

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

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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

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.

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 develop	Adjusting group structures; subgroups can continue but less an issue of trust and dissention	Issue clarification, member interests; conflict can be frequent but brief	Unified Interests and business; conflict decreases
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 communication networks	Members identifying conflict & initial discussion of conflict management and decision-making <i>or</i> 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
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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.

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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 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

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.

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 & Illustre, 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

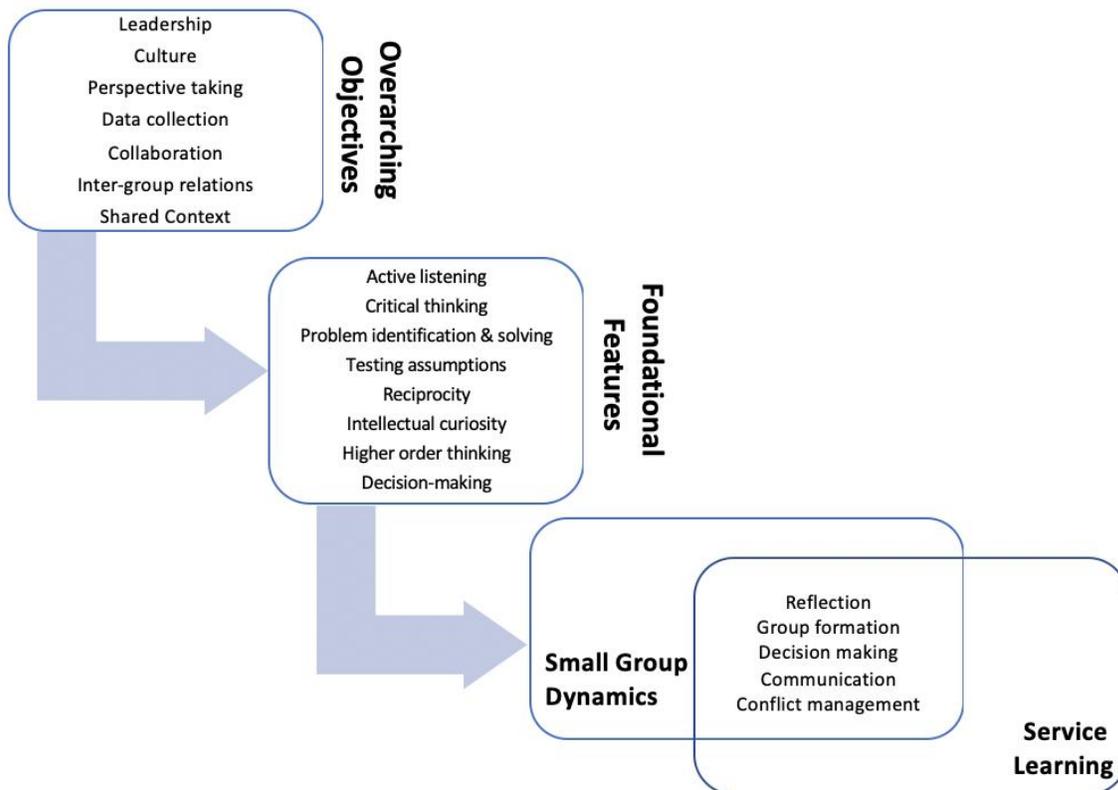
For service-learning researchers and practitioners, the layering of small group dynamics upon service-learning offers a wealth of information. This information is crucial to understanding the possible avenues for utilizing complementary pedagogical approaches to strengthen the desired structures, processes, 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%3A1HIE.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., Kosteci, 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/10.1177/1059601116681127>

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.han dle.net/2027/spo.3239521.0014.104>

Oakley, B., Felder, R. M., Brent, R., & Elhadj, 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](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/teachlearning.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?

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