)		
A great deal	25	34.2
A lot	18	24.7
A moderate amount	20	27.4
A little	4	5.5
None at all	6	8.2

Furthermore, to examine what demographic characteristics predict service-learning course outcomes, a series bivariate analyses were performed between the six demographic variables and the six student outcome indicators. There was a statistically significant difference between gender regarding to the influence of community service-learning experience on student's decision about major choice ($t(71) = 2.15$, $p < .05$). Female students indicated that the community service-learning experience had influenced their decision about major choice more than male students. Prior community service-learning experience impacted respondents' thinking and feeling about finishing college or graduating ($t(71) = -2.11$, $p < 0.05$). For respondents who had no prior experience, the impact of the community service-learning experience in the course on college completion was statistically stronger than respondents who had prior experience. Age was a strong predictor on student outcome indicators. Older respondents indicated statistically stronger impact from the community service experiences on their awareness of the needs of surrounding communities ($r(74) = -0.24$, $p < 0.05$), on their knowledge about applying learning to community issues ($r(74) = -0.26$, $p < 0.05$), and on their thinking and feeling about finishing college or graduating ($r(73) = -0.25$, $p < 0.05$).

Discussion

The results of this study, like in previous research, support the notion that service-learning activities in higher education institutions have impacts on students and course-based outcomes. The purpose of this research to measure the specific effects of service learning on three student outcome indicators: (a) connection of community engage learning to academic course material; (b) awareness of self and community needs; and (c) impacts on academic and career goals at a four-year public university in the Southeastern region of the state of Massachusetts in the United States revealed the following. Students who participated in course-based service learning programs received these specific benefits: (a) service learning activities influenced student understanding of the relevance of the course material and information to everyday life; (b) impacted student awareness of the needs of surrounding communities; (c) shaped student knowledge about applying learning to community issues; (d) changed student

thoughts about a career path as well as influenced their decision about major choice and (e) affected their thinking and feeling about finishing college or graduating positively. These findings support some of the previous discoveries found in the research literature.

This study did find three predictive indicators that were statistically significant in the measurement of the effects of course-based service-learning activities on student outcomes in this sample of four-year public university students: gender, age and prior community civic engagement. Female students indicated that service learning influenced their decision about major choice more than their male counterparts. Older students (i.e., > 21 years old) experienced the strongest positive effects of service learning across all indicators than younger fellows. Students with no prior experiences with community service volunteering acknowledged that the service-learning program shaped their thinking and feeling about finishing college or graduating more than those with previous community service civic engagement.

These results point towards a potential theoretical framework for understanding how service-learning may impinge the experiential learning of students. This study's theory argues that to predict and measure the outcomes of service learning on students and courses the characteristics of student participants are critical indicators for consideration. Meaning, to gauge future effects of service-learning designation courses on students, faculty and program administrators must account for participants' gender, age and prior experience levels in community civic engagement. The implications of the findings for high impact teaching practices underline the importance in the design and the development of service- learning course designated content to focus attention on student diverse characteristics in addition to learning objectives and outcomes.

In general, service-learning designated courses, at most traditional undergraduate postsecondary institutions, target upper-level undergraduate courses, i.e., junior, and senior status, which usually enroll older students (> 20 years old) and more females than males, especially in the social sciences. This study has uncovered that although older and female students are the most positively impacted by service-learning course-based activities, the effects of the programs are not reaching a critical audience in our higher education institutions like the lower-level freshman and sophomore students. Furthermore, the traditional design, planning and implementation of service-learning designated courses might not always include an understanding of participants' prior experiences with community civic engagement and its consequences on the program outcomes.

This research found that the level of previous student experiences with community involvement is critical to the outcomes of service-learning. Students with no prior civic engagement in community service were found to benefit the most from the experiential learning. Thus, the development of service-learning designated courses might invite for a two-tiered approach whereby students with prior community service experiences, versus their peer counterparts, are given different roles and assignments to maximize their experiential learning and produce more meaningful outcomes of their course-based service-learning activities. The application of this study's findings may be limited to social work and social science programs of study that utilize mandatory

service-learning designated courses to provide experiential learning and field education training to upper classmen in their majors.

To conclude, this study offers some recommendations for potential ways some higher education institutions might conceptualize their high impacts teaching and learning practices through service-learning designation courses in the future: (a) the design and content of service-learning designated courses should go beyond the standard course learning objectives and outcomes to incorporate diverse student participant characteristics like age, gender and prior level of experiences in community service volunteering; and (b) service-learning programs could serve essential student development functions and opportunities especially for younger students like freshmen and sophomores who, as this study has shown, are least impacted by the experiential learning. In this vein, service-learning courses could be leveraged as academic and personal growth mechanism used to reach cohorts of first- and second-year students susceptible to low retention risks and who traditionally are not engaged in service-learning course-based activities until their junior or senior year. These younger students could stand to gain some benefits in early involvement in experiential learning and civic engagement considering the long term positive outcomes of community service and learning on (a) student understanding of the relevance of the course material and information to everyday life; (b) awareness of the needs of surrounding communities; (c) knowledge about applying learning to community issues; (d) thoughts about a career path, decision about major choice and (e)thinking and feeling about finishing college or graduating.

References

Astin, A. W., Vogelgesang, L. J., Ikeda, E. K., & Yee, J. A. (2000). How service-learning affects students. *Higher Education*.144. http://digitalcommons.unomaha.edu/slcehighered/144

Berger, J., Milem, J. (2002). The impact of community service involvement on three measures of undergraduate self-concept. *NASPA Journal*, 40(1), 85-103

Bridgewater State University Community Service-Learning Center: https://www.bridgew.edu/student-life/community-service-center

Ellerton, S., Figueroa, S., Greenwood, D., & Fiume, P. (2016). The impact of academic service learning on community college students. *Journal for Civic Commitment*, 24, 1-23.

Flecky, K. (2011). *Service-Learning in Occupational Therapy Education: Philosophy and Practice* (1st ed.). London, UK: Jones Bartlett.

Jones, D., McAllister, L., & Lyle, D. (2016). Community-based service-learning: A rural Australian perspective on student and academic outcomes of participation. *International Journal of Research on Service-Learning and Community Engagement*. 4(1), 181-196

Gao, G., Man, B., Sakuda, C., & Tanna, W. (2020). Coaching lives: Promoting student learning and engagement through service-learning and civic engagement. facultyresourcenetwork.org/publications.

Khan, S., & VanWynsberghe, R. (2020). A synthesis of the research on community service learning in preservice science teacher education. *Frontiers in Education*, *5*, 1-13. https://doi.org/10.3389/feduc.2020.00045

Martin, T., Lecrom, C., & Lassiter, J. (2017). Hearts on our sleeves: Emotions experience by service-learning faculty. *International Journal of Research on Service-Learning and Community Engagement*, 5(1), 41-56

McIlrath, L., & Opazo, H. (2019). *Embedding Service Learning in European Higher Education Developing a Culture of Civic Engagement*. Oxfordshire, UK: Taylor and Francis.

Nowel. S. W., Regan. T., Ambary. J., Crais. E., & Able. H., (2020). The impact of service-learning on undergraduate awareness of autism spectrum disorder. *Journal of Higher Education Outreach and Engagement.* 24(1), 55-72

Olson, B., & Brennan, M. (2017). From community engagement to community emergence: The holistic program design approach. *International Journal of Research on Service-Learning and Community Engagement*, 5(1), 5-19

Rinaldo, S. B., Davis, D. F., & Borunda, J. (2015). Delivering value to community partners in service-learning projects. *Journal of Community Engagement and Scholarship*. 8(1), paper # 13.

Seider. S., Rabinowicz. S., & Gillmor, S. (2012). Differential outcomes for American college students engaged in community service-learning involving youth and adults. *Journal of Experiential Education*. 35(3).447–463.

About the authors

Jibril Solomon, Ph.D., Assistant Professor, Department of Humanities and Social Sciences, Bridgewater State University
Dr. Solomon is a faculty in the School of Social Work where he teaches undergraduate and graduate courses in social science theoretical practice and human behavior.
J1Solomon@bridgew.edu
781-223-3972

Jing Tan, Ph.D., Professor, Department of Humanities and Social Sciences, Bridgewater State University
Dr. Tan is a faculty and department chairperson of the School of Social Work. She teaches undergraduate and graduate courses in research and policy.

Acknowledgments:
Special thanks to the Bridgewater State University's Community Service-Learning Center's Director and Staff for their participation in identifying the community service programs where students were performing their required service-learning.

Bridging the Gap between Service and Learning within Business Curriculum through Community Voice & Reciprocity

Natalie Dick
Slippery Rock University

Dorene Ciletti
Point Park University

Ronald Dick
Duquesne University

Abstract

Experiential learning pedagogies, including service-learning, can be used in the business classroom to connect theory and practice. An increasing body of literature demonstrates a trend toward service-learning integration into the business classroom and shows that service projects can potentially support learning outcomes for business students. Although this existing research suggests the potential benefit of service-learning for business students, the mechanism that connects service experiences to classroom learning in business has not yet been defined. Clarification on how service informs learning and how learning informs service is needed for meaningful integration of business curriculum and service. This study addresses this need by analyzing the connection between service and learning within the business classroom environment through three case studies: Long Term Care Management, Principles of Marketing and Sport Sales and Revenue Generation. Themes emerge from the systematic analysis of these case studies demonstrating how service and learning can be bridged within the business classroom environment through reciprocity and community voice.

INTRODUCTION

University education provides an opportunity for students to build knowledge. Yet McHann and Frost (2010) suggest that a gap exists for students between knowing and doing. Doing – or applied learning – can be facilitated through experiences. Experiential learning, particularly with community partners, is considered a high impact educational practice (Kuh & O'Donnell, 2013). With experiential learning, "[k]nowledge is continuously derived from and tested out in the experience of the learner" (Kolb, 1984, p. 27). Students apply knowledge they learn in the classroom to real-world problems and situations. These experiential opportunities have benefit. Employers believe that requiring students to complete a significant applied learning project in college would improve both the quality of learning and the quality of graduates' preparation for careers, and are more likely to consider hiring recent college graduates who have completed an applied learning or project-based learning experience (Hart Research Associates, 2015).

Building experiences into the curriculum through service-learning and community engagement can better prepare students to enter the workforce, engage in civic-mindedness, and build problem-solving and critical thinking skills that can continue to serve them long after graduation. In addition, students provide reciprocal value to community partners through knowledge sharing and transfer in a mutually beneficial exchange. This

pedagogy work shares early successes and future opportunities of three distinct experiential learning engagements in varied business courses in healthcare management, marketing, and sports sales.

A Long Term Care Management course at a suburban public university integrated community and civic engagement into course design and outcomes. Through community and campus partnerships, students in this course experienced reciprocity in action while building civic and community identities.

The Principles of Marketing course at an urban private university was adapted to integrate a community and civic engagement experience with the city's Office of Nighttime Economy as a partner in three sections of the course in a way that immersed students in the community while supporting marketing course objectives, enhancing student learning and providing the community partner with valuable, needed marketing support.

The Sales and Revenue Generation course at an urban, private, Catholic university was designed to integrate experiential learning as a means to achieve course outcomes with an academic unit partner, enhancing student understanding and application of professional selling while assisting university athletics with ticket sales.

REVIEW OF THE LITERATURE

Experiential Learning as Business Curriculum Enhancement

Existing literature supports experiential learning as an effective tool for translating learning outcomes from the classroom into practical knowledge and skills. This has been demonstrated within various business disciplines including business leadership, strategic management, sales and marketing. For example, Seattle University's Albers School of Business and Economics houses leadership formation courses that integrate experiential learning designed to transition student knowledge and skills from classroom to practice by developing a banquet program to identify and honor community leaders (Bauermeister et. al., 2016). At Southern Arkansas University, a student-led strategy competition facilitated experiential learning as students from twelve participating universities interacted professionally and socially with corporate leaders, built mentors and networks, practiced interviewing and applied knowledge from the classroom within the setting of a business competition (Clark & White, 2010). A student consultancy in an upper-level retail marketing course, which involved the relocation of retail establishment, demonstrated benefits to students in achieving educational objectives for the course (Maskulka, Stout & Massad, 2011). In another example, a retail management course facilitated a class-led on-campus store, which helped to close the gap between practical work experience and in-class learning (Truman, Mason & Venter, 2017).

Experiential learning is so beneficial because of the way that it imparts skills and knowledge upon the business student. Experiential learning improves the development of critical thinking and decision-making skills compared to classroom experiences that rely on more traditional pedagogies such as classroom lecture (DeSimone & Buzza, 2013). Through active, hands-on experiential learning, business students can learn customer service skills that employers want, help them to recognize the relationship

between service and profit and learn unique perspectives of consumers (Gonzalez-Padron and Ferguson, 2015). For example, an undergraduate marketing and sales course demonstrated that experiential learning can provide essential professional sales skills through structured experiential learning activities that improve critical thinking, communication, and real-time problem solving (Alvarez et. al., 2015). Student understanding of course subject matter is particularly enhanced for business students when they are engaged in analysis, synthesis & evaluation of the experiential learning project (Helms & Whitesell, 2017). The impact of experiential learning may be so strong due to its relationship with student cognitive engagement, which has demonstrated a positive relationship with group experiential learning (Winsett et. Al, 2016).

Experiential learning also has the benefit of preparing business students for satisfying careers. Students who participated in experiential learning have gained confidence in choosing their business major and felt more engaged with their business student cohort (Maguire, 2018). Similarly, students who participated in experiential learning that involved role-playing for inside sales were more likely to view this area of business as a desirable career (Magnotta, 2018).

The Association to Advance Collegiate Schools of Business (AACSB) Accreditation has recognized the importance of experiential learning. Its standards include “the teaching and learning activities fostered by degree program curricula that highlight the importance of student engagement and experiential learning” as a “critical activity that help schools connect theory and practice.” (AACSB International – The Association to Advance Collegiate Schools of Business, 2018, p. 30.)

Service-Learning as Experiential Learning for Business Disciplines

Experiential learning can, but does not always, include service-learning. According to the Learn and Serve Clearinghouse, service-learning is “a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities” (2010). Importantly, curricular service-learning is not equal to a community service option added to a course but instead provides a critical learning component to the goals of a course – which can be challenging because it requires the reformatting of norms, roles and outcomes of the traditional classroom (Howard, 1998.) Service-learning goes beyond traditional models of engagement in its integration with classroom pedagogy and service-learning projects must be integrated with the course on all key levels including learning outcomes, curricular development, assessment and community impact (Bringle & Hatcher, 2009).

Service-learning enhances classroom learning in many ways. Business curriculum that incorporates service-learning – including areas such as accounting, finance, marketing, management and economics – enriches the student learning experience and translates classroom concepts into practice (Ayers, 2010). Students who participate in service-learning develop improved business workplace skills such as interpersonal skills, oral communication, written communication and leadership (Caseperz & Olaru, 2017). It can lead to an improved ability to work with others, increased openness to new ideas and solutions, and a likelihood of helping and

encouraging others (Carlisle et. al, 2017). Service-learning courses can also enhance student orientation toward service in general and can generate interest in promoting social change in areas such as poverty, unemployment, hunger, homelessness, crime, domestic violence, pollution, racial discrimination and disparities in health status (Bradley, 2014). Service-learning can lead students to develop philanthropic knowledge, skills, dispositions and behaviors that ultimately influence postgraduate choices in career, civic activities and family life toward a civic-minded orientation (Hatcher & Studer, 2015). Service-learning projects in business disciplines, such as marketing, can promote the development of authentic relationships for students and stakeholders as they work toward social change (Crutchfield, 2017). Through service-learning, business students can improve upon academic and personal skills related to their discipline while building civic competency as they set goals based on what they have learned, develop sensitivity and awareness, and improve critical thinking skills (Grotrian-Ryan, Ryan, and Jackson, 2016).

Service-learning can also have an impact on a student's tangible academic success. Students who participate in service-learning projects may see higher grades as a result of participation as compared to students who participate in standard pedagogy such as lecture (Brail 2016). Participation in service-learning can positively impact campus retention rates for first-year to second-year student transitions (Bringle, Hatcher & Muthiah, 2010). College students who participate in service-learning may also improve skills and understanding related to career decision-making (Coulter-Kern et. al, 2013).

Service-learning partnerships involve measuring service-learning specific outcomes with tools that can include reflective journals, surveys, focus group responses, and interviews (Bettencourt, 2015). Student outcomes service-learning can create significant gains in learning in the outcome areas of attitudes toward self, attitudes toward school and learning, civic engagement, social skills and academic performance (Cielo, Drulak and Dymnicki, 2011).

Students who participate in experiential learning, including service-learning and community engagement opportunities, may be more marketable. Employers believe that requiring students to complete a significant applied learning project in college can improve both the quality of learning and the quality of graduates' preparation for careers, and are more likely to consider hiring recent college graduates who have completed an applied learning or project-based learning experience (Hart Research Associates, 2015). A study by The Economist and Lumina Foundation found that executives identified critical thinking and problem-solving, collaboration and teamwork, communication, job-specific skills, and adaptability, all of which can be enhanced through experiential learning, as the most important workplace skills (Economist, 2014). Additionally, nearly 90% of employers surveyed responded that, regardless of major, students should "take courses that build civic knowledge, skills, and judgment essential for contributing to a democratic society" (Hart Research Associates, 2015, p. 4).

Due to its potential impact on student outcomes, universities should support faculty in developing service-learning integration within business courses. Since service-learning course integration can be very complex in terms of reflection, flexibility

and commitment, universities should provide institutional resources for faculty development in service-learning (Carracelas-Juncal et. al., 2009). Whether an institution of higher education is committed so service-learning is typically indicated within the organization's mission, promotion, tenure and hiring process, organization structure, student involvement, faculty involvement, community involvement, and campus publications (Young et. al. 2007).

METHODS

This paper seeks to analyze three business courses in terms of reciprocal partnerships and community voice to clarify the bridge between service and learning for business courses. Each course case study will be analyzed based on an established service-learning taxonomy, developed by a team from Indiana University Purdue University Indianapolis (IUPUI) in 2016. This taxonomy outlines six key service-learning attributes, the first of which is focused on reciprocal partnerships (Hanh, Hatcher, Price and Studer, 2016). This paper will examine this reciprocal service-learning attribute for the three courses identified - Long Term Care Management, Principles of Marketing, and Sports Sales and Revenue Generation - based on the three levels of reciprocal partnerships identified by the IUPUI taxonomy. The levels as identified by IUPUI are outlined as follows:

- Level 1: "The Instructor contacts a community organization to host students and provides a brief overview of the course (e.g. learning outcomes, syllabus) and the purpose of community activities" (Hanh, Hatcher, Price and Studer, 2016)
- Level 2: "The instructor meets with the community partner(s) to discuss the course (e.g. preparation/orientation of students, learning outcomes, syllabus,) and to identify how the community activities can enrich student learning and benefit the organization" (Hanh, Hatcher, Price and Studer, 2016)
- Level 3: "The instructor collaborates with and learns from the community partner(s) as co educators in various aspects of course planning and design (e.g. learning outcomes, readings, preparation/orientation of students, reflection, assessment) and together they identify how the community activities can enrich student learning and add to the capacity of the organization" (Hanh, Hatcher, Price and Studer, 2016)

For each course case study, a course description and objectives will first be introduced. Then, service-learning project integration will be described. The service-learning attribute of reciprocity will then be analyzed based on the three levels of the IUPUI taxonomy. The role of community voice will be described as an integral component of these reciprocal partnerships to connect service and learning through each course. All three courses will then be described as part of a continuum of reciprocal partnerships and service-learning.

CASE STUDIES: BRIDGING SERVICE AND LEARNING WITHIN BUSINESS DISCIPLINES

Long Term Care Management Course

A Long Term Care Management course at a suburban public university integrates community service-learning into course design and outcomes. Through community and campus partnerships, students in this course experience reciprocity in action while achieving enhanced course objectives that incorporated community voice.

Course description and objectives

The purpose of the Long Term Care Management course is to examine the environment and management of long-term health care organizations in the United States. The course focuses on external and internal long-term health care environments, the organization and delivery of services, and the administration, management and leadership of long-term care organizations. Core objectives for this course were designed as follows:

- Integrate concepts of long-term care theory and practice
- Analyze historical, present and future long-term care policies
- Describe key areas of long-term care including its structure and stakeholders
- Recognize challenges in both the external and internal environments of long-term care
- Collaborate with peers to develop innovative long-term care governance and management solutions
- Articulate how long-term care and fits within the broader picture of health care management
- Define and explain the importance of long-term care quality
- Apply long-term care management key concepts to long-term care problems and issues in practice
- Practice and improve both written and oral communication skills including effective listening exercises
- Incorporate ethics into the understanding and management of long-term care issues

Integration of experiential service-learning project

The course instructor worked closely with the university's Office of Community Engaged Learning (OCEL) to incorporate a service-learning project into the course objectives. In addition to the aforementioned core objectives, the course instructor collaborated with the OCEL to develop outcomes directly related to service-learning:

- Describe how diverse life histories and experiences shape an individual's personal values and choices.
- Effectively work individually and in small groups to deliberate across differences to build intergenerational bridges and enhance mutual understanding.
- Reflect on experience to acquire insights, derive personal meaning, and guide future action
- Understand how to improve the quality of people's lives through community service and learning
- Understand how civic engagement relates to long term health care

Students worked toward primary and service-learning course objectives while participating in a service-learning project in collaboration with community partners affiliated with a regional long-term care organization. The details of the service-learning project had been designed by the OCEL in collaboration with the existing community partners prior to being integrated with the course.

The goal of integrating this service-learning project within the Long Term Care Management course was to provide Health Care Administration & Management students with practical experience within the nursing home environment while providing benefit to nursing home residents and other community partners. The design of this project was developed to meet these goals. Each student in the course was partnered with nursing home resident to write the resident's life story. Students met with their assigned nursing home resident five times for one-hour sessions to interview their resident on the events that have shaped their lives. At the end of these sessions, students provided their assigned resident with a book that documented the findings of their interviews. This book ultimately reflected a narrative of the resident's life story. While interviewing each resident, students also asked them about the dreams that they still wished to fulfil in their life and worked with the community partners to make those dreams come true if and when possible.

As each student worked with their resident throughout the semester, they reflected on and discussed the lessons that they learned during their experience throughout the course. Community & campus partners, including the university Office of Community Engaged Learning helped to facilitate these reflections along with the course instructor.

The role of reciprocity and community voice

This course has been identified on the IUPUI taxonomy reciprocity attribute Level 1: "The Instructor contacts a community organization to host students and provides a brief overview of the course (e.g. learning outcomes, syllabus) and the purpose of community activities" (Hanh, Hatcher, Price and Studer, 2016.) The instructor of this course met with both campus and community partners during the development of the service-learning project integration to share existing course outcomes and develop some outcomes specific to service-learning for the course. A major focus of the initial reciprocal relationship was on the campus partnership with the Office of Community

Engaged Learning since the project was initially developed by the OCEL as a co-curricular program prior to course integration. The course instructor met with the campus partner, plus the community partner from the long term care facility, on a regular basis to share progression of the service-learning course and community objectives.

Community voice was integrated into reciprocal communication about course objectives largely by proxy through the service-learning campus partner (OCEL,) however the course instructor engaged in stakeholder meetings with the various community and campus partners during the course of the service-learning project semester. The course will continue to incorporate community voice as this service-learning integration evolves to enhance student learning outcomes and bridge the connection between the student's service and learning.

Principles of Marketing Course

The Principles of Marketing course at an urban private university was adapted to integrate a community and civic engagement experience with the city's Office of Nighttime Economy as a partner in three sections of the course in a way that immersed students in the community while supporting marketing course objectives, enhancing student learning and providing the community partner with valuable, needed marketing support.

Course description and objectives

The purpose of this Principles of Marketing course is for students to learn and apply fundamental marketing concepts to the business environment and utilize these concepts to identify markets and develop appropriate marketing plans. Course objectives for this course were developed as follows:

- Observe social and ethical responsibilities of marketing in our economy.
- Conduct, understand, evaluate and implement conclusions from marketing research.
- Effectively evaluate the price, product, place and promotion perspectives of a given product or service.
- Dissect markets into segments and select target market(s), justifying selections with research.
- Complete a SWOT analysis resulting in strategic marketing mix direction.
- Develop effective market positioning.
- Develop, write and present a marketing plan.

Integration of experiential service-learning project

The course instructor worked closely with the city manager of nighttime economy to incorporate an experiential service-learning project into the course. A scope of work

and plan for deliverables was developed in collaboration with the community partner that addressed course objectives as well as aligned with undergraduate business program objectives. Specific project-related components and deliverables included:

- Kick off meeting (orientation) with community partner
- Secondary research related to service-learning and the community partner
- Community partner neighborhood site visit and observation
- Mid project presentations and progress reports
- Strategic presentation of research, analysis and recommendations to community partner management team and written marketing planning report that includes (final format will be provided separately):
- Situation analysis
- Documentation and analysis of research findings including transferable best-in-class examples
- Summary review of observational research
- Best practice examples demonstrating how other organizations have aligned behavior management with residential and business objectives
- Summary review of potential marketing initiatives
- Completed public service announcement (PSA) digital video
- Recommendations for next steps
- Identification and evaluation of feasible alternatives versus agreed to criteria for success
- Bibliography of works cited

Project alignment with undergraduate business program objectives included:

Table 1
School of business program objectives aligned with experiential service-learning project

BUSINESS PROGRAM OBJECTIVES	EXPERIEINTIAL SERVICE-LEARNING PROJECT CONNECTION
• Work well with others and with a demonstrated appreciation of individual differences and a sensitivity to diversity	• Team project format • Community immersion/involvement
• Clearly communicate thoughts and ideas both verbally and in writing	• Written project submissions • Written reflections • Multiple presentations
• Apply information technology tools and techniques to meet the needs and expectations of the workplace	• Use of Microsoft, Google, and iMovie tools
• Analyze, integrate and communicate complex information to facilitate management decision-making	• Review of secondary research from scholarly sources, community plans, project-related artifacts • Completion of primary observational research; integration of research to provide evidence to support claims/recommendations
• Apply theory and practice in solving organizational problems	• Use of marketing theories and related business tools

The goal of the experiential service-learning project within the Principles of Marketing course was to provide students with practical marketing experience while providing benefit to a community partner. Students, in teams, focused on specific neighborhoods, immersed themselves in the neighborhoods first through background readings and research to build familiarity and then through primary observational research in the neighborhoods. Solid research and grounding in the neighborhood helped prepare students to move forward with marketing components and develop a marketing planning report and client presentation. In addition to instructor feedback, the community partner provided formal assessments at midpoint and end of project term.

The role of reciprocity and community voice

This course has been identified on the IUPUI taxonomy reciprocity attribute Level 3: “The instructor collaborates with and learns from the community partner(s) as co educators in various aspects of course planning and design (e.g. learning outcomes, readings, preparation/orientation of students, reflection, assessment) and together they identify how the community activities can enrich student learning and add to the capacity of the organization” (Hanh, Hatcher, Price and Studer, 2016). The course instructor co-created the service-learning component of the course with the community partner. Community partner representatives collaborated with the course instructor to develop course materials and served as project facilitators, providing instruction both in and outside of the classroom. Community partner representatives provided resource materials, presented in-class orientation for the project, attended a midpoint review session, and attended a final project presentation session. They were also available to consult with student teams throughout the semester.

Community voice was integrated into this service-learning project through the collaboration with the community partner, ongoing connection with the community partner and the primary observational research that took place in the community. Community interaction was a core component of the project, and student immersion in local neighborhoods facilitated service and learning.

Sport Sales and Revenue Generation Course

The Sport Sales and Revenue Generation course at an urban, private, Catholic university was designed to integrate experiential learning as a means to achieve course outcomes with an academic unit partner, enhancing student understanding and application of professional selling while assisting university athletics with ticket sales.

Course description and objectives

The purpose of the Sport Sales and Review Production course is to provide students with experience analyzing and developing skills essential to renewing existing sport customers essential to the revenue production and sales process commonly found in the sport business. In addition, students contribute to the university community by bringing alumni and students together for university sporting events. The course includes a study of sales, marketing, promotion and public relations strategies utilized in various aspects of the sport industry y, and sales of sport as a product and marketing of non-sports products using sport as a promotional tool. Learning goals for this course include the following:

- Introduce students to the application of basic principles of sales and consumer behavior to the managed sport industry.
- Gain appreciation for the revenue production function of a sport business operation.

- Demonstrate an understanding of sport business revenue streams and production tactics.
- Demonstrate core competencies in analyzing and responding to sport consumer behavior.
- Utilize messaging opportunities to effectively communicate with a sport business target market.
- Distinguish between direct and indirect selling approaches applicable to existing sport business consumers.
- Gain appreciation of sport sales psychology.
- Understand the components of long-term relationship development between consumers and sport businesses.

Integration of experiential service-learning project

The course instructor worked closely with the university's athletic department to incorporate an experiential learning project serving the university into the course objectives. In addition to the aforementioned core objectives, the course instructor collaborated with the athletic department to develop outcomes directly related to the experiential learning project:

- Demonstrate relevant inventory proficiency. 80% inventory analysis score required.
- Demonstrate understanding of assigned readings. 80% inventory analysis score required.
- Demonstrate role-play proficiency through proper execution of role play scenario. Clearance from instructor necessary.
- Demonstrate mock call proficiency through proper execution of mock call to team representative. Athletic Department representative approval necessary.
- Demonstrate sales call proficiency. Video/audio tape analysis and instructor approval required.
- Demonstrate referral-seeking proficiency. Video/audio tape analysis required.
- Demonstrate sale closing proficiency. Account payment required.
- Demonstrate account management proficiency through proper account recording keeping, documentation, and reporting.

The role of reciprocity and community voice

This course has been identified on the IUPUI taxonomy reciprocity attribute level 3: "The instructor collaborates with and learns from the community partner(s) as co educators in various aspects of course planning and design (e.g. learning outcomes, readings, preparation/orientation of students, reflection, assessment) and together they identify how the community activities can enrich student learning and add to the capacity of the organization" (Hanh, Hatcher, Price and Studer, 2016). The course

instructor has co-created the service-learning component of the course with the university athletics department. Representatives from the community partnered with the course instructor to develop course materials and are part of the course teaching team. Community partner representatives presented in-class orientation for the project then attended other course sessions as the students practice and learn to make outbound sales calls.

Community voice was integrated into this service-learning project, especially considering the relationship between the athletic department and the university community as a whole. In addition to generating revenue, the mission of the athletic department is to encourage community interaction - especially between alumni and students. Students in the Sport Sales and Revenue Generation course provide opportunity to bring the university community together by engaging alumni through outbound ticket sales calls. In addition, students in the course bring visitors into the university and city community by reaching out to opposing team fans to visit by attending a game.

DISCUSSION

There were many challenges before, during and after the development of integrated service-learning projects for each of the three courses studied. Lessons about developing reciprocity with community partners were found during the implementation of service-learning within each course. In addition, themes have emerged among all three courses that demonstrated the nature of reciprocity within service-learning as a continuum, as well as the importance of integrating community voice to bridge the gap between service and learning.

Lessons Learned: Long Term Care Management

Since the Long-Term Care Management service-learning project had initially been developed as a co-curricular voluntary university activity, it had not been specifically designed to meet course objectives when it began. The course instructor and community partners needed to work together closely to bridge the gap between service-learning co-curricular goals and service-learning curricular goals of the course. The course instructor will continue to collaborate with partners to bridge this gap through greater emphasis of community voice within learning outcomes.

Second, as the service-learning project began in the course, there were challenges with communication among the various partners in the project including the course instructor, the campus partner (OCEL) and other partners in the community. Improvements in communication will be an ongoing effort as this service-learning course integration continues to develop into the future. There is a need for students to gain more insight into the role of community voice and reciprocal collaboration. This will be achieved largely by improving class reflections to clarify connections between service and learning and the importance of community voice.

Last, there is significant room for improvement in the service-learning course outcomes and assessment of these outcomes. The course instructor will continue to work with its partners to refine objectives for the course related to the service-learning

project and to identify appropriate assessment tools to measure progress toward these outcomes. Assessment will measure attributes across the IUPUI taxonomy with a focus on reciprocity and community voice.

Lessons Learned: Principles of Marketing

There were a number of challenges and lessons learned through the development and implementation of this integrated service-learning team project within this Principles of Marketing course. First, it is critical to develop a project scope that sets parameters, provides an overview of the community partner situation and challenge, and identifies key project elements including partner touchpoints, minimum research needs, deliverables, and required reflections.

Second, it became clear during early project discussions with students that student baseline knowledge of the community partner was lacking. Assigning project pre-work to familiarize students with the client and the project was quickly added to facilitate familiarity and knowledge building. This should begin to build team collaboration, provide an overview of project, and facilitate critical thinking. Additionally, planning a project kick-off that functioned as an orientation can effectively introduce the client, provide an opportunity for student questions, and facilitate team collaboration and critical thinking.

Finally, the course can be improved by further refining reflections in order to clarify both the understanding of how marketing course objectives were achieved through the experiential service-learning project and well as the value of reciprocal collaboration. Reflections can be enhanced to help students gain more insight into reciprocal collaboration and develop student awareness of the impact of this project on both the community partner and the university community.

Lessons Learned: Sport Sales & Revenue Generation

The integration of service-learning within the Sport Sales and Revenue Generation course has been relatively smooth, although there are still some areas for improvement to connect service and learning for students in the course. First, reflections can be enhanced to develop student awareness of the impact of this project on the university community. For example, increased attendance at university sporting events enhances opportunities for alumni-student networking, exchange of ideas, and feeling of connectedness with the university community. Second, although reflections incorporate the partner athletic department at the beginning of the project, post-project reflections could also be enhanced incorporate stronger community voice. Third, a more formal feedback or assessment model could be incorporated into the course to incorporate community voice into assessment of the service-learning project outcomes.

Emerging Themes: The Continuum of Reciprocity and Community Voice as Bridging the Gap between Service and Learning

Two major themes emerged through the analysis of reciprocity and community voice within these three business courses.

First, as demonstrated by the application of the IUPUI service-learning taxonomy to the aforementioned case studies, reciprocal relationships within service-learning business courses are not one-size-fits-all and instead fall upon a continuum. A guideline such as the IUPUI taxonomy help course instructors to analyze where there may be gaps in various attributes of service-learning courses, but it is not possible to incorporate all of the nuances of service-learning in business within one comprehensive taxonomy. The nature of the partnership relationships within each of the three courses described demonstrates the diversity of these relationships and the various ways in which these relationships can continue to develop.

Second, the "learning" component of course service-learning projects in business often relies on practicing business skills to meet course objectives. However, it is equally important for students to develop engage in the mission of the community organization and how it relates to their mission as business students. This can be accomplished by incorporating community voice into all aspects of the course, so that students make the connection between overarching community goals and mission with the service-learning project in which they are engaged.

FUTURE RESEARCH

There are many opportunities to pursue further research to inform reciprocal partnerships and community voice for business-related service-learning courses. First, the continuum of reciprocity within service-learning and the specific challenges that this continuum presents to business faculty can be further developed.

Second, business courses have the opportunity to prepare students not only to generate profits for their future employers, but also to help students connect their career choices to ways that they can serve the community. In addition to the development of reciprocal relationships and community voice within service-learning, research on service-learning for business courses should also focus on how service-learning can develop civic identity and competencies for business students. This will help to prepare students for real-world problems that they will face in their future communities through both work and citizenship.

REFERENCES

Alvarez, C. Taylor, K., & Rauseo, N. (2015). Creating thoughtful salespeople: Experiential learning to improve critical thinking skills in traditional and online sales education. *Marketing Education Review, 25*(3), 233-243.

AACSB International – The Association to Advance Collegiate Schools of Business. (2018.) 2013 Eligibility Procedures and Accreditation Standards for Business Accreditation. 30.

Ayers, L., Gartin, T. L., Lahoda, B. D., Veyon, S. R., Rushford, M., & Neidermeyer, P. E. (2010). Service learning: Bringing the business classroom to life. *American Journal of Business Education*, 3(9), 55-60.

Bauermeister, M. C., Greer, J., Kalinovich, A. V., Marrone, J. A., Pahl, M. M., Rochholz, L. B., et al. (2016). Preparing students for leadership through experiential learning. *Journal of Leadership Education, 15*(3), 31-41.

Bettencourt, M. (2015). Supporting student learning outcomes through service learning. Foreign Language Annals, 48(3), 473-490.

Baasanjav, U.,(2013). Incorporating the experiential learning cycle into online classes. *Journal of Online Learning & Teaching, 9*(4), 575-589.

Bradley, C. L., & Saracino, M. (2013). The case for service-learning: Overcoming the obstacles. *Journal of Family and Consumer Sciences, 105*(2), 41-43.

Brail, S. (2016). Quantifying the value of service-learning: A comparison of grade achievement between service-learning and non-service-learning students. *International Journal of Teaching and Learning in Higher Education, 28*(2), 148-157.

Bringle, R. G., & Hatcher, J. A. (2009). Innovative practices in service-learning and curricular engagement. *New Directions for Higher Education,* (147), 37-46.

Bringle, R. G., Hatcher, J. A., & Muthiah, R. N. (2010). The role of service-learning on the retention of first-year students to second year. *Michigan Journal of Community Service Learning, 16*(2), 38-49.

Carlisle, S. K., Gourd, K., Rajkhan, S., & Nitta, K. (2017). Assessing the impact of community-based learning on students: The community-based learning impact scale (CBLIS). *Journal of Service-Learning in Higher Education, 6*

Carracelas-Juncal, C., Bossaller, J., & Yaoyuneyong, G. (2009). Integrating service-learning pedagogy: A faculty reflective process. *InSight: A Journal of Scholarly Teaching, 4*, 28-44.

Caspersz, D. & Olaru, D. (2017). The value of service-learning: The student perspective. *Studies in Higher Education, 42*(4), 685-700.

Celio, C. I., Durlak, J., & Dymnicki, A. (2011). A meta-analysis of the impact of service-learning on students. *Journal of Experiential Education, 34*(2), 164-181.

Coulter-Kern, R., Coulter-Kern, P., Schenkel, A. A., Walker, D. R., & Fogle, K. L. (2013). *Improving student's understanding of career decision-making through service learning* No. 47) College Student Journal.

Crutchfield, T. N. (2017). Critical service learning across two required marketing classes. *Journal of Education for Business, 92*(8), 371-379

Clark, J., & White, G. W. (2010). Experiential learning: A definitive edge in the job market. *American Journal of Business Education, 3*(2), 115-118.

DeSimone, F., & Buzza, J. (2013). Experiential learning: Improving the efficacy of an undergraduate business degree. *American Journal of Business Education, 6*(1), 7-24.

(The) Economist Intelligence Unit (2014). Closing the skills gap: Companies and colleges collaborating for change, p. 4. Retrieved from https://www.luminafoundation.org/files/publications/Closing_the_skills_gap.pdf

Gonzalez-Padron, T., & Ferguson, J. M. (2015). Using a service audit project for improving student learning in a service-marketing course. *Marketing Education Review, 25*(2), 99-116.

Grotrian-Ryan, S., Ryan, K., & Jackson, A. (2016). Instilling service learning to undergraduate business students: A case study approach to understanding business-related concepts with the use of kiva. *Journal of Education and Learning, 5*(1), 104-113.

Hahn Thomas W., Hatcher Julie A., Price Mary F., and Studer, Morgan L.. (2016.) IUPUI Taxonomy for Service Learning Courses – Course Design Centric for Institutional Assessment and Research. *IUPUI Center for Service & Learning Office of Community Engagement*. Retrieved from https://scholarworks.iupui.edu/handle/1805/10851

Hart Research Associates. (2015). *Falling short? College learning and career success*. Washington, DC: Association of American Colleges and Universities.

Hatcher, J. A., & Studer, M. L. (2015). Service-learning and philanthropy: Implications for course design. *Theory into Practice, 54*(1), 11-19.

Helms, M. M., & Whitesell, M. (2017). Structuring assignments to improve understanding and presentation skills: Experiential learning in the capstone strategic management team presentation. *Journal of Education for Business, 92*(7), 332-346.

Howard, J. P. F. (1998). Academic service learning a counternormative pedagogy. *New Directions for Teaching & Learning*, 1998(73), 21.

Kuh, G. & O'Donnell, K. (2013). *Ensuring Quality & Taking High-Impact Practices to Scale.* Washington, DC: AAC&U.

Learn & Serve for America's National Service-Learning Clearinghouse. (2010.) *Faculty Toolkit for Service-Learning in Higher Education*. S.D Seifer & K. Connors (Eds.) Community -Campus Partnerships for Health. P.5

Magnotta, S. (2018). Can you hear me now? an innovative experiential learning module to prepare Tomorrow's inside salespeople. *Marketing Education Review, 28*(2), 75-79.

Maguire, D. S. (2018). First year business practicum: Impacts of early experiential learning. *E-Journal of Business Education and Scholarship of Teaching, 12*(1), 88-101.

Maskulka, T. A., Stout, D. E., & Massad, V. J. (2011). Using and assessing an experiential learning project in a retail marketing course. *Journal of Instructional Pedagogies, 6*

McHann, J. C., & Frost, L. A. (2010). Integrating experiential learning into business courses: Using learning journals to create living case studies. *American Journal of Business Education, 3*(8), 1-12.

Truman, K., Mason, R. B., & Venter, P. (2017). A model to operate an on-campus retail store for workplace experiential learning. *Asia-Pacific Journal of Cooperative Education*, 18(1), 43-57.

Winsett, C., Foster, C., Dearing, J., & Burch, G. (2016). The impact of group experiential learning on student engagement. *Academy of Business Research Journa*l, 3, 7-17.

Young, C. A., Shinnar, R. S., Ackerman, R. L., Carruthers, C. P., & Young, D. A. (2007). Implementing and sustaining service-learning at the institutional level. *Journal of Experiential Education*, 29, 344-365.

ABOUT THE AUTHORS

Dr. Natalie Dick is Assistant Professor of Healthcare Administration & Management at Slippery Rock University School in Slippery Rock, PA. Contact: mnatalie.dick@sru.edu

Dr. Dorene Ciletti is the H.J. Heinz Company Endowed Chair in Business Management and Associate Professor and Director of the Marketing and Sales Program at Point Park University in Pittsburgh, PA.

Dr. Ronald Dick is Associate Professor of Sports Marketing at Duquesne University in Pittsburgh, PA.

Increasing Empathy and Awareness in Educator Preparation Through Social-Emotional Literacy Experiences with Children in Crisis Situations

Stefanie R. Sorbet
Lesley Graybeal

University of Central Arkansas

Abstract

This qualitative study examines service-learning reflections of 34 preservice teachers enrolled in a senior-level educator preparation course at a public university in the southern United States. Participants reflected on their experiences with an early literacy service-learning project with children in crisis situations. The service-learning project fulfilled course objectives of exposing preservice teachers to a variety of causes of challenging behavior in young children in an effort to increase awareness and understanding of behaviors and situations that may arise in the elementary classroom. This study addressed the following research questions: (a) how do preservice teachers engaging in early social-emotional literacy experiences describe the behavior of children in crisis situations, and (b) how do preservice teachers describe their own understanding, empathy, and openness following a service-learning experience with children from diverse backgrounds? Results from this study indicated that preservice teachers' exposure to children in crisis situations led them to increased awareness and understanding of challenging behavior in the classroom.

In today's educator preparation programs (EPPs), it is sometimes difficult to find quality field placements required for practicum teaching experiences within partnering school districts. While schools may not always be willing or able to allow interns or preservice teachers into their facilities to practice professional skills, service-learning projects with nonprofit community partners provide a potential avenue for undergraduate students to gain essential skills in authentic contexts that reach beyond observation while addressing community-identified needs (Brannon, 2013; Hildebrand & Schultz, 2015; Leon et al., 2019; Toronyi, 2020; Vavasseur, 2013; Williams & Lee, 2020). Research on preservice teachers' participation in service-learning has demonstrated impacts on their knowledge, confidence, bias recognition, and attitudes related to working with students from diverse backgrounds (Baldwin et al., 2007; Brannon; Chang et al., 2011; Conner, 2010; Cooper, 2007; Kajner, 2013; Leon et al.; Toronyi). As preservice teachers gain experience with children from diverse backgrounds, they enter into their repertoire of teaching a variety of interactions with children who represent diverse ethnicities, religions, cultures, and socioeconomic backgrounds, which further prepares them to teach in classrooms with students whose backgrounds are different from their own.

This study analyzes the reflections of 34 senior-level undergraduate preservice teachers upon completing a social-emotional literacy lesson with preschool-age children in crisis situations. This service-learning project was completed at a daycare center within a local homeless shelter serving children from six weeks old through high school age. The shelter had been in operation for over thirty years and at the time of the study the daycare center served approximately 60 children daily. Within the five years prior to this study, a new children's center was established, providing after school care in addition to the existing daycare program with a mission of supporting parents

staying at the shelter as they sought and obtained outside employment.

The purpose of this study was to examine the interactions and reflections of elementary education majors engaged in an episodic service-learning project with children in crisis situations in order to understand the impacts of the experience on preservice teachers' understanding, empathy, and openness. The study investigated the following research questions: (a) how do preservice teachers engaging in early social-emotional literacy experiences describe the behavior of children in crisis situations, and (b) how do preservice teachers describe their own understanding, empathy, and openness following a service-learning experience with children from diverse backgrounds?

This study is significant in that it analyzes how preservice teachers describe an episodic service-learning experience with children in crisis situations. Given that many types of service-learning and field experiences exist in higher education institutions, which may engage students in the community for varying durations, research on a variety of service-learning and field experience contexts is needed to understand the role of episodic service-learning in educator preparation.

Literature Review

Service-Learning in Educator Preparation

In educator preparation programs on college campuses, service-learning represents one way to infuse real-world experiences in surrounding communities into the curriculum. Giles and Eyler (1994) have pointed to John Dewey as a source of foundational theory for service-learning, and his assertion that hands-on experience has a crucial place in formal education similarly provided the impetus for field experiences in educator preparation programs. Giles and Eyler highlighted four criteria that Dewey established for a truly educational experience: the experience must generate interest, be intrinsically worthwhile, present problems that spur investigation, and foster development over time. Dewey, then, provided the original argument for meaningful field experiences that reach beyond observation to engage students in authentic problem-solving.

Numerous scholars of service-learning in educator preparation programs have argued the need for more meaningful field experiences and noted the value of service-learning as an authentic context for learning (Brannon, 2013; Hildebrand & Schultz, 2015; Leon et al., 2019; Toronyi, 2020; Vavasseur, 2013; Williams & Lee, 2020). Service-learning research has found wide ranging benefits for students across disciplines, from improved academic achievement (Celio et al., 2011) and critical thinking (Vogelgesang & Astin, 2000) to social and intercultural skills (Celio et al., Desmond et al., 2011; Kilgo et al., 2015; Vogelgesang & Astin; Wozencraft et al., 2014). A growing body of research supports the use of service-learning in educator preparation programs to build preservice teachers' understanding of how the environment and community influence students' experiences in schools (Nelson, 2013). Several studies have found service-learning to have long-term impacts on teachers' attitudes and behaviors (Brannon, 2013).

A particular focus of service-learning projects in educator preparation programs has been exposing predominantly white, female preservice teachers to the diversity of student backgrounds and experiences. Kajner and colleagues (2013) applied critical service-learning (Mitchell, 2008) to an educator training context to demonstrate how course concepts combined with intentional placements were used to raise preservice teachers' awareness of inequalities in the classroom and community. Leon and colleagues (2019) found that a service-learning project designed to expose preservice teachers to children with disabilities was successful in

reaffirming their career choices and enhancing their sense of social responsibility, while Anita Toronyi (2020) used meta-synthesis of research on service-learning projects that engaged preservice teachers with English Language Learners (ELLs) to observe that intentional placements and class discussions that focused on a social justice perspective shifted preservice teachers away from deficit-model thinking and reduced their belief in stereotypes. Pre-service teachers also gained relationship-building skills and confidence about working with students from diverse backgrounds.

A noticeable gap separates today's preservice teachers' lived experiences and that of the families and students that they may serve (Brannon, 2013). In Brannon's study, preservice teachers' reflections indicated that they experienced fear of working with students and parents whose cultural backgrounds were different from their own, and that the source of this fear was their limited experience. Brannon posited that service-learning experiences embedded within teacher education can provide an opportunity for preservice teachers to confront these fears and biases and better understand the cultures and environments of students. Brannon has further argued for the inclusion of a variety of service-learning opportunities throughout the college experience in order to achieve a breadth of experiences outside the classroom and achieve long-term changes in teachers' attitudes and behaviors (2013).

Field Experiences in Educator Preparation

Authentic field experiences are a valuable part of the preparation to be an educator. Educator preparation programs require specific field placement hours in order for preservice teachers to gain experiences with children prior to graduation and obtaining licensure. Preservice teachers require hands-on, practical experiences with children in order to gain expertise in their field, and participation in these experiences affects both teachers' and students' long-term success. According to an interview with Linda Darling-Hammond, teachers who are fully prepared remain in the profession at a higher rate than those less-prepared (Scherer, 2012). Darling-Hammond stated that teachers in the profession who have completed student teaching, been coached and observed in the field, and had opportunities to study child development and curriculum were less likely to exit the profession than those who did not have these opportunities (2012).

Research on clinical field experiences has established their role in preparing future educators with experiences of teaching and learning in K-12 schools (Hamilton & Margot, 2019), as well as the common problem of educator preparation programs lacking meaningful field experiences (Vavasseur et al., 2013). As Vavasseur and colleagues have established, field experience hours are often composed primarily of observation rather than interaction with students, as educator preparation programs focus primarily on meeting the required number of hours for field experiences rather than the depth of the learning experience for preservice teachers. Authentic and engaging field experiences throughout educator preparation programs provide opportunities for preservice teachers to meet specific educator standards prior to graduation, thus making them better prepared for the profession.

Universities with educator preparation programs and school districts cannot simply provide experience for preservice teachers without collaborating with the communities in which the schools serve (Zeichner et al., 2014). Field experiences that allow preservice teachers to work with children in authentic community contexts expose preservice teachers to a different perspective on children from diverse backgrounds in addition to the classroom encounters that allow them to practice what they are learning. Field experiences have become a necessary component of teacher preparation. Preservice teachers engaged in high levels of field experiences gain practical knowledge and practice that prepares them for their career. Educator

preparation programs build their coursework and field experiences to align with national and state teaching standards for professional educators. One way that educator preparation programs work to achieve such standards is to provide a variety of experiences in pedagogy and methodology throughout their programs.

One such set of standards, the Interstate Teachers Assessment and Support Consortium (InTASC) standards, were created to raise the level of learning in classrooms across the nation. The standards include (a) learner development, (b) learning differences, (c) learning environments, (d) content knowledge, (e) application of content, (f) assessment, (g) planning for instruction, (h) instructional strategies, (i) professional learning and ethical practice, and (j) leadership and collaboration (CCSSO, 2013). Educator preparation programs have modeled their programs to best prepare preservice teachers for meeting these standards when they begin teaching.

The Council for the Accreditation of Educator Preparation (CAEP) has set forth additional standards that educator preparation programs seeking initial licensure must follow in order for their program to be nationally accredited. Such standards for K-6 include (a) understanding and addressing each child's developmental and learning needs, (b) understanding and applying content and curricular knowledge for teaching, (c) assessing, planning, and designing contexts for learning, (d) supporting each child's learning using effective instruction, and (d) developing as a professional (CAEP, 2018).

While field experiences in educator preparation programs have changed over the years to meet standards such as those outlined by InTASC and CAEP, they remain tied to Dewey's ideal of "intelligently directed development of the possibilities inherent in ordinary experience" (1938, p. 40). This belief in the value of authentic experiences within any type of education has played a foundational role in service-learning and other types of experiential learning and remains a theoretical force shaping multiple aspects of educator preparation programs.

Social-Emotional Learning

As part of their assignment for the course, preservice teachers researched and identified a piece of children's literature that addressed one of the five social-emotional competencies as defined by the Collaborative for Academic, Social and Emotional Learning (CASEL). Preservice teachers chose a book that could be shared through a read-aloud with a child in an effort to increase knowledge of one of these five components.

CASEL (2021) defines social-emotional learning as learning that both children and adults need in order to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, maintain positive relationships, and make responsible decisions. CASEL wheel competencies include (a) self-awareness, (b) self-management, (c) social awareness, (d) relationship skills, and (e) responsible decision-making. CASEL supports all educators and policy leaders and enhances the experiences and outcomes for all PreK-12 students. By incorporating social-emotional lessons with children, teachers can increase students' ability to make appropriate behavioral choices that can improve the classroom community and behavior as a whole (Sorbet & Notar, 2020).

Research has demonstrated increases in social and emotional skills, attitudes, behaviors, and academic performance by K-12 students participating in social-emotional programming in schools. Durlak and colleagues (2011) summarized results from 213 school-based social-emotional learning programs in a meta-analysis that reviewed the follow-up effects of 270,034 students within grades K-12. The study reported gains by students who participated in these programs in social-emotional skills, attitudes, and positive behaviors and also demonstrated fewer behavior problems and lower levels of emotional stress. This study's results

are currently utilized by CASEL to further strengthen the need for continued social-emotional programming in K-12 schools. A 2017 press release by CASEL further summarized a follow-up study of long-term impacts of SEL programs, noting that 3.5 years after a social-emotional learning intervention, participating students' academic performance averaged 13 percentile points higher than their non-participating peers (Taylor et al., 2017, as cited in CASEL).

Challenging Behavior in Children

In order for preservice teachers to be able to be effective educators, they must apply multiple social-emotional skills to address challenging behavior in the classroom. Challenging behavior is defined by Kaiser & Rasminsky (2012) as a pattern of behavior in children that interferes with a child's cognitive, social, or emotional development. Challenging behavior is harmful to the child or others and puts a child at a high risk for social problems or failure in school. According to Kaiser & Rasminsky, challenging behavior may be exhibited by children in crisis situations, including those experiencing poverty, homelessness, foster care, abuse, neglect, or other situations beyond the child's control. The ultimate goal of a classroom teacher is to build trust and establish a sense of community where the child feels safe and has consistency in his or her life.

Preservice teachers who have experiences with children in crisis situations have the opportunity to increase self-awareness, self-management, social awareness, relationship skills, and responsible decision-making in the children they serve. In order to best understand challenging behavior in children in the classroom, preservice teachers must come to understand the underlying reasons for children's behavior. Through authentic field experiences such as service-learning and other community-based projects, preservice teachers can gain the expertise necessary to support children from diverse backgrounds who may be exhibiting challenging behavior in the classroom.

Alignment of Conceptual Framework

This study is rooted in the idea that preservice teachers need authentic field experience to gain knowledge and expertise within their profession in order to acquire skills and best practices in the elementary classroom. Service-learning provides such authentic experiences while simultaneously serving a community-identified need. Educator preparation programs training preservice teachers to be able to understand a variety of diverse learners can benefit from service-learning to expand preservice teachers' experiences beyond the classroom and make such experiences more intentional. Through this hands-on approach, preservice teachers interact with community members, increase their understanding of children's diverse backgrounds, and gain expertise and experience with children for their profession.

Methodology

Population and Sampling

This service-learning project was implemented within a required course designed for elementary education majors seeking a K-6 grade level teacher certification at a mid-size regional university in the southern United States. Elementary education preservice teachers enrolled in the course titled Guidance and Management of Children learn about why students in the elementary classroom may exhibit challenging behavior and the connection of behavior to crisis situations. Two sections of this course participated in the study, comprising all of the preservice teachers enrolled in a given cohort, and both sections met for one approximately three-hour class meeting per week for a 16-week semester. The course focused on addressing

challenging behavior through understanding the child's situation and needs. This course was designed to enhance preservice teachers' ability to be able to examine the cause of the challenging behavior demonstrated within the classroom and to determine if the behavior is due to the child experiencing a crisis situation.

Preservice teachers enrolled in the elementary program who participated in this study complete two semesters of classroom management courses. Preservice teachers are first introduced to social-emotional learning and the five CASEL components during their first semester of their junior year. The course introduces preservice teachers to positive approaches to classroom management while incorporating social-emotional learning in the elementary classroom. Preservice teachers enrolled in the elementary program proceed to the course Guidance and Management of Children in their senior year.

Also during their senior year, preservice teachers intern in field experiences twice weekly in an elementary classroom. During this time, they observe the significance of social-emotional learning and the impact that a positive classroom environment has on classroom management. The interns write a lesson plan addressing one of the five CASEL components within their morning meeting lesson. Preservice teachers begin to gain understanding of challenging behavior through hands-on and authentic experiences and begin to rely on research and best practices for supporting children who exhibit challenging behaviors. Preservice teachers learn that some challenging behaviors are the result of children dealing with crisis situations at home while some are not. Overall, the educator preparation program studied seeks to combine the academic study of classroom management with field experience to equip preservice teachers with best practices for approaching challenging behavior as well as empathy and understanding for children experiencing crisis situations who may exhibit these behaviors in the classroom.

Participants and Demographics

The participants for this study were 34 preservice teachers enrolled in a senior-level classroom management course required for their curriculum in K-6 grade level teacher certification at a state university within the southern United States. All 34 (100%) of the preservice teachers identified as female; 24 (71%) identified as white, two (6%) identified as African American, four (12%) identified as Hispanic, and one (3%) identified as American Indian.

The community site visited by the preservice teachers in this study was a homeless shelter with an on-site daycare center in an urban area in the southern United States. The shelter had served the community for over thirty years and had established a children's center to provide appropriate child care during the day for young children and after school care for school-age children. This childcare allowed parents to seek and obtain employment without the concern of their children's care throughout the day. The center enrolled children from a diversity of cultural and socioeconomic backgrounds. Some children at the center were living in the homeless shelter with their families, while some were children of employees at the center. No specific demographic information about the children was included in this study. Preservice teachers in the study visited the children's center together on the same day and rotated amongst the classrooms. The preservice teachers in this course visited the center on one weekday during the hours of 9:00 am to 11:00 am and spent approximately two hours at the facility.

Parents of the children at the center were familiar with the practice of community volunteers visiting the facility, and the facility maintained signed parent release forms on file for the children in each classroom and informed participants ahead of time of any children who were not allowed to participate or be photographed. Because the focus of this study was on the impacts of pedagogical practices for university students and no children were included as study

participants, the researcher received an exempt Institutional Review Board approval to collect and analyze data from student reflections. The approved IRB application #19-108 is currently on file with the university.

Data Collection

A convenience sample was used for this study. Preservice teachers enrolled in a service-learning course were the participants of this study. Hermeneutic phenomenology provided the qualitative design for this study, as it is focused on the subjective experience of specific individuals (Kafle, 2011). For the purposes of this study, only qualitative data from preservice teachers' reflections were analyzed. The researcher used inductive coding, which relies on creating generalizations based on observations of a limited number of related experiences, to identify themes that emerged from the responses (Gay et al., 2012).

The one-page reflection is common practice for preservice teachers to examine their own thoughts and beliefs coming into the field of education and align those to current research presented to them in their educator preparation programs. To complete the reflection included in this study, participants connected initial feelings of understanding, empathy, and openness, their insights from previous reflections and class discussions, and the service-learning experience. This study focused on the immediate responses of participants upon completion of an episodic service-learning experience and the connections in-class learning about understanding, empathy, and openness.

Throughout this course preservice teachers were encouraged to use thoughtful reflection to carefully identify their own thinking about their teaching practices regarding classroom management. Preservice teachers additionally reflected through discussions as a class and in small groups to determine best practices rooted in the research of classroom management theorists and behaviorists. Preservice teachers reflected often throughout the semester as they determined which rules, procedures, and expectations that they would put forth in their classrooms to best support and provide positive guidance to their students. The research questions for this study came from one of many reflective activities done throughout this course. This reflection was completed immediately following preservice teachers' service-learning experience at the center.

Instrumentation

The preservice teachers participating in the study were asked to write a one-page written reflection of their experiences at the shelter upon completion of the service-learning experience. An initial component of the assignment was to research an area of crisis experienced by children, such as poverty, homelessness, foster care, abuse, neglect, or others, to gain familiarity with possible conditions that children may be experiencing. The second part of the assignment was to respond to a reflective question which asked the following:

> Write a 1-page reflective summary of your experience with this unit of study. Be sure to address not only what you learned through your research, but also how your interactions with children at the facility increased your level of understanding, empathy, and openness related to your previous assumptions and level of understanding of children in crisis.

Service-Learning Project Studied

To incorporate social-emotional learning objectives within this course, and to provide early literacy experiences to children in crisis situations, the researcher was awarded a small seed grant from the university to purchase the children's literature for the children at the center.

Funds were secured in the amount of $250 to purchase age-appropriate children's books focused on social-emotional learning incorporating the CASEL competencies of self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, 2020). The picture books were chosen based on themes related to these five competencies.

The preservice teachers who participated in this study visited the nonprofit community shelter in an urban area of the southern United States one weekday during the hours of 9:00 am to 11:00 am and spent those two hours conducting a read aloud activity. Upon arrival at the shelter, the preservice teachers each received one of the newly purchased children's books to use in the read aloud activity. Preservice teachers were divided into two groups during this visit. The day began with a briefing from the coordinator who gave background information on the families of the children in attendance and a tour of the facility.

Upon completion of the tours, the participants completed a read aloud of their social-emotional literacy picture books with the 3- and 4-year-old children assigned to them by the classroom teachers. During these interactions the professor of the course divided her time among the two preschool classrooms observing, assisting, and providing feedback on behavior management techniques to assist the preservice teachers as they completed the read aloud. The classroom teachers and staff assisted, monitored, and provided immediate feedback throughout the read aloud as well in an effort to support children's engagement during the activity.

Preservice teachers read the books to the children and discussed the overarching social-emotional themes within each book. Preservice teachers also made connections to the child's feelings and emotions toward the book, connecting CASEL core competencies as they reread the child's favorite selections. Before closing the reading activity with the child, the preservice teacher modeled how to write the child's name on the inside cover of the book and gifted it to the child. After the preservice teachers completed their read-alouds, they showed their appreciation for the children's participation through giving the books to the children. The preservice teachers said their goodbyes and thanked the classroom teachers by offering them a classroom book as a donation.

The preservice teachers concluded their visit by gathering into a multipurpose room for a debriefing with the coordinator and the professor. The coordinator thanked the preservice teachers for their service and partnership in conducting the activity and invited their continued engagement with the center. The professor then asked general questions to the preservice teachers about the read aloud activity and experience. The professor reminded the preservice teachers during the debrief to share about their experiences in more depth in their reflection assignment to be completed that evening.

Analysis

For the purposes of this study, only qualitative data from the reflections were analyzed. Each reflection was printed with the preservice teacher's name removed and analyzed by the researcher. The researcher used inductive coding (Gay et al., 2012) to analyze the qualitative data and identify overarching themes across the 34 reflections submitted. The researcher created thematic memos with data supporting each theme during analysis of these reflections.

Results

This study presents results for two research questions: (a) how do preservice teachers engaging in early social-emotional literacy experiences describe the behavior of children in

crisis situations, and (b) how do preservice teachers describe their own understanding, empathy, and openness following a service-learning experience with children from diverse backgrounds? Of the reflections made by the preservice teachers, three themes emerged. These emergent themes were empathy, connections to literacy, and classroom management.

Research Question 1

The first research question asked how preservice teachers engaging in early social-emotional literacy experiences described the behavior of children in crisis situations. Preservice teachers' reflections indicated their belief or observation that the children were excited to have visitors to their classroom. One reflected, "I enjoyed reading to the children and I could tell they were all so excited to have all these visitors. The child I read to was such a sweetheart and I hated leaving him." Another reflection stated, "The little boy that I read to was the sweetest. He sat on my lap as I read the two books to him. He enjoyed every minute of it." Participants from this study felt connections to the children and shared their perceptions that the interactions were positive experiences for the children. Preservice teachers observed that the children were attentive and appeared to enjoy having an adult read to them.

Other preservice teachers noted that the children did not seem to be immediately engaged in the read-aloud activity. These preservice teachers noted times when they struggled to gain and maintain a child's attention during the literacy experience. One reflection stated, "She reluctantly agreed after several prompts, yet she was not listening to the book as I read." Another stated, "I was able to read to a little girl. She didn't find as much interest in the books as she did in me." Other reflections described the physical behaviors of the children; as one preservice teacher noted, "One child I was reading to did not want to come out from under the table at first…just needed a bit of encouragement." Another preservice teacher recalled of a child, "While I was working with him, he was very squirmy and was not very interested in the book." It was evident in the reflections that some preservice teachers perceived the children as unengaged in the reading of the picture books based on their behavior, while overall the reflections demonstrated a belief that the children enjoyed the literacy activity.

Research Question 2

The second research question asked how preservice teachers described their own understanding, empathy, and openness following a service-learning experience with children from diverse backgrounds. Preservice teachers' reflections included several responses connecting empathy to their experiences. Reflections noted that students in their future classrooms may come from a variety of cultures, experiences, circumstances, and family backgrounds, but they also connected that a teacher's job is to ensure that the classroom is safe for all students. The preservice teachers noted that the trip to the shelter helped them to broaden their perspectives and deepen their knowledge of crisis situations and their role in children's physical, social, and academic lives. Other responses explained the need for teachers to be responsive to students' needs and feelings while at school.

One preservice teacher reflected, "From this trip, I realized that you cannot just assume about a child's home life based upon immediate interactions." Another reflection stated, "This trip motivated me to be even more passionate and proactive with how I help students in crisis in my future classroom." As another preservice teacher shared, "Overall, the field trip provided me with an opportunity to become aware of the fact that poverty and homelessness surrounds us, and it takes empathy and openness to understand those who may be in crisis." These preservice teachers were able to draw upon these experiences to connect what was learned in class regarding children in crisis situations with the service-learning experience and realize that

children within their classrooms may come from a variety of backgrounds and home circumstances. Preservice teachers in this study were able to increase their own social-emotional skills of social awareness as they were made aware of children in crisis and behaviors that may arise due to these situations.

Preservice teachers in this study perceived that the children were not in control of their home situations. One preservice teacher wrote, “These students do not get to choose the situation they’re in, and their parents don’t have total say either, so we must be open to working with these students and cheering them on.” Another reflection stated, “I used to ignorantly think that being homeless was a ‘choice.’ In my young mind I wondered, ‘Why won’t they just get a job?’ But all along, it was so much deeper than that.” After this community project, some participants in this study perceived that homelessness could happen to anyone at any time. Preservice teachers within this study came to the realization that the crisis situations that children experience are not always visible in the classroom, and that children have limited control of their home situation. These preservice teachers gained insight into possible causes of challenging behavior due to crisis situations and they were able to add this knowledge and authentic experience to their repertoire from which they can pull as classroom teachers.

Discussion

During this service-learning project, preservice teachers gained authentic field experiences with young children while providing social-emotional literacy experiences. These preservice teachers explored the connections between children experiencing crises such as poverty and homelessness and challenging behaviors exhibited in the classroom. Most preservice teachers have very limited interactions with the community and families that they serve in their classrooms (Brannon, 2013). Immersing preservice teachers in service-learning opportunities can challenge their preconceptions and add to preservice teachers’ professional knowledge.

In addition to the answers to this study’s research questions, two themes emerged from the analysis of the qualitative data from the reflections written by the preservice teachers. Themes present within the preservice teachers’ reflections of their experiences at the homeless shelter were empathy and literacy. The reflections showed the theme of empathy as students described their own feelings when interacting with students in crisis situations. Reflections also highlighted the literacy experience itself and aspects of early literacy development. Preservice teachers used both of these themes to discuss classroom management principles.

Empathy

Developing the theme of empathy, preservice teachers’ responses included descriptions of their feelings that the children were victims of circumstances beyond their control, as well as expressions of commitment to the children’s wellbeing. One reflection stated, “Overall, I’m really glad I got to experience this and dive deeper into a very real problem that I know as a teacher I will need to stay educated on to do my best by my students and protect their well-being.” Another preservice teacher reflected that the children did not ask to be born into a crisis situation. This reflection points to the idea that preservice teachers within this experience observed that childrens’ behaviors are connected to circumstances beyond their control. Preservice teachers connected that they would be teaching children from “all kinds of experiences, circumstances and backgrounds. Extreme poverty, along with homelessness, abuse and neglect, foster care and natural disasters have a huge impact on these kids and their development.” Preservice teachers expressed the belief that the experience broadened their

perspectives on children in crisis situations and also connected how crisis situations played an active role in the child's development.

Interactive Literacy Experiences

Literacy was a second theme that emerged from the reflection data collected. Preservice teachers reflected that they enjoyed the experience of reading to the children and expressed a belief that the children were also excited to spend time with the preservice teachers. One preservice teacher wrote, "The children cling to visitors and enjoy being read to. I did not expect this." Another preservice teacher reflected on the experience of reading to the children stating, "I read to a child that did not show any signs of behavior issues and was very engaged and interested when reading the book. He made comments about the funny parts, and knew what the front, back, and spine of the book was." Preservice teachers in this study expressed the perception that the literacy read-aloud activity was an enjoyable experience for the children involved, sometimes revealing their own sense of surprise at the children's enjoyment.

Preservice teachers in this study also reflected on the children's reactions to receiving their own books following the activity. The reflections additionally indicated the belief that the children were excited by the sense of ownership of the book. One reflection recalled, "Once I told him that he would get to keep these books and that they now belonged to him since his name was in them, his face lit up with the biggest smile. He was so excited to have something that belonged to him and only him." Another reflection was similar stating, "Her face lit up when we wrote her name in the books and told her she was going to be able to keep them for herself. She told us thank you multiple times and gave us a lot of hugs when we had to leave." Preservice teachers in this study experienced a variety of emotions as they gifted their books to the children and gained many internal rewards from this opportunity that they can carry with them into their professional journey.

Connection to Classroom Management

The academic curriculum for the service-learning course studied was rooted in guidance and management of children. The curriculum and aligned objectives for the course address the diversity of backgrounds and behaviors that children bring to an elementary classroom. The objectives in the course also seek to increase preservice teachers' understanding of children in crisis situations and the impact of these crises on their behavior in the classroom. The preservice teachers' reflections provided evidence of connections between course content related to crisis situations and an episodic service-learning experience with children living in a homeless shelter.

One preservice teacher indicated that classroom management required being open to all students, "not only with how I will teach them, but how I care for them as well." Other reflections on the experience further indicated an awareness that teaching children in crisis situations would require intentional effort from a teacher. One reflection stated, "As an educator, I understand it is important to reach the different needs of your student in regards to learning styles. In the future, I plan to integrate social-emotional skills throughout my lesson and conduct morning meetings that'll be specifically planned to counsel the students in need." Another preservice teacher reflected, "The idea brings me back to the quote, 'the child is not giving you a hard time, he's having a hard time.' I will remember this when I have students who are living in crisis in my future classroom. I now know better ways to help them cope, be successful, and feel supported in my classroom." Preservice teachers gained insight through this experience as they came to realize that children's behavior may be a direct result of their life's journey and

beyond their control. Preservice teachers learned that as educators they will have to assess the whole child in order to provide engaging lessons that meet educational as well as social and emotional needs.

Reflections also indicated that some children did not show any signs of challenging behavior. As one preservice teacher wrote, “I read to a child that did not show any signs of behavior issues and was very engaged and interested when reading the book. While I was in the classroom, I did see and hear some things that allowed me to make connections to my research and to what we have discussed in class.” Reflections such as this demonstrated the preservice teacher’s realization that not all students in crisis situations or from a particular background may exhibit challenging behaviors. Takeaways such as these may decrease the preservice teacher’s reliance on stereotypes and make them more aware of the biases they bring to the classroom as they engage in field experiences.

New Strategies for Preservice Teachers and Educator Preparation

Through this service-learning project, preservice teachers began to formulate their own individual philosophies of management and guidance of challenging behavior in the elementary classroom while coming to understand that the children they will teach come from many diverse backgrounds and experiences. As an episodic service-learning experience, the project did not provide preservice teachers with the opportunity to repeatedly reflect and apply new strategies; however, preservice teachers used metacognitive strategies throughout their own classroom learning, service-learning project, and reflection to develop new ways of thinking about children’s behaviors. Analysis of preservice teachers’ reflections on their experiences confirmed the findings of other studies of service-learning in educator preparation programs, particularly those that found impacts on preservice teachers’ openness, confidence, and commitment to working with children from diverse backgrounds (Leon et al., 2019; Toronyi, 2020).

This study also supports the value of educator preparation programs using service-learning experiences in community settings to place preservice teachers in authentic contexts for understanding children’s diverse backgrounds. Preservice teachers in this study broadened their perspectives of children in crisis situations and gained a more nuanced understanding of the relationship between crisis situations and behavior. Preservice teachers who might otherwise have responded to challenging behavior through discipline may instead focus on helping children to cope with challenges and succeed in the learning environment.

Limitations and Future Directions for Research

As this study used analysis of written reflection data collected at a single point in time following a service-learning experience, results reflect preservice teachers’ perceptions of their own empathy rather than a measurement using a survey instrument before and after the experience. Additionally, because all preservice teachers in the cohort were required to participate in the same service-learning experience, preservice teachers’ reflections cannot be compared with others who did not participate in the experience. While this study can provide insight into the experiences of one group of preservice teachers, additional research taking a comparative approach is needed to more fully understand the relative impacts of various types of service-learning and field experiences. One such opportunity would be to compare the reflections of preservice teachers engaging in different lengths of service-learning experiences with children in crisis situations. Additionally, further longitudinal study is needed to understand how service-learning experiences may inform preservice teachers’ pedagogy and classroom management once they have entered the profession, particularly compared with preservice

teachers who did not participate in service-learning experiences engaging with children in crisis situations.

Conclusions

Preservice teachers are called to the profession to teach the whole child. At a time when teachers are expected to wear many hats, one such hat is one of understanding and empathy in order to best provide students with a safe learning environment at school. Immersing preservice teachers in field experiences with children from diverse backgrounds, including children in crisis situations, offers preservice teachers authentic opportunities to gain practice and expertise in serving a variety of childrens' diverse needs. Engaging with children exhibiting challenging behaviors due to crisis situations prior to the first year of teaching will provide the new teacher some basic skills necessary to be able to best support and manage all learners in their classrooms.

The preservice teachers involved in this service-learning project witnessed first-hand how children within their classrooms may be dealing with situations beyond their control that may cause some of them to exhibit challenging behavior. Preservice teachers' reflections in this study indicated that an episodic service-learning experience with children in crisis situations increased their own empathy and understanding of children they may teach in their future classrooms. This experience added to the preservice teachers' repertoire of initial reactions and responses toward children in the elementary classroom who exhibit challenging behavior due to crisis situations and helped preservice teachers to recognize new strategies for better understanding and responding to these children. By providing service-learning projects that incorporate early literacy experiences with children in crisis situations, educator preparation programs can provide preservice teachers with first-hand encounters in guidance and management of children prior to their first year of teaching.

Service-learning projects such as these that provide learning opportunities for children in crisis while simultaneously engaging preservice teachers in the areas of diversity, classroom management, and instruction are an important component of educator preparation. When preservice teachers are prepared for their experiences with intentional classroom instruction and critically examine them through guided reflection, episodic service-learning projects can increase preservice teachers' empathy and awareness of the sources of challenging behavior in the classroom. Experiences such as these remind us as educators that all children, regardless of their life experiences and the behaviors they use to cope, may be just as excited to engage in learning activities as other children in the classroom. Service-learning projects, when intentionally designed, provide preservice teachers with a window into children's life experiences and allow them to enter into their profession with more empathy and understanding. Preservice teachers in this study gained insight into the crisis situations that children may face and realized the importance of a positive learning environment where all children can feel supported and thrive.

References

Baldwin, S. C., Buchanan, A. M., & Rudisill, M. E. (2007). What teacher candidates learned about diversity, social justice, and themselves from service-learning experiences. *Journal of Teacher Education, 58*(4), 315-327. https://doi.org/10.1177/0022487107305259

Brannon, D. (2013). Using service-learning to increase pre-service teachers' sense of self-efficacy regarding parent involvement. *Journal of Service-Learning in Higher Education, 2*, 24-36.

Celio, C.I., Durlak, J., & Dymnicki, A. (2011). A meta-analysis of the impact of service-learning on students. *Journal of Experiential Education, 34* (2), 164-181. https://doi.org/10.1177%2F105382591103400205

Chang, S., Anagnostopoulos, D., & Omea, H. (2011). The multidimensionality of multicultural service-learning: The variable effects of social identity, context and pedagogy on pre-service teachers' learning. *Teaching and Teacher Education, 27*(7), 1078-1089. https://doi.org/10.1016/j.tate.2011.05.004

Collaborative for Academic, Social, and Emotional Learning. (2017). A major new research study: Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects. *2017 Meta-Analysis.* https://casel.org/2017-meta-analysis/

Collaborative for Academic, Social, and Emotional Learning. (2021). *SEL: What are the core competence areas and where are they promoted?* https://casel.org/sel-framework/

Conner, J. O. (2010). Learning to unlearn: How a service-learning project can help teacher candidates to reframe urban students. *Teaching and Teacher Education, 26*(5), 1170-1177. https://doi.org/10.1016/j.tate.2010.02.001

Cooper, J. (2007). Strengthening the case for community-based learning in teacher education. *Journal of Teacher Education*, 58, 245-255. https://doi.org/10.1177/0022487107299979

Council for the Accreditation of Educator Preparation. (2018). *CAEP 2018 K-6 Elementary Teacher Preparation Standards.* http://caepnet.org/accreditation/caep-accreditation/caep-k-6-elementary-teacher-standards

Council of Chief State School Officers. (2013). *InTASC Model Core Teaching Standards and Learning Progressions for Teachers 1.0: A Resource for Ongoing Teacher Development.* https://ccsso.org/sites/default/files/2017-12/2013_INTASC_Learning_Progressions_for_Teachers.pdf

Desmond, K.J., Stahl, S.A., & Graham, M.A. (2011). Combining service learning and diversity education. *Making Connections: Interdisciplinary Approaches to Cultural Diversity, 13*(1), 24-30.

Dewey, J. (1938). *Experience and Education.* Touchstone.

Durlak, J. A., Weissberg, R.P., Dymnicki, A.B., Taylor, R.D., Schellinger, K.B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, *82*(1), 405-432. https://doi.org/10.1111/j.1467-8624.2010.01564.x

Gay, L.R., Mills, G.E., & Airasian, P. (2012). *Educational Research Competencies for Analysis and Application.* Pearson.

Giles, D.E. & Eyler, J. (1994). The theoretical roots of service-learning in John Dewey: Toward a theory of service-learning. *Michigan Journal of Community Service Learning*, *1*(1), 77-85. http://hdl.handle.net/2027/spo.3239521.0001.109

Hamilton E.R.& Margot K.C., (2019). Preservice teachers' community-based field experiences. *Frontiers in Education, 4*. https://doi.org/10.3389/feduc.2019.00115
Hildenbrand, S. M., & Schultz, S. M. (2015). Implementing service learning in pre-service teacher coursework. *Journal of Experiential Education, 38*(3), 262–279. https://doi.org/10.1177/1053825915571748

Jenkins, A & Sheehey, P. (2012). A checklist for implementing service-learning in higher education. *Journal of Community Engagement and Scholarship, 4*(2). jces.ua.edu/a-checklist-for-implementing-service-learning-in-higher-education

Kafle, N.P. (2011). Hermeneutic phenomenological research methods simplified. *Bodhi: An Interdisciplinary Journal*, 5(1), 181-200. https://doi.org/10.3126/bodhi.v5i1.8053

Kaiser, B. & Rasminsky, J.S. (2012). *Challenging Behavior in Young Children: Understanding, Preventing, and Responding Effectively* (3rd ed.). Pearson.

Kajner, T., Chovanec, D., Underwood, M., & Mian, A. (2013). Critical community service learning: Combining critical classroom pedagogy with activist community placements. *Michigan Journal of Community Service Learning, 19*(2), 36–48. http://hdl.handle.net/2027/spo.3239521.0019.203

Kilgo, C.A., Ezell Sheets, J.K., & Pascarella, E.T. (2015). The link between high-impact practices and student learning: Some longitudinal evidence. *Higher Education, 69*(4), 509-525. https://doi.org/10.1007/s10734-014-9788-z

Leon, R. Kraai, R., & Dowd, K. (2019). Preparing teachers for special education: Lessons from a service-learning class. *International Journal of Research on Service-Learning and Community Engagement, 7*(1), 1-15.

Mitchell, T. D. (2008). Traditional vs. critical service-learning: Engaging the literature to differentiate two models. *Michigan Journal of Community Service Learning, 14*(2), 50– 65. http://hdl.handle.net/2027/spo.3239521.0014.205

Nelson, R. (2013). A model for using service-learning in teacher education programs. *US-China Education Review, 3*(1), 59-65. https://www.scribd.com/document/212788703/US-China-Education-Review-2013-1A

Scherer, M. (2012). The challenges of supporting new teachers**:** A conversation with Linda Darling-Hammond. [Supporting beginning teachers.] *Educational Leadership. 69*(8) 18-23. http://www.ascd.org/publications/educational-leadership/may12/vol69/num08/The-Challenges-of-Supporting-New-Teachers.aspx

Sorbet, S. (2020) Motivating and meeting students' diverse needs with positive classroom design and social-emotional learning. *World Journal of Educational Research, 7*(3), 107-120. https://doi.org/10.22158/wjer.v7n3p107

Strage, A. (2000). Service-learning: Enhancing student learning outcomes in a college-level lecture course. *Michigan Journal of Community Service Learning, 7,* 5-13. http://hdl.handle.net/2027/spo.3239521.0007.101

Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects. *Child Development, 88*(4), 1156-1171. https://doi.org/10.1111/cdev.12864

Toronyi, A. (2020). Preservice teachers working with English Language Learners: A meta-synthesis of service-learning as an effective pedagogical tool. *Journal of Service-Learning in Higher Education, 11*. https://journals.sfu.ca/jslhe/index.php/jslhe/article/view/207

Vavasseur, C. B., Hebert, C. R., & Naquin, T. S. (2013). Pre-service teachers serving students: Service-learning through virtual tutoring case study. *Journal of Service-Learning in Higher Education, 2*, 47-61. https://journals.sfu.ca/jslhe/index.php/jslhe/article/view/37

Vogelgesang, L. J. & Astin, A. W. (2000). Comparing the effects of community service and service-learning. *Michigan Journal of Service Learning, 7*(1), 25-34. http://hdl.handle.net/2027/spo.3239521.0007.103

Williams, P. H., & Lee, C. K. (2020). Developing preservice elementary teachers' professional identity as science teachers through community-based service-learning. *International Journal of Research on Service-Learning and Community Engagement, 8*(1), 1-15. https://doi.org/10.37333/001c.18784

Wozencraft, A., Pate, J.R., & Griffiths, H.K. (2014). Experiential learning and its impacts on students' attitudes toward youth with disabilities. *Journal of Experiential Education, 38*(2), 129-143. https://doi.org/10.1177%2F1053825914524363

Zeichner, K. M., Brayko, K., & Payne, K. (2014). Democratizing teacher education. *Journal of Teacher Education*, *66*(2), 122-135. https://doi.org/10.1177/0022487114560908

About the Authors

Stefanie R. Sorbet is an assistant professor at the University of Central Arkansas. She is the K-6 program coordinator and instructs elementary classroom management courses within the Elementary, Literacy, and Special Education Department of UCA's College of Education. Her research interests include novice teacher mentoring and sustainability, coaching administrators to support novice teachers, service-learning as field experiences, and social-emotional learning and the connectivity to positive classroom design.

Ssorbet1@uca.edu

Lesley Graybeal is the Director of Service-Learning at the University of Central Arkansas. Her research interests include intersectional service-learning impacts, community partnership development, community partner perspectives, and community-based qualitative inquiry.
lgraybeal@uca.edu