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**HOW SUPPLEMENTAL INSTRUCTION (SI) LEADERS EXPERIENCE  
TRANSFORMATIVE LEARNING AND THE NATURE OF CIVIC  
ENGAGEMENT AS A RESULT OF SERVING IN A PEER LEADERSHIP ROLE  
IN HIGHER EDUCATION**

by  
Neva Lozada

A Dissertation

Submitted to the  
Department of Educational Services and Leadership  
College of Education  
In partial fulfillment of the requirement  
For the degree of  
Doctor of Education  
at  
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Dissertation Chair: Ane Turner Johnson, Ph.D.

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## Abstract

Neva Lozada

### HOW SUPPLEMENTAL INSTRUCTION (SI) LEADERS EXPERIENCE TRANSFORMATIVE LEARNING AND THE NATURE OF CIVIC ENGAGEMENT AS A RESULT OF SERVING IN A PEER LEADERSHIP ROLE IN HIGHER EDUCATION: A CASE STUDY

2017-2018

Ane Turner Johnson, Ph.D.

Doctor of Education

To empower students to become influential social change agents, institutions of higher education must move away from traditional academic models of civic engagement and toward alternative approaches of engaging students outside of the classroom. Providing students an opportunity to serve in a leadership role can lead to the actualization of transformative learning experiences, which may materialize in a heightened development of skills that are transferable to future academic, professional, and civic aspirations. While the majority of research on peer-facilitated academic assistance programs, such as Supplemental Instruction (SI), examines positive effects on participants, few studies set out to examine the additional impact that the program has on undergraduate student leaders (Lockie & Van Lanen, 2008; Malm, Bryngfors, & Morner, 2012; Skalicky & Caney, 2010; Stout & McDaniel, 2006). This case study assists in filling the void in research on how undergraduate students benefit, both by experiencing transformative learning and the nature of civic engagement, as a result of serving in a leadership role within a peer-facilitated academic assistance program in higher education.

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## Chapter 1

### Introduction

One of the historic and central missions of higher education has been to nurture the development of students into civic-minded citizens who will serve as future community leaders (Cress, Burack, Giles, Elkins, & Carnes Stevens, 2010; Jacoby, 2014). However, a pressing issue facing America today is that “too few of our citizens are actively engaged in efforts to effect positive social change” (Astin & Astin, 2000, p. 2). The question, then, becomes: “Who will lead us?” The answer, according to Richardson (2000), is “we will be led by those we have taught, and they will lead us as we have shown them they should” (p. 7). Therefore, it is the constant challenge of the institution to model effective leadership and problem-solving skills and to empower students to become influential social change agents (Astin & Astin, 2000). To undertake this charge, institutions of higher education must also transform themselves to justify their role in society, turning away from traditional academic models of civic engagement and moving toward alternative approaches of engaging students outside of the classroom.

Traditional models of civic engagement in higher education take many forms within a classroom setting, whether as a culminating experience in a capstone course, through project-based service learning, or in critical thinking assignments in which students are asked to make meaning of their own knowledge and experiences (Flanagan & Levine, 2010; Jacoby, 2009). However, simply educating students to be civically engaged without providing them real-world opportunities outside of the classroom in which they can become engaged is not enough. Only when students have experienced immersive leadership opportunities within their institution will they be able to lead

effectively (Astin & Astin, 2000). In-class academic experiences constitute only a fraction of the learning that occurs during a student's undergraduate career; co-curricular experiences provide powerful learning opportunities for leadership development that supplement students' formal classroom experiences (Kuh, 1993; Astin & Astin, 2000). Higher education research throughout the decades has shown that extracurricular learning that extends beyond the confines of the college classroom walls is most significant to how students learn, mature, develop, and change (Kuh, 1993; Moffatt, 1989; Wilson, 1966).

The growing national skepticism of higher education calls for college and universities to provide more intentional, high-impact, and immersive leadership opportunities for students in a concerted effort to transform them into the civically minded, engaged citizens of future generations (Stripling, 2016). Actively participating in civic engagement within higher education involves students learning from others and assuming leadership roles, thereby fostering a learning experience that is transformative rather than merely transactional in nature (Jacoby, 2009). Studies that focus on the intersection of civic engagement and student leadership in higher education have found that student leaders demonstrate improved academic performance, critical thinking skills, communication, and leadership qualities that are transferable to real-world settings as a result of serving in a leadership role during their undergraduate study (Cress et al., 2010). Participating in civic engagement through student leadership roles not only fosters academic learning outside of the classroom but also develops the essential skills needed to transform students into the effective change agents of tomorrow (Cress et al., 2010).

## **Peer-Facilitated Learning**

Student leadership within the realm of peer-facilitated academic assistance programs has a long tradition in higher education and has proven successful in promoting student success (Ning & Downing, 2010). Student leaders “effectively serve as a bridge between course ‘experts’ with extensive content knowledge and the lived experience of the student body,” thus truly functioning as facilitators of learning rather than sources of knowledge (Sloan, Davila, & Malbon, 2013, p. 86). The role of the student leader, in this sense, supports the constructivist paradigm, which serves as the theoretical foundation for all peer-assisted learning. In this framework, student leaders as facilitators assist their peers in constructing their own knowledge rather than merely providing answers, which places the responsibility of learning back on the students themselves (Ning & Downing, 2010).

According to Ning and Downing (2010), learning is both socially and culturally constructed; therefore, it is only natural that peer-to-peer interaction would serve to foster a more powerful learning experience. In a peer-facilitated learning environment, students work collaboratively to solve problems and there is greater opportunity for learner involvement. Such student-facilitator connections reflect key components of transformative learning, including a focus on critical thinking and reflection (Sloan, Davila, & Malbon, 2013). Further, learners are more likely to engage with one another due to the less threatening nature of the peer-facilitated teaching discourse; this increased motivation results in students contributing to their own knowledge while simultaneously benefiting from the knowledge of others (Ning & Downing, 2010). Through the organic

mentorship that occurs through peer-facilitated collaborative learning, students may also benefit by gaining a sense of belonging on campus.

### **Supplemental Instruction (SI)**

One such peer-facilitated academic assistance program, Supplemental Instruction (SI), provides an outlet through which undergraduate students can participate in learning communities and collaborative learning environments, which strengthens their community orientation and civic engagement responsibilities while concurrently inspiring others to take ownership of their own learning (Flanagan & Levine, 2010). The SI model was originally developed in 1973 by Dr. Deanna Martin at the University of Missouri-Kansas City (UMKC), with the overall goal of identifying and supporting the most challenging courses for students. SI integrates how to learn with what to learn, incorporating collaborative learning strategies with course content. Studies show that students who attend SI sessions earn statistically higher final course grades than those students who do not attend, even among students who are underprepared when they enter the course. Because of its proven success in increasing student performance and retention, SI is now offered at over 1,800 academic institutions worldwide (Congos, Langsam, & Schoeps, 1997).

The SI program targets traditionally difficult academic subjects—those that have a high rate of D or F grades and withdrawals—and provides regularly scheduled, out-of-class, peer-facilitated study sessions for all students enrolled in the targeted courses. As a non-traditional academic assistance program, SI does not identify high-risk students, but rather identifies historically difficult classes, thereby avoiding a remedial stigma. While all students may not take advantage of the voluntary service, it attracts an equal



proportion of students from differing ability groups (Monmouth University, 2010a).

In regard to benefits for student participants, SI provides an opportunity for students to develop relationships with other students and staff, an important factor in retention; places the responsibility of learning with the students; helps to develop self-confidence and independence; is proactive and participatory rather than reactive and passive; provides peer collaborative learning experiences, which promote assimilation into the campus culture; improves communication skills; accommodates various learning styles; provides students with teamwork experiences; and promotes a non-remedial image while offering academic support to all students enrolled in historically difficult subjects (Monmouth University, 2010a).

A typical SI review session is an hour-long meeting facilitated by an SI leader which might include a review of lecture and assigned readings, group work and discussion, problem-solving and critical thinking activities, or a mock exam. An SI leader is a student who has already done well in the targeted course and is recommended by the professor to facilitate the SI sessions. The SI leader typically attends all class sessions, takes notes, and reads all assigned material for the target course, as well as conducts three SI sessions per week. In these sessions, the SI leader's primary focus is to assist students in understanding the course material while helping them to develop effective study skills that are both applicable to the content and also transferable to other courses throughout their college experience (Monmouth University, 2010a).

The philosophy behind the SI model stems from a collection of theoretical principles including Vygotsky's (1978) theory of socially mediated learning and Piaget's (1935, 1977) cognitive development principles. SI also borrows from Vygotsky's (1986)

social interdependence principles because, “by voluntarily attending SI sessions, which provide opportunities for shaping their own learning process, students necessarily become independent and active learners” (Ning & Downing, 2010, p. 923). However, the SI leaders, who are responsible for fostering student learning, also become equally independent and active in their own learning as a result of facilitating SI sessions; thus, the SI model is mutually beneficial.

### **Problem Statement**

The role of higher education continues to be questioned in today’s society due to the lack of engaged American citizenry and the rising cost of a college degree (AASCU, 2017). While exposing students to civic engagement seeks to fulfill one of the historic and central missions of higher education—a responsibility to the public good in developing civic-minded citizens who view themselves as problem-solvers with the desire to make a difference (Jacoby, 2014)—aligning this responsibility with the evolving needs and expectations for future leaders is critical (Reich & Checkoway, 2014). For this reason, institutions of higher education must seek more intentional ways to nurture the growth and development of student leaders outside of the traditional classroom experience to prepare them for fulfilling lives, successful careers, and lifelong learning, as well as to prepare them to lead our communities (Astin & Astin, 2000).

Traditional indicators of academic success, such as grade point averages, retention, and completion rates, fail to measure the holistic experience of the college student. However, like civic engagement, student success should be measured and defined through more transformative measures (Cress et al., 2010). The idea of “moving theoretical academic content from the lectern to engaged applications” is a significant

contributor in developing “critically, civically, and globally minded graduates who possess problem-solving and leadership abilities” (Cress et al., 2010, p. 3). Institutions of higher education must make a paradigmatic shift in viewing students as both learners as well as leaders, thus considering their out-of-the-classroom experiences as equally impactful indicators of success in order to open up new possibilities for transformation and change (Astin & Astin, 2000).

Out-of-the-classroom experiences, such as serving in a student leadership role, can lead to the actualization of transformative learning opportunities, which may materialize in a heightened development of skills that are transferable to future academic, professional, and civic aspirations. However, the majority of research on peer-facilitated academic assistance programs, such as SI, examines improvement in course grades and the positive effects that the program has on session participants; few studies set out to examine the additional impact that the program has on the undergraduate student leaders who are responsible for program facilitation (Lockie & Van Lanen, 2008; Malm, Bryngfors, & Morner, 2012; Skalicky & Caney, 2010; Stout & McDaniel, 2006). This study assists in filling the void in research on how undergraduate students benefit, both by experiencing transformative learning and the nature of civic engagement, as a result of serving in a leadership role within a peer-facilitated academic assistance program in higher education.

### **Purpose Statement**

The purpose of this qualitative case study was to explore how former SI leaders experienced transformative learning and the nature of civic engagement within their student leadership roles as a result of working in an SI program in higher education. A

particularistic case study framework was chosen to examine the occurrence of this phenomenon within a particular SI program at a four-year, private university in New Jersey (Merriam, 2007). For the purpose of the study, the unit of analysis was a group of former SI leaders who were selected through purposeful maximum variation sampling in an effort to capture the heterogeneity of the SI leader population and to ensure that participant responses satisfactorily represented the range of SI leaders employed by the program. Data collection methods chosen for the current study included both semi-structured interviewing and graphic elicitation. The study was viewed through the theoretical lens of Mezirow's (1997) transformative learning theory. Since SI leaders facilitate collaborate learning experiences that seek to transform how their student participants learn, Mezirow's (1997) transformative learning theory offers a compelling lens through which their own experiences can be framed during the process (Caruana, Woodrow, & Perez, 2015).

### **Research Questions**

The study is guided by the following research questions:

1. How do former SI leaders describe the impact of serving in leadership roles during their undergraduate study at a private, four-year university in New Jersey?
2. How do former SI leaders describe their participation in civic engagement while working in an SI program at a private, four-year university in New Jersey?

3. In what ways do former SI leaders who served at a private, four-year university in New Jersey connect their student leadership experiences to transformative learning?
4. In what ways do former SI leaders apply their student leadership experiences to their post-graduation lives?

### **Definition of Terms**

The following terms are defined for the purpose of the current study:

**Supplemental Instruction (SI).** SI is a free, peer-facilitated academic assistance program designed to help students succeed in traditionally difficult courses in higher education. SI sessions are regularly-scheduled, informal review sessions that involve collaborative learning activities through which students can clarify course concepts and practice the types of study strategies that will help them truly master the information and skills required by the target course (Monmouth University, 2010b).

It is important to note that SI is different from peer tutoring in that it targets a specific course as being “at risk” rather than targeting a particular student, thus removing the remedial stigma typically associated with traditional academic assistance programs. SI is proactive rather than reactive in that SI-participating courses have academic support built into the class from the first day of the semester in the form of an SI leader. Other traditional academic resources, such as tutoring, are often reactive in that students do not seek help outside of class until after they perceive the content to be difficult, which may often be too late. Further, SI is founded on collaborative learning in a group setting in which the SI leader serves as a facilitator, whereas tutoring sessions are often one-on-one,

and the peer tutor serves the needs of the individual student rather than the collective needs of the larger group.

**SI leader.** An SI leader is defined as an undergraduate student (sophomore level or higher) who has successfully completed the SI-participating course with a B grade or better, has a 3.2 or higher cumulative grade point average, has been recommended by a faculty member, sits in course lectures with current students, and facilitates collaborative review sessions outside of the classroom three times per week for all students enrolled in the targeted course. The scope of this study focused on the perceptions of former SI leaders only—those who served in the role for at least one year while completing their undergraduate degrees and have since graduated from the institution that serves as the context for this case study (Monmouth University, 2010b).

It is important to note that the title “SI leader” is designated by the International Center for Supplemental Instruction at UMKC to refer to student facilitators working in SI programs. Although the term “leader” is used in reference to these undergraduate students, the focus of the present study is not on student leadership but on the transformation and engagement that SI leaders may undertake as a result of serving in this role.

**Civic engagement.** This study uses Diller’s (2001) definition of civic engagement, which is defined as “all activity related to personal and societal enhancement, which results in improved human connection and human condition” (p. 22). Diller (2001) further defines civic engagement as “experiencing a sense of connection, interrelatedness, and, naturally, commitment towards the greater community” (p. 22). For the purpose of this study, Diller’s (2001) definition will be applied within the

context of higher education, with “community” referring to both the campus community as well as the former SI leader’s connection to the broader community upon graduation.

### **Theoretical Framework**

This study used the theoretical lens of Mezirow’s (1997) transformative learning theory to frame the research on how SI leaders experience transformative learning as a result of serving in a peer leadership role in an academic assistance program in higher education. Understanding the meaning of transformative learning for the participant was the focus of the current study, as it sought to understand how undergraduate student leaders develop subjective meanings of their experiences within the context of peer leadership and how such constructed meanings can be interpreted (Cresswell, 2014).

Based on the principles of Kuhn (1962), Freire (1970) and Habermas (1984), Mezirow’s (1990a) transformative learning theory defines transformative learning as “the process of learning through critical self-reflection,” which allows “a more inclusive, discriminating, and integrative understanding of one’s own experience” (p. xvi). The theory was originally proposed by Jack Mezirow at Columbia Teacher’s College in 1978 based on his research on adult women reentering college and the subsequent internal changes that occurred as a result of their transition from homemaker to student (Hoggan, 2016; Nohl, 2015). Mezirow continued to develop the theory well into the late-1990s with an increased focus on how adult students take control of their own learning in the classroom, a foundational aspect of Freire’s (1973) concept of student conscientization (Hoggan, 2016; Patterson, Munoz, Abrams, & Bass, 2015). Mezirow (2000) termed this process *perspective transformation*.

The foundation of this theory involves the learner transforming his or her own frames of reference through critical reflection, specifically in regard to problem-solving, and becoming critically aware of his or her encounters with the world, others, and themselves (Mezirow, 1990b, 1997). Mezirow's (1997) original model of perspective transformation had 10 stages: (1) a disorienting dilemma, an experience or situation which throws the learner off balance from their usual perspective or view; (2) self-examination; (3) a critical assessment of assumptions; (4) recognition that one's process of transformation is a shared experience; (5) exploration of options for new roles or actions; (6) planning a course of action; (7) acquisition of knowledge or skills for implanting the action plan; (8) provisional trying of new roles; (9) building competence and self-confidence in new roles and relationships; and (10) a reintegration into one's life on the basis of one's new perspective (pp. 168-69). These ten stages reflect the full cycle of perspective transformation, which includes learners' reflection, change and action (King, 2009).

**Types of learning.** Mezirow (1990a) posits that individuals learn differently when learning to perform rather than when learning to understand, which echoes Habermas's (1984) distinctions among instrumental learning (learning to do through task-oriented problem solving) and communicative learning (achieving coherence through understanding the meaning of what others communicate) (Cranton & Hoggan, 2012; Mezirow, 1997). Despite their equal importance to transformative learning, the purpose, process, and outcome of both instrumental and communicative learning drastically differ. According to Mezirow (2003), instrumental learning focuses on "controlling and manipulating the environment, with emphasis on improving prediction and performance"



(p. 59). Therefore, instrumental learning concerns the concrete and rational spheres of understanding through which knowledge is developed and enhanced (Quinn & Sinclair, 2016).

Conversely, communicative learning allows the individual “to negotiate his or her own purposes, values, feelings, and meanings rather than to simply act on those of others” (Mezirow, 2000, p. 10). This process, according to Quinn and Sinclair (2016), allows the learner to make sense of his or her social experiences and further develop his or her understanding of human communication. Both instrumental and communicative learning are key elements within transformative learning theory, as without these domains of learning, transformation cannot occur (Quinn & Sinclair, 2016).

**A practice-based approach to transformative learning.** Mezirow intentionally did not establish definitive constructs or parameters regarding what transformative learning is in order to ensure that the theory could be applied more broadly to a variety of contexts; as a result, transformative learning theory remains in transition nearly forty years after its initial development (Quinn & Sinclair, 2016). Thus, according to Hoggan (2016), “if transformative learning is used to refer to everything, then it means nothing” (p. 60). Mezirow’s work on perspective transformation did, however, provide explicit description of the phenomenon of transformative learning through his delineation of concepts and process through which scholars were subsequently able to apply it within a variety of disciplines. More recent studies of transformative learning theory (Taylor, 1997, 2007) differentiate Mezirow’s phase model from alternative models that refer to the more general phenomenon of change (Hoggan, 2016; Nohl, 2015). One such

alternative model proposed by Nohl (2015) offers a more general phase model in an effort to transcend contexts in regard to studying transformative learning.

Building off Mezirow's (1978) original 10-phase model, Nohl (2015) suggests a five-phase, practice-based approach to the transformation process: (1) the non-determining start, when novelty, neither anticipated nor planned, breaks into life; (2) the phase of experimental and undirected inquiry, when actors explore the novel practices without knowing the ultimate goal of their learning efforts; (3) the phase of social testing and mirroring, when actors expose their practices to others and have the opportunity to reflect on them in light of others' collective reactions; (4) the phase of shifting relevance, when the newly introduced practice turns into a focused experience; and (5) the phase of social consolidation and reinterpretation of biography, when actors find social relations that stabilize their new practices and perceive their biography through a new outlook. According to Nohl's (2015) practice-based model of transformative learning, the initiating occurrence of a disorienting dilemma is not required for transformation to take place within the learner; transformative learning, when viewed in this light, "may begin incidentally, and sometimes even casually, when a new practice is added to old habits" (p. 45). The scope of transformative learning theory has increased as a result of this practice-based model, which allows the application of the theory to span a multitude of contexts.

Given the ever-changing landscape of transformative learning as an educational learning theory, both Mezirow's (1978) transformative learning theory and Nohl's (2015) practice-based model of transformative learning served as the theoretical foundation for the current study. These concepts will be explored in greater depth in Chapter 2.

## **Delimitations**

As with any research, the current study has some delimitations. For the purpose of this study, multiple data collection methods, interviews and graphic elicitations, were implemented in an effort to gather answers to the same central research questions via different means, thus employing triangulation. Since both methods are equally vulnerable to the bias intrinsic to self-reported data, triangulation of methods by comparing participants' experiences across interview responses and graphic elicitation diagrams served to counter balancing flaws that may have been inherent in a single method (Stake, 1995). However, given that the setting of the study is where I am currently employed, I am conducting "backyard research," which poses additional threats to the study's validity (Glesne & Peshkin, 1992).

One such threat concerns the interpretive lens of the researcher-practitioner (Jones, 2002). As supervisor to 40-50 student leaders each academic year, I have directly observed how the skills they gain by serving in a leadership role during their undergraduate years have directly transferred to their current success in graduate studies, in medical school, and in their current professions. These beliefs have influenced the way I have approached this research and exemplify a constructivist worldview, which seeks to understand how undergraduate students develop subjective meanings of their experiences within the context of peer leadership and how such constructed meanings can be interpreted (Cresswell, 2014). The fact that I conducted the interviews and also had a former supervisory relationship with participants may have influenced responses, thereby skewing results for the study. To address this bias, I was cognizant of intentionally understanding this possible influence on the participants' responses and how it may have

also affected the validity of the inferences drawn from the interviews and graphic elicitations (Maxwell, 2013).

Another threat of backyard research concerns prolonged engagement, defined by Jones (2002) as “the investment of significant time and energy in a particular setting” (p. 464). Throughout the research process, I was cognizant of the delineation of my dual role as researcher and as a practitioner, thus intentionally differentiating between my engagement in the setting as an employee versus my engagement in the setting when conducting research for this qualitative study. To accomplish this, I conducted interviews outside of my regularly scheduled hours as an employee of the institution. Further, I was careful not to blur lines between qualitative research and program assessment or evaluation (Jones, 2002).

### **Significance**

This study was conducted to better understand how former SI leaders experienced transformative learning and the nature of civic engagement as a result of serving in a student leadership role in a peer-led academic assistance program in higher education during their undergraduate years. In addition to filling the void in research on this topic, this study may also have significance in how student leadership is viewed in regard to civic engagement and how peer-facilitated academic assistance programs are evaluated in terms of student success. Further, the current study may also serve as a springboard for future research by revealing additional benefits student leaders gain as a result of their leadership roles.

**Policy.** Reich and Checkoway (2014) suggest that “while recognition of a civic role has been an integral part of American higher education, the understanding of this

role and how to implement it changes as perceptions and expectations for higher education develop to meet the demands of today and tomorrow” (p. x). Faculty and administrators who have a vested interest in developing student leaders, as well as a heightened understanding of this central and historic mission of higher education, can become advocates both within their own institutions and across colleges and universities in suggesting a policy shift in how civic engagement is defined and actualized within higher education to prepare student leaders to meet the evolving needs of our communities. If the current culture of higher education can change by providing transformative opportunities for students to civically engage outside of the classroom during their undergraduate experience, students will develop into the effective social change agents and civic-minded leaders of future generations.

**Practice.** According to Ray (2004), “if the civic is not a single destination or practice but rather the embodiment of connected learning in pursuit of shared goods, then the pathways toward its actualization are limited only by the imagination and the will” (p. 57). Further exploring how SI leaders experience transformative learning offers just one example of an out-of-the-classroom opportunity through which undergraduate students can engage in leadership development. This study contributes to the growing body of research that suggests that community-based, applied learning educates students with competencies and skills that will impact their future success as actively engaged citizens. By providing opportunities, like SI, for students to work together on problem-solving tasks with practical significance, institutions of higher education will better prepare students “to engage with those who are different from themselves, and to apply what they learn in the classroom to real world settings” (Moore McBride & Mlyn, 2013, p. 3).

This study indicates that institutions of higher education should expand the availability of transformative opportunities outside of the classroom through which students can develop the skills needed to become civic-minded leaders, not only within peer-facilitated academic assistance programs, such as SI, but also within learning communities, shared governance, residence halls, or other areas that students inhabit both on and off campuses. Since “wherever students are is where the civic can be instantiated,” the possibilities of transformative civic engagement are endless (Ray, 2004, p. 57).

**Research.** This case study provides insight regarding the transformative learning experiences of former SI leaders who were employed at a mid-sized, four-year private university in New Jersey during their undergraduate study in an attempt to partially fill the void in research regarding the civic and transformative development of student leaders in higher education. However, this study also serves as a stepping stone for future research on peer-facilitated academic assistance programs, including how serving as a student leader benefits future career and civic aspirations. A subsequent study measuring this variable would include following this particular cohort of participants through the framework of a longitudinal study throughout their pre-professional studies and careers to determine if serving in a student leadership role has benefitted their professional and civic aspirations. A longitudinal study of this nature could also provide a unique understanding of how student leaders’ perspectives of transformative learning evolve over time as they begin to critically reflect on action.

## **Organization of the Dissertation**

This dissertation is divided into six chapters. Chapter 1 situates the current study within the larger context of higher education. Chapter 2 provides an abridged overview of the pertinent literature reviewed for the study. Chapter 3 offers a detailed discussion of the methodological framework; Chapter 4 presents an overview of the research findings; and Chapters 5 and 6 comprise two unique journal articles that further elaborate significant findings with the intent for future publication.

## Chapter 2

### Literature Review

This chapter provides an abridged literature review that focuses on the following themes: formative learning; transformative learning in higher education; the nature of civic engagement; peer leadership in higher education; and SI leader development. Although previous studies present these themes in a variety of contexts, this abridged literature review will mainly concentrate on situating undergraduate students' experiences of serving as SI leaders within both the theoretical framework of transformative learning theory as well as the nature of civic engagement in an effort to address the aforementioned research questions posed by the study. Chapter 2 also bounds the case study within the context of both the institutional setting as well as the study participants.

#### Formative Learning

It is necessary to provide a foundation of the formative learning that occurs during an individual's adolescent years before discussing the principles behind transformative learning. While operationalizing learning is challenging, for the purpose of this study, the discussion of formative learning is situated within the context of Piaget's cognitive-developmental stage theory, which provides the foundation on which constructivist theories are based and consists of four major stages of childhood learning and knowledge construction: sensorimotor, preoperational, concrete operational, and formal operational (Wood, Smith, & Grossniklaus, 2001). Piaget and Inhelder (1958) define the formal operational stage, which children enter between 11 and 12 years of age, as the ability for adolescents and adults to "think about multiple variables in systematic ways, formulate



hypotheses, and think about abstract relationships and concepts” (p. 3). Therefore, the individual’s ability to think about the possible rather than just the real, described by Day (1981) as “hypothetico-deductive” thought, changes his or her worldview, as he or she is now able to “conceptualize what might be as well as what is” (Kuhn, 1979, p. 38).

According to Piaget, when a balance between a child’s mental scheme and the external world has been achieved, he or she has reached a state of equilibrium (Blake & Pope, 2008). However, such equilibrium is temporary at each stage of Piaget’s model, as intellectual development is a lifelong process that continues throughout adulthood through the ongoing acquisition and construction of knowledge (Wood, Smith, & Grossniklaus, 2001). This lifelong process of adult learning serves as the pillar for transformative learning.

### **Transformative Learning**

Previous research on transformative learning in higher education has highlighted the significance that establishing relationships with others has on fostering transformative experiences for students (Langan, Sheese, & Davidson, 2009; Mandell & Herman, 2009; Taylor, 2009). For example, Taylor (2009) notes that building trusting and authentic relationships helps learners develop the confidence needed to establish a foundation for transformative learning to occur. Langan, Sheese, and Davidson (2009) concur that personal transformation is more likely to occur if the student is equally engaged with both the course content as well as with other students in the course. Out-of-the-classroom experiences, such as serving in a student facilitator role, can lead to the actualization of transformative learning opportunities, which may materialize in a heightened development of skills that are transferable to future academic, professional, and civic

aspirations (Langan, Sheese, & Davidson, 2009; Mandell & Herman, 2009; Taylor, 2009).

Student-facilitator approaches reflect key components of transformative learning, including a focus on critical thinking and reflection (Sloan, Davila, & Malbon, 2013). Similarly, the context of collaborative learning provides students many opportunities to share experiences and goals and develop mutually enhancing relationships, which ultimately results in students taking responsibility for their own learning and reversing the student-teacher dynamic (Langan, Sheese, & Davidson, 2009; Mandell & Herman, 2009). The construct of learner-centered teaching, in which the teacher's role is that of a facilitator who maintains balance among all group members through shared learning and decision-making, is perceived by Taylor (2009) as central to fostering transformative learning in higher education. In this reconfiguration of the educational experience, role shifts are apparent, and every student becomes both teacher and learner. Mandell and Herman (2009) find this unconventional approach to learning to have a strong link to transformative learning as it requires critical reflection on customary academic roles.

Critical reflection is inherent to mentoring and non-traditional academic assistance programs, like SI, in that “the mentor-student relationship could not exist unless teachers remind themselves that their role is not so much to profess as to facilitate” (Mandell & Herman, 2009, p. 79). Peer facilitators have the unique ability to connect with fellow undergraduate students on their level and relate difficult, abstract concepts in a more concrete and easily understood manner, ultimately serving as “a bridge between course ‘experts’ with extensive content knowledge and the lived experience of the student body” (Sloan, Davila, & Malbon, 2013, p. 86). In these leadership roles, students are

required to make a cognitive shift from student to facilitator and to critically reflect on that personal transformation, which is the essential nature of transformative learning (King, 2009).

### **Civic Engagement**

Critical reflection is also an essential component of democratic citizenship (Roth, 1990). The nature of civic engagement fulfills one of the historic and central missions of higher education: a responsibility to the public good in developing civic-minded citizens that view themselves as problem-solvers with the desire to make a difference (Cress et al., 2010; Jacoby, 2014; Reich & Checkoway, 2014). Nurturing the growth and development of civic-minded citizens to lead our communities and preparing them for fulfilling lives, successful careers, and lifelong learning are the founding principles of many colleges and universities (Cress et al., 2010; New Jersey Commission on Higher Education, 1996); however, the context of where such nurturing occurs has extended beyond the confines of the classroom walls over the past few decades.

According to Cress et al. (2010), participating in civic engagement experiences outside the classroom, whether through volunteerism, service learning, community service, or student leadership roles, not only increases the likelihood that a student will complete college, but also prepares students for continued success beyond the college years by “directly support[ing] the acquisition of broader life skills needed for effectively transitioning into adult roles and responsibilities” (p. 10). Research shows that participating in learning communities and collaborative learning strengthens students’ community orientation and commitments (Flanagan & Levine, 2010). Collaborative learning communities, such as SI, provide a social context for self-reflection, thus

fostering collective meaning-making, which is directly linked to civic engagement (Eaton & Patton, 2003). Such communities also reflect the actual world in which students will work and offer real-world problems for them to solve as a team, thus fostering a model of higher education that “may offer psychological benefits by helping students . . . see that citizenship is not a part-time enterprise,” but one that continues to develop in all aspects along their journeys as lifelong learners (Flanagan & Levine, 2010, p. 170; Moore McBride & Mlyn, 2013).

To assess this transformative approach to higher education, measures of student success have also broken down conventional barriers to encompass cultural competency, communication skills, and critical thinking ability in addition to previous, traditional indicators of student success, such as grade point averages, retention, and completion rates, in an effort to accurately measure the holistic student experience (Cress et al., 2010). This transition is further exemplified by the characteristics of an excellent system of higher education for the twenty-first century, which include “to better humankind—morally, intellectually, physically, and materially—and to educate leaders for a diverse and complex society” (New Jersey Commission on Higher Education, 1996, p. 5). The prioritization of student success both during and beyond the college years continues to be a priority.

### **Peer Leadership**

The determination of the college years as a critical period for students’ growth has led institutions of higher education to extend learning outside of the classroom in an effort to enrich the overall college experience (Logue, Hutchens, & Hector, 2005). This type of experiential learning is referred to by the Association of American Colleges and

Universities (AACU) (2011) as “integrative and applied learning” and has been named one of the four essential learning outcomes of higher education for the twenty-first century (p. 7). One specific area of renewed focus has been on increasing peer leadership opportunities for students.

Broadly, peer leadership is defined as “students who have been selected and trained to offer educational services to their peers [that] are intentionally designed to assist in the adjustment, satisfaction, and persistence of students toward the attainment of their educational goals” (Ender & Kay, 2001, p. 1). Peer leadership positions may come in the form of an academic tutor, peer mentor, orientation leader, resident assistant, or a leader of student club or organization. The common goal of peer leadership is to empower students to provide a positive example for their peers as well as to serve as an intermediary between students and professional staff that is more accessible and less threatening in the form of a guide through which the college experience can be navigated more easily. This peer-to-peer relationship fosters a deeper sense of community engagement and social integration on campus for both student leaders and their peers (Shook & Keup, 2012).

Studies in the field of peer-led academic support programs explore student leadership as a component of integrative and applied learning, specifically in regard to Astin’s (1985) Involvement Theory (Logue, Hutchens, & Hector, 2005; Shook & Keup, 2012). Peer-facilitated learning has deep roots in higher education as a means for promoting student learning; collective sense-making and problem-solving among peers foster a sense of belongingness for students and promotes the social and cultural constructivist nature of learning itself. The role of the student leader in any type of peer-

led academic assistance program is that of a facilitator, assisting learners in the processing, comprehension, and construction of their own knowledge, with the ultimate goal of mutually transforming both their students and themselves into independent learners (Ning & Downing, 2010).

While much research has proven a positive correlation between peer leadership opportunities and students' enhanced career and academic development during these critical college years, few studies account for the personal experiences of the student leader in terms of transformative learning opportunities and critical self-reflection (Astin, 1985; Cress, Astin, Zimmerman-Oster, & Burkhardt, 2001). Cress, Astin, Zimmerman-Oster, and Burkhardt (2001) explored the effects of peer leadership training on the personal growth of college students, which included more developed conflict resolution skills as well as an increased commitment to civic responsibility for student leaders. Such leadership opportunities also provide students the ability to develop, apply, and transfer skills related to self-direction, communication, teamwork, and critical thinking (AACU, 2011). According to Rhodes (2010), however, peer leadership experiences extend beyond the surface of merely developing desirable skills among leaders; rather, these experiences can also provide students an opportunity to integrate these skills in a way that can transform college learners into real-world problem solvers.

### **SI Leader Development**

Examination of the current literature in regard to the development of student leaders specifically employed by SI programs yielded limited results. Most widely cited is a literature review conducted by Stout and McDaniel (2006), which reveals that benefits for SI leaders, in particular, include the following: increased understanding of the

course material; improved communication skills; enhanced interactions with faculty, students, and other SI leaders; enhanced personal development; and professional development.

Several researchers uncovered the mutual academic benefits for both SI leaders and program participants in terms of increasing understanding of course concepts (Donelan, 1999; Stone, Jacobs, & Hayes, 2006; Wallace, 1992). In regard to gaining greater knowledge of effective study techniques, Donelan (1999) discussed SI leader benefits as a result of learning a variety of cognitive activities, note-taking skills, and organization and planning strategies that accompany the facilitation role of the SI leader. The influence of the SI program on increasing SI leaders' opportunities to build professional relationships through personal interactions with faculty and students, as well as the self-confidence and teamwork experience that come along with the leadership role, have also been noted as key benefits (Donelan, 1999; Wallace, 1992).

Lockie and Van Lanen (2008) uncovered additional benefits for SI leaders found across the following themes: the diversity of student learning needs, enriching academic experiences, enriching intrapersonal experiences, and relationships with faculty. The first theme described benefits related to an appreciation of the unique ways in which individual students learn, which is a benefit that had not been discussed in previous research in the field. The second theme yielded results similar to the academic benefits presented by Stone, Jacobs, and Hayes (2006) and Donelan (1999), such as increased content knowledge and good study habits, while the third theme presents experiences of SI leaders that enriched their own sense of leadership, communication, and self-confidence, a variation on the benefits outlined by Donelan (1999).

While previous research (Donelan, 1999; Wallace, 1992) cited all relationship-building opportunities as benefits for SI leaders, Lockie and Van Lanen's (2008) study focused particularly on the improvement of faculty-student relationships as a result of the SI experience, which allowed the student leader the unique opportunity of understanding the challenges that faculty face when helping students learn difficult content material. Lockie and Van Lanen (2008) also concluded that the long-range benefits of serving as an SI leader are assets to the future academic and professional success of these students.

Additional studies of SI leader experiences yielded specific aspects of leadership development that can be directly attributed to the student's role in the SI program, such as organization, support, facilitation, role model, attitude, responsibility, relationships, communication, collaboration, and decision-making, as well as improved self-confidence and academic understanding (Malm, Bryngfors, & Morner, 2012; Skalicky & Caney, 2010). These findings confirm those yielded in earlier studies by Congo and Stout (2003) and Lockie and Van Lanen (2008) in regard to the leadership development of SI leaders.

### **Theoretical Framework**

**Transformative learning theory.** This study uses the theoretical lens of Mezirow's (1997) transformative learning theory to frame the research on how SI leaders experience transformative learning as a result of serving in a peer leadership role in an academic assistance program in higher education. Building on the foundation of the theoretical work of Kuhn (1962), Freire (1970) and Habermas (1984), Mezirow's (1978) psychocritical approach to transformative learning posits that transformative learning occurs "when there is a transformation in one of our beliefs or attitudes, or a transformation of our entire perspective" (as cited in Merriam, Cafarella, & Baumgartner,



2006, p. 133). Mezirow (1978) defines the four main components of the transformative learning process as experience, critical reflection, reflective discourse, and action.

For Mezirow (1990a), *learning* becomes synonymous with *meaning* when an individual uses an interpretation of his or her own experience to guide decision-making. Mezirow (1990a) further differentiates between two types of meaning-making: *meaning schemes* and *meaning perspectives*. Meaning schemes refers to “related expectations governing ‘if-then,’ ‘cause-effect,’ and category relationships as well as event sequences” (p. 1); in other words, meaning schemes are implicit rules for interpreting meaning based on expectations from previous experiences (e.g., turning a knob will open a door). Conversely, meaning perspectives are higher-order interpretations based on predictions, not expectations. Meaning perspectives, according to Mezirow (1990a), “refer to the structure of assumptions within which new experience is assimilated and transformed by one’s past experience during the process of interpretation” (n. p.) . While meaning schemes comprise objective, causal relationships that are learned over time, meaning perspectives consist of subjective assumptions and sociocultural concepts that may be acquired through cultural assimilation.

Such perspectives provide principles for interpretation, which contribute to an individual’s frame of reference, which is defined by Mezirow (1997) as a “structure of assumption through which we understand our experiences,” thus, frames of reference “selectively shape and delimit expectations, perceptions, cognition, and feelings” (p. 5). Transformative learning, then, is the process of altering an individual’s frame of reference. When transformative learning occurs, individuals move toward a more inclusive frame of reference that is molded by critical reflection and personal experience,

which allows them to consider a worldview that extends beyond prior preconceptions or assumptions (Mezirow, 1997). Since understanding the meaning of transformative learning for the participant is the focus of the current study, the experience and critical reflection components of Mezirow's (1978) model in particular will guide the research.

**A practice-based approach to transformative learning.** While transformative learning theory was originally developed by Mezirow (1997) specifically to address the learning involved in broad social change (Hoggan, 2016), more recent studies of transformative learning (Taylor, 1997, 2007) differentiate Mezirow's model from alternative models that refer to the more general phenomenon of change (Hoggan, 2016; Nohl, 2015). One such alternative model proposed by Nohl (2015) offers a more general phase model in an effort to transcend contexts in regard to studying transformative learning.

Adapting Mezirow's (1978) original 10-phase model to allow the application of the theory to span a multitude of contexts, Nohl (2015) suggests a five-phase, practice-based approach to the transformation process: (1) the non-determining start, when novelty, neither anticipated nor planned, breaks into life; (2) the phase of experimental and undirected inquiry, when actors explore the novel practices without knowing the ultimate goal of their learning efforts; (3) the phase of social testing and mirroring, when actors expose their practices to others and have the opportunity to reflect on them in light of others' collective reactions; (4) the phase of shifting relevance, when the newly introduced practice turns into a focused experience; and (5) the phase of social consolidation and reinterpretation of biography, when actors find social relations that stabilize their new practices and perceive their biography through a new outlook.

According to Nohl's (2015) practice-based model of transformative learning, the initiating occurrence of a disorienting dilemma is not required for transformation to take place within the learner; transformative learning, when viewed in this light, "may begin incidentally, and sometimes even casually, when a new practice is added to old habits" (p. 45).

**Blended framework to assess how students experience transformative learning.** Nohl's (2015) practice-based approach to transformative learning, in combination with Mezirow's (1997) model of perspective transformation, serves as a framework for this study, as it seeks to understand how undergraduate student leaders develop subjective meanings of their transformative experiences within the context of peer leadership and how such constructed meanings can be interpreted (Cresswell, 2014). The present study combines stages 2, 4, and 9 of Mezirow's (1997) model with phases 1, 3, and 5 of Nohl's (2015) approach into a six-stage, blended model to assess how students experience transformative learning, as outlined below:

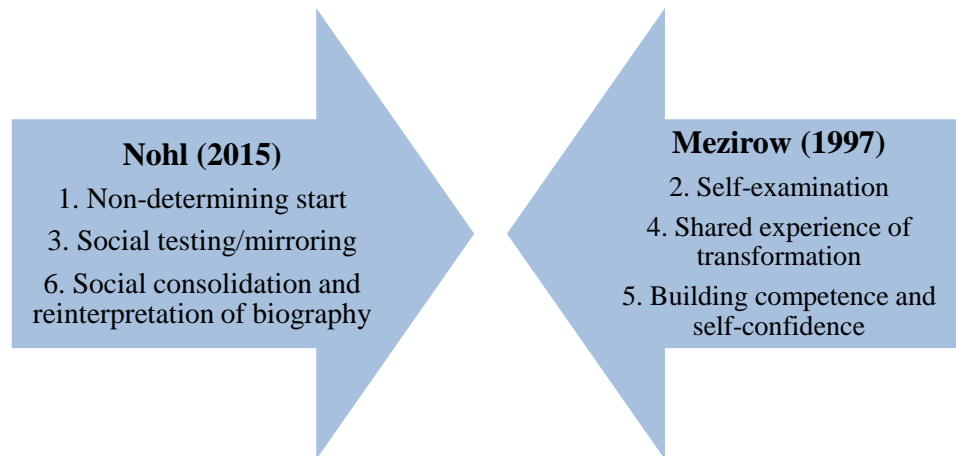
1. *Non-determining start:* Although participants voluntarily chose to work as SI leaders, it is not possible to determine the exact moment while serving in their student leadership roles in which they may have experienced a transformation; therefore, the framework for the current study will begin with Nohl's (2015) non-determining start phase, rather than with Mezirow's (1997) disorienting dilemma stage, as proposed by his original model of perspective transformation.
2. *Self-examination:* Since the current study is asking participants to reflect on their time before becoming an SI leader as well as to reflect on their time after becoming an SI leader, it is critical to include self-examination as the second

stage in the study's framework. Although the framework does not acknowledge a determining start, it is necessary to acknowledge that participants would have examined their current student roles prior to becoming an SI leader and, thus, prior to experiencing any potential transformation during their undergraduate years. Self-examination is the second stage in Mezirow's (1997) original model as well.

3. *Phase of social testing and mirroring*: The third phase in Nohl's (2015) approach serves as the third stage in the theoretical framework for the current study as well, as it serves to examine how both internal and external interactions shaped the SI leaders' experiences when transitioning from students to facilitators.
4. *Recognition that one's process of transformation is a shared experience*: Building off the previous stage, the fourth stage of Mezirow's (1997) model will remain the fourth stage of the current framework as well, as it bridges the internal experience of the newly hired SI leaders with the experiences of the collective group, thus examining interactions between SI leaders and peers who are sharing the experience of transformation.
5. *Building competence and self-confidence in new roles and relationships*: The ninth stage of Mezirow's (1997) 10-stage model of perspective transformation will serve as the fifth stage of the theoretical framework employed by the current study as it serves to critically explore how SI leaders continue to build confidence and further strengthen their relationships with faculty and peers as they take ownership of their new facilitator roles.

6. *Phase of social consolidation and reinterpretation of biography*: The final phase of Nohl's (2015) practice-based approach to transformative learning is the final stage of the blended framework as well, as it bridges the SI leaders' engagement from the campus to the larger community and beyond, thus exploring how their transformative experiences may shape their post-graduation lives.

The figure below represents this intersection of theoretical frameworks as it applies to the current study.



*Figure 1.* A six-stage, blended model to assess how students experience transformative learning combining elements of Mezirow's (1997) model of perspective transformation and Nohl's (2015) practice-based approach to transformative learning.

### **Context**

According to Merriam (2007) "the single most defining characteristic of case study research lies in delimiting the object of the study, the case" (p. 27). The

intrinsically bound system for this particularistic case study is an SI program at a four-year, private university in New Jersey, as detailed in the subsequent sections.

**Institutional background.** A private, comprehensive coeducational institution of higher education founded in 1933, Monmouth University is located on a 159-acre campus less than one mile from the New Jersey shore and one hour from New York City. Monmouth offers 57 undergraduate and graduate degree programs to approximately 6,300 students (4,600 undergraduates and 1,800 graduates) through eight schools and six centers of distinction (Monmouth University, 2017a). Of the total number of degree-seeking students, 41.8% are men, and 58.2% are women (U.S. News & World Report, 2017). Monmouth University's student body is comprised of students from 29 states and 31 countries. Based on fall 2016 enrollment data, 24% of students were members of ethnically diverse groups (Monmouth University, 2017a).

With a faculty-to-student ratio of thirteen-to-one, Monmouth University prides itself on offering a personalized education through small classes, active learning, and individualized academic advising and career counseling (U.S. News & World Report, 2017). The institution's strategic plan highlights a commitment to transformative learning that is implemented through three main pillars: an intellectually challenging and rigorous academic experience built on a strong foundation in the liberal arts; learning experiences that are both immersive and that extend beyond the classroom; and preparation for life after Monmouth (Monmouth University, 2017a). To support these initiatives, Monmouth provides its students with hands-on experiences both within and outside of the classroom to prepare them to be effective leaders in their communities with a strong focus on citizenship and social responsibility (Princeton Review, 2017; U.S. News & World

Report, 2017). According to the university's website, 100% of Monmouth students are engaged in experiential learning opportunities (Monmouth University, 2017a).

In an effort to provide students with a full spectrum of support to successfully make the vital connections between educational, career, and life choices, Monmouth University launched the Center for Student Success (CSS) in 2009. The support services focused on academic and career goals that are housed within the CSS include the following: First Year Advising; Transfer and Undeclared Student Services; Disabilities Services; Tutoring Services; Writing Services; Supplemental Instruction; Career Services; Service Learning and Community Service; and the Educational Opportunity Fund (EOF) program (Monmouth University, 2017b). This support prepares students to realize their potential as leaders and to become engaged citizens in a diverse and increasingly interdependent world.

**SI program.** In its fall 2010 pilot semester, the SI program filled a gap in the academic services offered by the CSS by providing specific assistance to students enrolled in courses that are deemed traditionally difficult. The University looked at courses where students had received a substantial percentage (>20%) of Ds, withdrawals, and failures (DWF). The high-risk courses selected for the program's initial launch included General Chemistry I and II, and Physics of the Life Sciences I and II, all of which were already in high demand for peer tutoring requests through the institution's Tutoring Center (Lozada, 2015). Unlike tutoring, however, as a non-traditional form of academic assistance, SI seeks to reduce the negative stigma associated with traditional academic assistance programs, since SI targets courses rather than students.

In its first five years (2010-2015), the SI program saw a 485% increase in the number of participating course sections and a 238% increase in the number of SI leaders holding review sessions for students enrolled in these sections (Lozada, 2015). This increase is primarily due to high faculty demand across a multitude of disciplines across campus. The SI program continues to expand at a rapid rate because it works: for the 2016-2017 academic year, 84% of students who participated in SI passed the course for which SI was offered with a C or better. In addition, SI participants earned a higher final course GPA in SI-supported courses than non-participants, and 97% of SI participants ranked SI sessions as helpful or very helpful on an end-of-term satisfaction survey (Lozada, 2016).

**SI leader training.** New SI leaders are required to attend a mandatory, two-day training, led by the director, prior to the start of the semester for which they were hired. The training is held from 9am to 3pm on each of the two days, with a one-hour lunch break included. The SI leaders are paid for their training hours. On the first day of the training, the director outlines the fundamentals of the SI program, collaborative learning, and Bloom's taxonomy, and both distributes and reviews the SI Leader manual with the new SI leaders. Within the manual are specific collaborative learning activities and session strategies. It is responsibility of the director to train the SI leaders in these activities and strategies during the two-day training; it is then the responsibility of the SI leaders, who are experts in their assigned subject areas, to pair which activities and strategies would work best with their content areas.

During day one of training, the SI leaders watch a videotaped lecture, acting as though they are students in a class. After the lecture, the director holds a mock SI session



based on the previously watched lecture, acting as an SI leader, so the new SI leaders can experience the student perspective of being in an SI session. The director then asks the new leaders to provide feedback about the session and prepare their own session for the following day. The second day of training is more hands-on for the new SI leaders. They begin by reviewing the previous day's work and then practice introducing SI to their classes.

During day two of training, each new leader also has the opportunity to lead an SI session based on the previous day's lecture and provide constructive criticism to each other after the sessions have concluded. In addition, the director reviews possible SI scenarios and troubleshooting with the new leaders, preparing them for any obstacles that may occur during the semester. The second day of training also provides an opportunity for the new leaders to meet the existing leaders, as all SI leaders join together for lunch on day two. The director then conducts a roundtable during which the new leaders can ask the experienced leaders more specific questions about the job and its responsibilities. Training continues throughout the semester through the director's observations of SI leaders and subsequent debriefing sessions.

**SI leaders.** The SI leader, also an undergraduate student, is not a tutor, but rather a facilitator for a group of students. The level of comfort and lack of stigma because of the peer-to-peer environment contributes to the effectiveness of the SI program. The SI leader attends the targeted course for which he/she is assigned and works with students during regularly scheduled sessions to review notes, clarify material, prepare for tests, and improve learning strategies. To be considered for the SI leader position at Monmouth University, the candidate must meet the following criteria: have sophomore status or

higher, have an overall GPA of 3.2 or higher, have successfully completed the SI-participating course with a B+ or higher, and have the recommendation of a faculty member (Monmouth University, 2010).

The SI program initially employed seven SI leaders during its pilot semester in fall 2010; as of spring 2017, there were twenty-two SI leaders facilitating SI sessions for the following historically difficult courses: General Chemistry I and II; Physics of the Life Sciences I and II; General Physics with Calculus I and II; Organic Chemistry I and II; Anatomy and Physiology I and II; Physiology with Anatomy I and II; Introduction to Cell and Molecular Biology; Introduction to Biodiversity and Evolution; Drug Discovery; and Financial Accounting. An additional eight SI leaders were hired in the spring 2017 semester to lead sessions for writing-intensive courses selected for a new SI pilot program to support writing across the curriculum at the university (Monmouth University, 2017c).

Over the course of the program's history (2010-2017), 102 undergraduate students were employed as SI Leaders, and 77 have since graduated from the university. Of these 77 former SI Leaders, 51 served in the role for at least one full academic year while completing their undergraduate study. The present research will focus solely on the perceptions of experienced former SI leaders.

## **Conclusion**

While the reviewed literature on civic engagement, peer leadership, and SI leader development established the transformative nature of student leadership in higher education, there were notable areas absent from the research regarding the impact that peer-facilitated academic assistance programs, such as SI, has on the undergraduate

student leaders who are responsible for their facilitation (Lockie & Van Lanen, 2008; Malm, Bryngfors, & Morner, 2012; Skalicky & Caney, 2010; Stout & McDaniel, 2006).

This case study uses qualitative data to answer the research questions and to assist in filling the void in research on how undergraduate students benefit, both by experiencing transformative learning and the nature of civic engagement, as a result of serving in a leadership role within a peer-facilitated academic assistance program in higher education.

## Chapter 3

### Methodology

The purpose of this qualitative case study was to explore how former student leaders experienced transformative learning and the nature of civic engagement within their peer leadership roles as a result of working in an SI program in higher education. A particularistic case study methodology was chosen to examine the occurrence of this phenomenon within a particular SI program at a four-year, private university in New Jersey (Merriam, 2007). For the purpose of the present research, the unit of analysis was a group of former SI leaders, who have since graduated from the institution that serves as the context for this case study. Participants were selected through purposeful maximum variation sampling in an effort to capture the heterogeneity of the SI leader population and to ensure that participant responses satisfactorily represented the range of SI leaders employed by the program (Patton, 2002). Since “a hallmark of case study research is the use of multiple data sources,” data collection methods chosen for the current study included both semi-structured interviewing and graphic elicitation (Baxter & Jack, 2008, p. 554).

The study sought to answer the following questions:

1. How do former SI leaders describe the impact of serving in leadership roles during their undergraduate study at a private, four-year university in New Jersey?
2. How do former SI leaders describe their participation in civic engagement while working in an SI program at a private, four-year university in New Jersey?

3. In what ways do former SI leaders who served at a private, four-year university in New Jersey connect their student leadership experiences to transformative learning?
4. In what ways do former SI leaders apply their student leadership experiences to their post-graduation lives?

### **Assumptions of and Rationale for a Qualitative Methodology**

Qualitative research “helps us understand the meaning of social phenomena with as little disruption of the natural setting as possible” (Merriam, 1998, p. 5). It is based on the notion that reality is constructed by individuals interacting with their natural worlds. Thus, reality in terms of qualitative research is defined as “holistic, multidimensional, and ever-changing” (p. 202). Qualitative research is built upon “an interpretive paradigm, which emphasizes subjective experiences and the meanings they have for an individual” (Biba Starman, 2013, p. 30). Qualitative researchers, then, are interested in understanding the meanings that individuals have constructed (Merriam, 1998).

Most studies of transformative learning have used qualitative research methods in an effort to effectively align with the inherent exploratory nature of transformative learning itself, as the construct of transformative learning is also unique and personal to each individual. Therefore, the reality for each individual is his or her own interpretation of it, thus supporting the constructivist paradigm that serves as a foundation for qualitative research (Merriam & Kim, 2012). The current study sought to understand how undergraduate student leaders develop subjective meanings of their experiences within the context of peer leadership and how such constructed meanings can be interpreted (Creswell, 2014). Since “the interpretive paradigm, phenomenological approach, and

constructivism as the paradigmatic basis of qualitative research are closely linked to the definition and characteristics of case studies,” a qualitative case study methodology was implemented for this study to better understand participants’ experiences (Biba Starman, 2013, p. 30).

**Case study design.** The purpose of case study research is “to gain an in-depth understanding of the situation and meaning for those involved” in a particular phenomenon through “intensive descriptions and analyses of a single unit or bounded system” (Merriam, 1998, p. 19). Case study researchers are interested in discovery and interpretation rather than testing hypotheses; therefore, the case study as a methodological design is best aligned with qualitative research that seeks to answer “how” and “why” questions (Merriam, 1998; Yin, 1994).

The methodological approach for this study is aligned with Merriam’s (1998) definition of case study research, which characterizes case studies in three ways: particularistic, descriptive, and heuristic. First, the case study is particularistic in that it focuses on a particular situation, event, program, or phenomenon. Second, the case study is descriptive in nature, as it provides “a rich, thick description of the phenomenon under study” (p. 43). Third, the case study is heuristic in that it “can bring about the discovery of new meanings, extend the reader’s experience, or confirm what is known” through an exploration of the background of the phenomenon and the reasons for the problem, as well as an analysis of the findings (p. 44). A particularistic case study design was used in this study, which examines the experiences of former student leaders who worked in an SI program while completing their undergraduate degrees at a four-year, private university in New Jersey.

According to Merriam (1985), the case study offers a level of understanding and explanation not possible through conventional experimental or survey designs: “Rather than surveying a few variables across many cases, the case study intensively examines the interplay of all variables in order to provide as complete an understanding of the phenomenon as possible” (p. 206). Case study research provides a holistic approach to analysis, which is critical to exploring questions of meaning, particular in regard to educational research. Further, one of the advantages of conducting case study research is “the close collaboration between the researcher and the participant, while enabling participants to tell their stories” (Baxter & Jack, 2008, p. 545). Therefore, the implementation of case study design was appropriate for this study in order to better understand the meaning of transformative learning for the participants through the stories of the former SI leaders themselves.

### **Context**

The scope of this research focused on the perceptions of former SI leaders who were employed within an SI program at Monmouth University in West Long Branch, New Jersey, between 2010 and 2017. The university that serves as the context for this study is a comprehensive, coeducational institution that offers 57 undergraduate and graduate degree programs to approximately 6,300 students (Monmouth University, 2017a). The SI program began as a pilot in fall 2010 to fill a void in academic support services provided by the university to better support historically difficult courses. The initial pilot supported seven sections of General Chemistry and employed seven SI leaders. The program has since grown both due to its effectiveness and by faculty demand and, as of fall 2017, supports 55 course sections across multiple disciplines,

including biology, chemistry, physics, and accounting, with a staff of 30 SI leaders (Monmouth University, 2017c).

For the purpose of the study, the unit of analysis was a group of former SI leaders. An SI leader is defined as an undergraduate student (sophomore level or higher) who has successfully completed the SI-participating course with a B grade or better, has a 3.2 or higher cumulative grade point average, has been recommended by a faculty member, sits in course lectures with current students, and facilitates collaborative review sessions outside of the classroom three times per week for all students enrolled in the targeted course. This study concentrated on the experiences of former SI leaders who previously served in the role for at least one year while completing their undergraduate study and completed the mandatory, two-day training requirement, which includes hands-on training in collaborative learning techniques, Bloom's taxonomy, redirecting questions, facilitating sessions, and managing difficult student situations, among other topics.

### **Participants**

Fifty-one of the 77 former SI leaders who worked for the SI program at Monmouth University in West Long Branch, New Jersey, between Fall 2010 and Spring 2017 (and have since graduated) were qualified to participate in the study. All qualifying participants worked in the program for at least one full academic year and completed the same two-day, mandatory new SI leader training before the start of their first semester working in SI. The 26 former SI leaders who did not qualify did not work in the program for one full academic year. Participants were selected through a purposeful sampling strategy in an effort "to discover, understand, and gain insight" from experienced SI leaders (Merriam, 2007, p. 61). In order to capture the heterogeneity of the SI leader



population and to ensure that participant responses satisfactorily represented the range of SI leaders employed by the program (including demographic variables such as academic year, academic major, and gender), maximum variation sampling was implemented.

Since SI leaders facilitate sessions across a variety of disciplines, the study sought to include at least one former SI leader from each of the SI-supported courses in an effort to represent the entire range of variation within the sample population. Further, former SI leaders from both 100-level and 200-level courses were intentionally solicited to participate in order to have equal representation within the sample population, as SI leaders' experiences facilitating sessions for first-year students may differ from their experiences facilitating sessions for upperclassmen. These criteria determined which former SI leaders' experiences would be most relevant to the study (Maxwell, 2013).

Of the 51 former SI leaders who met the established criteria, I had personal contact information for 31 and solicited their voluntary participation through an email that outlined the purpose of the study as well as informed consent procedures and next steps should they wish to participate. Twenty-two former SI leaders expressed their willingness to participate in the study. Six of the 22 participants were male, and 16 were female. The participants ranged in age from 22 to 32. Three participants worked as an SI leader for one year; 9 participants served in the role for two years; and 10 participants maintained the position for three years while completing their undergraduate studies. Participants ranged from two months to six years post-graduation.

While employed by the SI program, the participants collectively facilitated SI review sessions for the following courses: (7) General Chemistry I (CE111); (2) Physics of the Life Sciences I (PH105); (1) Organic Chemistry I (CE241); (2) Anatomy and

Physiology I (BY111); (5) Physiology with Anatomy II (BY211); (6) Introduction to Cell and Molecular Biology (BY110); (1) Introduction to Biodiversity and Evolution (BY109); (3) Discovery and Thinking in Natural Sciences (SC100); (1) Western Civilization I (HS101); and (1) Principles of Financial Accounting (BA251). It is necessary to note that 5 former SI leaders facilitated SI sessions for more than one course as evidenced by the above course distribution.

### **Data Collection Methods**

**Interviews.** Data collection methods chosen for the current study included both individual interviewing and graphic elicitation. Interviews provide detailed accounts of participants' experiences and personal narratives within a particular context. As a common data collection method in qualitative research, interviews are often conducted along with other forms of data collection in an effort to provide the researcher with a wealth of information for data analysis (Rossman & Rallis, 2013; Turner, 2010). The rationale for interviewing participants in the current study is that the SI leaders' transformative learning experiences cannot be directly observed. Interviews are often used for evaluating transformative learning because they "focus on the learner's story of a particular experience to gain insight into the processes or outcomes of the learning" (Cranton & Hoggan, 2012, p. 524). For these reasons, a semi-structured, open-ended interview design was employed to allow the former SI leader participants to share as much information as they liked and to fully express their experiences given the nature of the open-ended questions. In addition, this design allowed me to ask follow-up, probing questions when additional information was desired (Creswell, 2007; Turner, 2010).

Since the researcher is a key instrument in qualitative data collection, conducted the interviews with each of the participants. Each interview lasted approximately 30 minutes in duration and was audio-recorded (Creswell, 2014). Participants were provided a document of informed consent prior to the start of each interview that stated the nature and purpose of the study, the confidentiality of their responses, the duration of the interview, and how their participation would benefit future student leaders. Participants were also informed that they could decline to answer any of the questions posed by the interviewer and choose to provide as little or as much detailed information as they would like in response to each question.

**Graphic elicitation.** At the conclusion of each interview, participants were provided with a graphic elicitation instrument (in the form of a participatory diagram) and prompt, which they completed individually during the latter 30 minutes of the scheduled meeting time. Graphic ideation, in the form of graphic elicitation, “offers the opportunity to thoroughly examine a problem from a number of perspectives using visual representations to both record and stimulate thought” (Crilly, Blackwell, & Clarkson, 2006, p. 345). Graphic elicitation provides participants an opportunity to draw a concept or experience, which can be beneficial when participants are asked to express abstract concepts that may be challenging to articulate in response to interview questions. For the purpose of this study, graphic elicitation was employed after the participants’ interviews as to not provide an immediate basis for discussion and potentially influence participants’ responses at the outset of the interview. By providing graphic elicitation prompts at the conclusion of the interview, respondents’ perspectives had already been verbally revealed prior to introducing an overview of my research interests in the form of the participatory

diagram (Crilly, Blackwell, & Clarkson, 2006). Implementing the graphic elicitation after the interview also allowed the participants to reflect on the answers they previously provided and expand or redefine them.

Research has shown that drawing allows research participants to become more aware of their own thoughts, opinions, and emotions and, therefore, also provides them a better medium through which they can process their experience (Bagnoli, 2009; Copeland & Agosto, 2012; Crilly, Blackwell, & Clarkson, 2006; Umoquit et al., 2008). Graphic elicitations are particularly useful when implemented as complementary to another data collection approach, such as interviewing (Copeland & Agosto, 2012). According to Bagnoli (2009), “Focusing on the visual level allows people to go beyond a verbal mode of thinking, and this may help include wider dimensions of experience, which one would perhaps neglect otherwise” (pp. 565-566). Given the abstract nature of the transformative learning experience of the SI leader, graphic elicitations assisted in further defining the participants’ perceptions of their role after the conclusion of their interviews.

### **Instrumentation**

**Interview protocol.** The individual interviews consisted of 10, open-ended questions and subsequent follow-up questions and probes that were focused on the central research questions, which sought to determine how SI leaders experience transformative learning and the nature of civic engagement as a result of serving in their peer leadership roles (see Appendix). The interviews began with neutral, descriptive information regarding the participant’s history with the SI program and continued toward a more conversational format that allowed the former SI leader to describe and interpret his or her own experiences while serving in a student leadership role (Merriam, 2007; Rubin &

Rubin, 2012). Through open-ended questioning, respondents had the opportunity to elaborate on their own unique experiences and anecdotes while working as an SI leader, which provided deeper description for data analysis (Stake, 1995).

Questions were partially derived from those asked on the *Learning Activities Survey (LAS)*, which was developed by King (1997) for use in higher education to evaluate respondents' experiences with perspective transformation. The LAS has two purposes: to identify whether learners experienced a perspective transformation and, if so, to determine what learning activities may have contributed to this transformation in an effort to gain a clear indication of the learner's understanding of the experience (King, 2004). The LAS is also divided into two parts: a survey and a follow-up interview. For the purpose of this study, the follow-up interview from the LAS (King, 2009) was adapted to refer specifically to the participant's experience within the SI program, rather than at the university as a whole; open-ended questions asked by the LAS were rephrased to reflect this adaptation and were included within the semi-structured interviews of the present research. Further, each interview was audio-recorded as a best practice measure of analysis (Merriam, 2007).

The relationship between the study's research questions and interview questions is illustrated in the following matrix.

Table 1

*The Relationship between Research Questions and Interview Questions*

Research Question	Interview Question(s)
1. How do former SI leaders describe the impact of serving in leadership roles during their undergraduate study at a private, four-year university in New Jersey?	<ul style="list-style-type: none"> <li>• How would you describe your undergraduate student experience before becoming an SI leader?</li> <li>• In what ways did serving as an SI leader within this institution's SI program develop your leadership skills (if at all)? Please provide specific examples.</li> </ul>
2. How do former SI leaders describe their participation in civic engagement while working in an SI program at a private, four-year university in New Jersey?	<ul style="list-style-type: none"> <li>• How would you describe your relationships with faculty and peers before becoming an SI leader?</li> <li>• How would you describe your involvement on campus before becoming an SI leader?</li> <li>• How did serving as an SI leader within this institution's SI program influence your involvement on campus while completing your undergraduate study (if at all)? Please provide specific examples.</li> <li>• How did serving as an SI leader within this institution's SI program foster your relationships with faculty and peers (if at all)? Please provide specific examples.</li> </ul>
3. How have former SI leaders experienced transformative learning within their SI leader roles at a private, four-year university in New Jersey?	<ul style="list-style-type: none"> <li>• In what ways have you changed since your undergraduate years as a result of serving in a peer leadership role?</li> <li>• What specific experiences in your role as SI leader may have contributed to this change?</li> </ul>
4. In what ways do former SI leaders who served in an SI program apply their student leadership experiences to their post-graduation lives?	<ul style="list-style-type: none"> <li>• How did serving as an SI leader within this institution's SI program affect your own personal academic or professional achievements (if at all)? Please provide specific examples.</li> </ul>

**Graphic elicitation protocol.** At the conclusion of the interview, participants were asked to depict, whether through words or a visual representation, how they conceptualized their leadership role in the form of a graphic elicitation (participatory

diagram). Participants were provided a diagram, which consisted of a blank sheet of paper with a figure representing the SI leader in the middle. An open-ended prompt that was less structured than the previous interview was included at the top of the diagram that instructed participants to sketch out the types of responsibilities and relationships that they associated with their SI leader role, as well as any other aspects that they found relevant in defining their peer leadership experience. I did not offer any verbal instructions or cues during the implementation of the graphic elicitation to assist the participants with their diagram in an effort to reduce potential biases (Umoquit et al., 2008).

The inclusion of graphic elicitation in the form of participatory diagramming allowed the respondents an additional opportunity to interpret their own experiences while serving as SI leaders during their undergraduate study. This type of creative activity encourages thinking “in non-standard ways, avoiding the clichés and ‘ready-made’ answers” which participants could easily respond with during an interview (Bagnoli, 2009, p. 566). Further, this activity appealed to different types of learners, as those participants who were more inclined to express ideas and experiences visually offered more information than they previously had in the interview format.

### **Data Analysis**

Case study research does not claim any particular methods for data analysis (Merriam, 2007). This study employed single-case data analysis that was both inductive and deductive. The analysis of collected data was continuous as data collection and analysis occur simultaneously in qualitative research. The data management system used for the study follows Reid’s (1982) protocol for organizing and managing data. During

the data preparation phase, I organized my personal notes, observations, and initial thoughts, while transcribing participant interviews. Each interview was coded with a pseudonym for confidentiality, organization, and retrieval purposes (Merriam, 1998). For the data identification phase, I divided the text into meaningful segments and created a spreadsheet to assist with data recall. During the data manipulation phase, I highlighted passages of text and noted observations in the margin as a preliminary analysis procedure prior to coding (Reid, 1982, as cited in Merriam, 1998). Transcribed interviews were coded as soon as transcripts were available (Maxwell, 2003; Merriam, 2007). To maintain reliability of data, I also checked all transcripts before the first phase of analysis to make sure that they did not contain any obvious mistakes made during transcription (Creswell, 2014).

**Coding.** According to Saldaña (2016), a code is “a word or a short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data” (p. 4). Coding is both heuristic and cyclical; it is an exploratory problem-solving technique that embodies multiple cycles in an effort to further focus the most salient features of the qualitative data (Saldaña, 2016). Therefore, “categories are abstractions derived from the data, not the data themselves” (Merriam, 1998, p. 181). Data are categorized by commonalities found within participants’ responses, even if “the commonality consists of differences” (Saldaña, 2016, p.10).

During the first cycle of data analysis, I used a combination of process coding and in vivo coding to summarize basic topics of passages as well as to reference particular phrases that came up repeatedly throughout the participants’ responses in an effort to



create a preliminary categorized inventory of the data's contents (Saldaña, 2016). While qualitative research questions address the nature of the participants' realities and suggest the exploration of personal, interpretive meanings found within the data, process coding and in vivo coding "catalogue and better reveal these ontologies" (p. 70). Process coding uses gerunds (-ing verbs) to label actual or conceptual actions relayed by participants, which "gets at the dynamics of their experiences," while in vivo codes are derived from the actual language of the participants in order to "better capture the meanings inherent to their experiences" (p. 106). Process coding further reflects the phases of the transformative process for participants through both simple, observable actions and more general, conceptual actions (Saldaña, 2016). During this first cycle, I used broad terms and connected preliminary codes to the central research questions of the study.

Through a second cycle of data analysis, I implemented pattern coding, which is "explanatory or inferential" and seeks to "identify an emergent theme" among data (Saldaña, 2016, p. 236). I extracted all similarly coded, first-cycle summaries and rearranged them into a smaller number of themes in a separate file for further analysis in an effort to develop the most relevant categories for the study (Saldaña, 2016). Each preliminary code was clustered together with similar codes in an outline form, which resulted in a list of tentative category names. I independently applied the codes to the data, and several initial minor themes were discarded due to having an insufficient number of responses associated with them.

In addition, during this second phase, I analyzed the participants' graphic elicitation diagrams for triangulation purposes to determine if any consistent themes were present across the multiple forms of data retrieved for the study. According to Crilly,

Blackwell, and Clarkson (2006), “comparing the evidence of each case to visual representations encourages an ongoing appraisal of the accuracy of the concepts and relationships depicted” (p. 351). I constructed a matrix to identify patterns, comparisons, and trends amongst and between the data collected in both the individual interviews and the graphic elicitations that were structured around the central research questions of the study (Maxwell, 2013). I also extracted passages within both participants’ interview responses and graphic elicitation diagrams that exemplified a particular code and recoded the data based on any new emergent themes that arose. This phase of the data analysis was more deductive in nature, as I looked back at the data from the themes to determine if more evidence was needed for support (Creswell, 2014). After the data analysis concluded, eight final themes remained, as outlined in Chapter 4.

As an outcome of coding, a theme serves to “bring meaning and identity to a recurrent experience and its variant manifestations” in an effort to unify “the nature or basis of the experience into a meaningful whole” (DeSantis & Ugarriza, 2000, as cited in Saldaña, 2016, p. 199). Thematic analysis is an appropriate method of qualitative analysis, especially in studies that seek to explore individual experiences and employ interviews and participant-generated documents as data collection methods. In the case of the current study, thematic analysis effectively served to “divide, regroup, reorganize, and link data to consolidate meaning and develop an explanation” of how former SI leaders experienced transformative learning and the nature of civic engagement in relation to the research questions posed by the study, as well as in connection with the study’s theoretical framework (Saldaña, 2016, p. 9). More specifically, the outcome of the analysis produced an integrative theme, weaving together various smaller themes into

a coherent narrative exemplifying the impact of the peer leadership experience for study participants (Saldaña, 2016).

### **Trustworthiness, Reliability, and Validity**

The study sought to establish trustworthiness of data through reliability and validity. Triangulation is a primary method of addressing both reliability and internal validity within qualitative research (Merriam, 2007). For the purpose of this study, multiple data collection methods, interviews and graphic elicitations, were implemented in an effort to gather answers to the same central research questions by different means, thus employing triangulation. It should be noted that both methods are equally vulnerable to the bias intrinsic to self-reported data; however, triangulation of methods by comparing participants' experiences across interview responses and graphic elicitations served to counter balancing flaws that may be inherent in a single method (Maxwell, 2013). To further address internal validity, I implemented member checks within the data analysis process, and brought data and interpretations back to the participants for clarification and validation (Merriam, 2007).

Additionally, I provided a clear outline of the study's methodology or, as Merriam (2007) refers to it, an "audit trail," in an effort to make successful replication possible for future research. The study is also credible in that the research was systemic and grounded in a conceptual framework, and conclusions were logically drawn. Further, the study also meets the authenticity criteria of social constructivist inquiry, which, according to Lincoln and Guba (2000), maintain trustworthiness, academic rigor, and internal validity in the form of fairness; ontological and educative authenticities; and catalytic and tactical authenticities. In regard to fairness, all stakeholders' views, perspectives, claims,

concerns, and voices were considered during the study and are apparent within the text. In terms of ontological and educative authenticities, the study raised a level of awareness of student leadership development and implications among individual research participants as well as individuals with whom they may communicate. While I intend for this study to prompt further inquiry from its readers in the form of action research, the catalytic and tactical authenticities have yet to be determined (Lincoln & Guba, 2000).

### **Researcher's Role**

When conducting qualitative inquiry, researchers carry with them certain assumptions, worldviews, and previously developed conceptual frameworks through which they comprehend everyday life (Creswell, 2014). I personally have had multiple experiences that are relevant to the topic of this dissertation, both at the student and professional levels, which I, too, carried with me while conducting the present research. For example, I worked as a peer writing assistant during my graduate studies and also currently serve as the director of the writing center and SI program at Monmouth University. From these two vastly different experiences, I am able to not only witness the transformation of the student leaders whom I supervise, but I am also able to reflect back on my personal transformation as a student and future professional as a result of having served in a student leadership role.

In my role as director, I supervise approximately 50 student leaders each academic year in their roles as writing assistants and SI leaders. In addition, I have kept in touch with many former student leaders and have been able to observe how the skills they gained serving in a leadership role during their undergraduate years have directly transferred to their current success in graduate studies, in medical school, and in their

current professions. As a result of these experiences, I have developed specific beliefs and assumptions regarding the development of student leaders. I believe that these students gain a great deal of leadership, communication, time management and relationship-building skills as a result of their on-campus peer leadership positions. I also believe that such skills can contribute to increased levels of institutional engagement and generate high-impact, immersive learning experiences outside of the classroom.

These beliefs have influenced the way that I am approaching this research in that I am more aware of how student leaders learn to help peers construct knowledge through social interaction, exploration, and application, which can lead to connecting with other students individually and the campus community as a whole. This assumption is also connected to a constructivist worldview in that I am seeking to understand how undergraduate students develop subjective meanings of their experiences within the context of peer leadership and how such constructed meanings can be interpreted (Creswell, 2014). The constructivist worldview that I ascribe to influences my choice of implementing a qualitative research approach for this study; through a qualitative framework, I was able to co-construct knowledge of the phenomenon as a researcher along with the participants of the study (Jones & Abes, 2010).

### **Ethical Considerations**

Ethical guidelines set forth by the IRB of Rowan University were followed for this study. After IRB approval was obtained, research commenced. Participation in both the interviews and the graphic elicitations was completely voluntary. It is important to note that I conducted the interviews and also had a previous supervisory relationship with the participants when they were employed as SI leaders. To address this bias, I was

cognizant of intentionally understanding this possible influence on the participants' responses and how it may have also affected the validity of the inferences drawn from the interviews and graphic elicitations (Maxwell, 2013). Further, for the same reason, it is important to consider potential threats to the study due to power dynamics between me and my former student employees (Sieber & Tolich, 2012). I was also cognizant in eliminating any perceived pressure that the former SI leaders may have had to participate by clearly communicating that the study had no impact or connection to the supervision or quality of their work while employed as student leaders during their undergraduate study at the university. I was careful not to blur lines between qualitative research and program evaluation (Jones, 2002).

All participants were informed that their participation was voluntary, the interviews were being audio-recorded, and their responses would remain confidential within the study. Each participant was provided informed consent with the option to decline to answer any of the questions that I posed, both within the individual interview and graphic elicitation, as well as the ability to choose to provide as little or as much detailed information as he or she would like in response to each question. To ensure the confidentiality of responses, each participant was assigned a pseudonym of which only I was privy; during the transcription and coding processes, participants were identified by their pseudonyms and never referred to by name or any personal identifier.

## **Conclusion**

This chapter detailed the qualitative research design selected for this study, including an overview of the study's sampling strategy, data collection methods, analysis, and instruments, situated within the framework of case study methodology. In addition,

issues concerning the role of the researcher, ethical considerations, and the privacy and confidentiality of participants were also discussed. Results of the study will be presented in Chapter 4.

## Chapter 4

### Overview of Findings

The purpose of this chapter is to provide an overview of the major findings yielded by the qualitative data analysis with a focus on how former SI leaders experienced transformative learning and the nature of civic engagement while serving in a peer leadership role in higher education during their undergraduate years. This chapter also includes a code map that details the bridge between both cycles of coding and the emergent themes found within the data, as well as a discussion of the triangulation of both the interview transcripts and the graphic elicitation diagrams in regard to these themes. Further, this chapter offers a brief introduction of and rationale for the following two chapters, which are in the form of journal articles, thus serving as a springboard for later discussion.

Prior to the discussion of findings, it is necessary to address the limitations of Diller's (2001) definition of civic engagement, which served as a guide for the present research in an attempt to describe how SI leaders participate in civic engagement as a result of their role. Diller's (2001) definition as a heuristic was vague in that it did not effectively align civic engagement within the specific context of higher education, which is how it was represented within the current study. The definition of civic engagement that is inherent to the mission statement of the institution that serves as the context for this case study would have been more closely aligned with the purpose of this research.

While there were no significant changes made to the aforementioned methodological framework for the current study, it is important to note that three participants had limited time and were unable to complete the graphic elicitation exercise



at the conclusion of the interview; therefore, the data set includes 22 interview transcripts but only 19 graphic elicitation diagrams. There are no additional challenges to report concerning the generation of data or data analysis.

### **Discussion of Findings**

The primary data set for this qualitative case study included semi-structured interview transcripts and graphic elicitations. I invited 31 former SI leaders who met the criteria to participate in the study via an email invitation that outlined the purpose and nature of this research. Twenty-six of the 31 potential participants responded within the first 48 hours of receiving the invitation; 22 of the 26 respondents went on to schedule face-to-face interviews with me over the course of the following three weeks. These 22 participants were asked to talk about their undergraduate student experiences both before and after assuming the role of an SI leader as well as how this experience may have impacted their current professional or academic careers. Interviews lasted between 36 and 62 minutes and were audio-recorded and manually transcribed. Immediately following the interview, each of the 22 participants was asked to complete a graphic elicitation in the form of a participatory diagram, which prompted him or her to construct a visual representation of the SI leader's experience.

Through the blended framework of both Mezirow's (1997) transformative learning theory and Nohl's (2015) practice-based approach to transformative learning, findings emerged from the data analysis of both the interview transcripts and graphic elicitations that exemplified how participants experienced both transformative learning and the nature of civic engagement as a result of their service as SI leaders while completing their undergraduate degrees at a four-year, private institution in New Jersey.

Research findings were categorized into the following eight emergent themes: skills gained, personal growth, connecting with others, engagement on campus, internal changes, interpretation of role, transferability of skills, and post-graduation life. This chapter provides a brief summation of these findings. Chapters 5 and 6 will provide a more thorough discussion of each finding in relation to the SI leader's transformative experience.

**Skills gained.** Former SI leaders were able to reflect on tangible skills they acquired as a result of serving in a peer leadership role in higher education during their undergraduate years. Participants delineated the skills they gained into three specific categories: academics, communication, and public speaking. In terms of enhanced academic skills, participants noted that their ability to sit in on classes that they had already taken in a new facilitator role allowed them to keep on top of their own studies. Since the 100- and 200-level SI-participating courses serve as the foundation for advanced-level courses that the SI leaders were taking, participants communicated that they were able to continue strengthening their knowledge of core content even as they were applying it to more complex concepts. Further, participants strongly felt that having an opportunity to teach course content helped them increase their own knowledge of the material.

Participants also referenced that their grades increased while serving as an SI leader due to better developed time management skills and an increased awareness of varied study techniques. They discussed that, after becoming an SI leader, they gained a sense of structure to their weekly college schedule, which, despite a decrease in free time, allowed them to perform better academically, since they had to plan their work and study

hours in advance. They also admitted that serving in the SI leader role taught them how to study; not only did preparing study sessions for their students allow them to discover their own strengths and weaknesses in regard to note-taking, textbook reading, and test preparation, but participants also noted that they learned from their students as well, thus fostering a reciprocal academic relationship that benefitted both parties.

Data collected from both interview transcripts and graphic elicitation diagrams indicated that communication ability and public speaking confidence were two areas in which participants experienced significant growth while serving as SI leaders. Participants credited their SI leader role with helping them become better at communicating, both personally and professionally, with a diverse group of individuals, including different ways to approach people, different ways to phrase ideas, and adapting communication measures based on audience, particularly in terms of motivating unmotivated students.

Participants were also open in expressing their former fears of public speaking prior to becoming an SI leader and discussed how their experience in the position over time served to alleviate those fears. Participants specifically mentioned how they would have to get up in front of a group of students three times each week and be confident in their delivery of content material, which forced them out of their comfort zone, or as one participant expressed, “being comfortable being uncomfortable.” Participants reflected on the value that overcoming their fear of public speaking through their SI leader position has had on their ability to deliver presentations in other classes and present at research conferences during their undergraduate years and beyond.

**Personal growth.** In addition to providing specific examples of the tangible skills they gained as a result of serving in an SI leader role during their undergraduate years, former SI leaders also expressed the intangible personal growth they experienced in terms of their advanced leadership development. In both their interview responses and graphic elicitation diagrams, participants commented or depicted how they were able to hone and cultivate their leadership skills, foster their confidence, and subsequently grow in new ways through the mentorship responsibility that inherently comes along with the SI leader position and their transformation into this new role.

Participants reflected on the realization that their growth and success as an SI leader was dependent on their growth and success as both a mentor and a role model to their students. Participants characterized the role model figure they provided students within the context of the SI leader position as setting an example of what a model student should be doing, both inside and outside of the classroom. Former SI leaders expressed that their role organically progressed from role model to mentor for their students, as their connection with them lasted beyond the scope of one semester.

Interview responses indicated that participants attributed their continued effectiveness as both role models and mentors to the leadership skills they developed during the time they served as SI leaders. The specific leadership skills exemplified by the participants' discussions include critical thinking, conflict resolution, and task delegation. Participants defined critical thinking in terms of looking at a situation from all possible angles before coming to the best decision for their students; they defined conflict-resolution as problem solving and managing different personalities; and they defined task delegation as the ability to effectively divide their time and responsibilities

to help different people in the most efficient way possible. Former SI leaders credited these intangible skills with fostering their increased confidence in taking on this and other leadership roles, especially for those who were previously wary of such positions, as well as the self-assurance in knowing that they would be able to effectively carry out those roles much in the same way they did as an SI leader during their undergraduate years.

**Connecting with others.** In addition to heightened personal growth, participants also expressed the positive social impact that serving as an SI leader has had on connecting with others on campus during their undergraduate years. In analyzing the interview and graphic elicitation data, the delineation of the relationship-building aspects of the SI leader's role became apparent in three distinct categories: with faculty, with students, and with peer SI leaders. Participants voiced great value in having had the unique role of serving as a liaison between faculty and students, thus forging bonds with a larger network of faculty members. Further, participants stated that they were introduced to professors through the SI position whom they may not have otherwise had the chance to take for class. Working with a diverse group of faculty members provided former SI leaders an opportunity to engage in conversations regarding their own academic and professional aspirations with experts in their fields; these interactions in some cases led to on-campus research opportunities for former SI leaders. Participants also mentioned an added benefit of learning how to approach faculty members and viewing them in a different role outside of the classroom. As a result of serving as an SI leader, participants responded that they were better able to relate to faculty more than they had in their former student roles.

Former SI leaders commented that their facilitator role also allowed them to build rapport quickly with the current students in the course because the students knew who they were by just seeing their faces in class. Within their interview responses and graphic elicitation diagrams, participants noted the importance of developing new relationships with students who attended SI sessions, which deepened their connection to other students on campus with whom they may not have met in any other capacity. Participants also expressed their intrinsic desire to help others and how the SI program provided them with both an outlet and a medium through which they were connected to students who needed their help, thus satisfying a personal, inherent need and fostering a passion for civic engagement. In addition to helping students, former SI leaders also reflected on the reciprocity they received in return, specifically concerning the expansion of their social networks. Participants added that some of their students would eventually end up being their classmates in upper-level courses and expressed pride in developing SI students into future SI leaders themselves.

Participants also illustrated the bond that naturally formed among peer SI leaders due to their common involvement with helping others through a non-traditional academic assistance program that fosters a greater campus connection and student experience. Some former SI leaders responded that they were recruited to the position by their friends who served in the role and had positive experiences, while others conveyed that they met their core group of friends during new SI leader training and that those friendships continued beyond graduation. Given the variety of SI-participating courses, participants noted that friendships formed across academic disciplines and allowed them the opportunity to step out beyond the social confines of their undergraduate major.

Additionally, participants recollected that their mutual experience granted them an opportunity to learn how to work together with fellow SI leaders toward a collective goal of how to best help their students.

**Engagement on campus.** Participants responded that the relationship-building experiences they encountered as a result of working in the SI program positively impacted their levels of institutional engagement by opening doors to other opportunities and providing them with a sense of belonging on campus. Former SI leaders identified their involvement with the SI program as the turning point in building their confidence to get more involved. For participants who were commuter or transfer students and would otherwise just attend classes and go home, working as an SI leader required them to spend more time on campus, which led to their interest in pursuing additional student leadership positions, such as becoming student mentors, alumni liaisons, admission representatives, and research assistants. Participants also noted that serving as an SI leader allowed them to branch out in additional ways in serving their community during their undergraduate years and provided them the incentive to do so.

Former SI leaders credited the SI program with fostering a sense of belonging to something larger than themselves through a unified mission to support student success. Further, participants specifically noted that SI provided them with a physical space on campus that served as a home away from home, which was pivotal to their on-campus engagement and connection with the institution. Participants who lived far from home during their undergraduate years expressed they would come into the SI office every day and feel like part of a family. Similarly, participants who were student-athletes in high school but did not continue their sport in college conveyed that working in the SI

program filled a void by allowing them the opportunity to belong to a different type of team. Further, former SI leaders who transferred from another institution during their undergraduate years commented that through their SI leader role, they were not only able to help students but, in the process, also found a community to meet other people and transition to their new environment. Throughout their interview responses, participants expressed that, through these shared experiences, they were able to connect on a different level and eventually find their niche in serving as an SI leader during their undergraduate years.

In terms of participating in civic engagement on campus, respondents noted their intrinsic desire to help others as a factor influencing their initial decision to become SI leaders. Additionally participants identified the SI program as providing both an outlet and a medium through which they became connected to others who needed their help, thus fostering a passion for altruism. Once in the role, SI leader participants communicated that their desire to serve others, both on and off campus, further evolved through additional opportunities they were presented with, such as volunteering or other leadership roles, which ultimately resulted in a positive experience for both the SI leaders and the greater community.

**Internal changes.** Participants expressed that, after finding their niche, they underwent numerous internal changes while navigating their new student-facilitator role that contributed to a perspective shift in how they viewed themselves. One particular constituent of internal change that was cited frequently throughout the participants' interview responses and within their graphic elicitation diagrams concerned building confidence. Former SI leaders noted several aspects of the student leadership role that



contributed to increasing their confidence, such as their understanding of challenging content material, their ability to balance work and school, the recommendation of their respective faculty members, and their competence in communicating with a diverse group of individuals.

Participants responded that having to facilitate review sessions for a complex, foundational course developed their academic confidence in their ability to handle advanced content material in their own upper-level courses. Further, participants reflected on the time commitment required for the SI leader position and how their ability to effectively balance their time between work and school gave them the confidence to pursue additional employment opportunities during their undergraduate years and beyond. Former SI leaders also noted that the faculty recommendation needed to be considered for the position was a confidence booster because it proved that they excelled among their peers in the eyes of their former professors. In addition, participants expressed increased confidence in their ability to communicate with and provide guidance to individuals who were different from themselves.

Within the graphic elicitation diagrams, former SI leaders illustrated the overarching, internal transformation that took place by serving in this peer leadership role as “finding yourself.” When asked to reflect on how they have subsequently changed since their undergraduate years, participants identified taking on the SI leader position as a turning point in becoming more open, more vocal, less introverted, less timid, and more outgoing. Participants also mentioned that as they became more comfortable in the SI leader role, they became more comfortable at the university in general. This concept was further defined throughout the interview responses where participants noted that serving

as an SI leader made them more comfortable in seeking out new experiences and stepping outside their comfort zones, not only throughout the remainder of their undergraduate years, but in their post-graduation lives as well.

**Interpretation of role.** Former SI leaders also admitted to experiencing a perspective shift in how they interacted with the world around them, specifically regarding how they were viewed by others, after transforming into their student-facilitator roles within the SI program during their undergraduate years. Participants discussed the new level of respect they garnered from faculty members once they became SI leaders. By taking on the additional responsibility of assisting their peers in challenging courses, former SI leaders said that faculty members were impressed, as their commitment to the position proved that they were truly invested in the academic discipline. Further, participants commented that, when faculty members knew they were SI leaders, they began to treat them like peers even though they were still undergraduate students themselves. Participants reflected on how they had to navigate their new relationships with faculty members on the student-faculty level, interacting as a colleague when performing their SI leader responsibilities, yet still functioning as a student in their own classes and faculty-sponsored research projects.

In addition, participants expressed that they were challenged in developing relationships with other students while interpreting their new peer-facilitator roles within the SI program. Former SI leaders commented that other students viewed them differently because of their close working relationships with faculty members despite the fact that they were still their undergraduate peers. They also reflected on the difficulty in learning how to interact with younger students in a way that fostered mentorship and did

not perpetuate an authoritative role. Participants identified the complexity associated with “wearing two hats” during their undergraduate years as both SI leader and undergraduate student. One participant expressed the interpretation of this new role as “a scoop of real life in between all this academia.”

**Transferability of skills.** When asked to reflect on how their SI leader experience has impacted their lives beyond graduation, participants discussed how the skills they developed during their time as an SI leader have transferred to their current, real-world careers and post-graduate work. The skills with the highest level of transferability were broken down by participants into the following categories: content knowledge, session facilitation, and communication. In terms of content knowledge, participants expressed that sitting in lectures as an SI leader offered a great review of the material needed for medical school as well as provided a solid foundation of key courses in their chosen disciplines. Former SI leaders also noted that having to teach the material to other people further increased their content knowledge, which made it easier to retain and apply these concepts to their graduate coursework. Additionally, participants currently enrolled in medical school commented that serving as an SI leader prepared them for the MCAT exam because it kept key content fresh in their minds, such as anatomy, that they would need to know for their future careers. Regardless of their future goals, former SI leaders collectively expressed that their participation in the SI program fostered their passion to become lifelong learners.

Additionally, participants noted that the specific collaborative learning techniques and study strategies they used in facilitating SI sessions for students have equally benefitted their own studying and work preparation. Former SI leaders who are currently

medical school students responded that they are now able to approach studying in different ways to achieve greater success on exams, while participants working in the education field regularly tap into what they learned while working in SI when preparing lesson plans for their high school students. Similarly, former SI leaders who pursued teaching assistant positions (TA) in graduate school added that the different techniques they found helpful for their undergraduate students are the same techniques they are using again in their TA sessions. Some participants paralleled their prior SI leader experience facilitating sessions with their current experience diagnosing patients, as for each role, they are required to identify a concern, assess how they can help, and be able to break down complex ideas in an easily understood manner, which is a key component of the SI model.

Throughout the interview responses, participants highlighted how the communication skills they gained as a result of their SI leader experience transferred into increased involvement and socialization in their current academic or professional roles. Former SI leaders commented that they were more eager to meet new people and take advantage of on-campus opportunities as soon as they arrived at their current graduate or medical school due to their previous engagement in the SI program during their undergraduate years. They noted the same level of comfort in their ability to talk one-on-one with faculty, which they attributed to the close faculty relationships they developed through the SI partnership, as well as in their ability to work with individuals different from themselves, which they noted was important when planning to enter a career involved with patient care. Participants pursuing medical degrees further elaborated that aspects of communication that they learned and developed as SI leaders have proven

helpful in fostering patience when talking with patients and their families and also when handling difficult situations. Former SI leaders also stressed the importance of learning to work as a team in the SI program, as it provided them the ability to interact with administrators, faculty, and students on different levels, which has been transferable to their current positions, whether as a medical school student working with doctors and nurses, or as an employee working with peers and supervisors.

**Post-graduation life.** In addition to honing valuable skill sets, former SI leaders illustrated in their graphic elicitation diagrams how their experience serving in a peer leadership role during their undergraduate years helped shape their future goals and ambitions, which they are currently pursuing in their post-graduation lives. While some participants already planned on applying to medical school prior to taking on their SI leader role, other participants chose their career path directly as a result of their experience in the SI program. In their interview responses, participants equally expressed that being an SI leader gave them an opportunity to continuously engage in foundational course content within their chosen disciplines during their undergraduate years, which provided them the ability to decide if that was really the career they wanted to pursue following graduation.

Participants also discussed the specific ways in which their SI leader role directly connected them to their current positions, whether through letters of recommendation from their SI faculty members, who were able to express their capabilities not just as students but as colleagues as well, or through stating their involvement with SI on their graduate and medical school applications, which set them apart from peers applying for the same programs. Former SI leaders noted the ways in which they leveraged their SI

leader role during their medical school interviews; one participant shared that she did not think she would be in medical school right now without SI. Another participant responded that she chose her current master's degree program in healthcare administration solely based on the passion for leadership that grew out of her SI experience.

Further, some participants indicated that they received employment opportunities as a direct result of serving as SI leaders. One participant credited his SI leader experience as the feature that set him apart from his peers when applying for a TA position, as he already had experience teaching and helping other students as an undergraduate. Another participant reflected on his SI leader experience during a recent job interview when asked how he would work with different types of personalities and have the ability to see other people's points of view. Former SI leaders who are currently employed as high school teachers discussed how serving as an SI leader helped shaped their careers in education by determining the field they wanted to pursue following graduation, as they were not education majors in college. One former SI leader, in particular, who is now an educator, shared that she landed her first teaching job before graduating because her SI faculty member recommended her for a position at the high school she was also teaching at part-time. Participants remarked that they were grateful for the professional networking opportunities that were inherent to their SI leader experiences.

### **Code Map**

The format of the following code map (Table 2) is based on iterations of analysis conducted by Anfara, Brown, and Mangione (2002) and serves as a visual representation

of the emergence of the aforementioned findings from the initial coding of data through theme development. This code map also provides a holistic interpretation of the data set as a whole as it relates to the central research questions guiding the present study.

Table 2

*Code Map: Three Iterations of Data Analysis*

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**Code Mapping for SI Leader Transformation**

RQ1: How do former SI leaders describe the impact of serving in leadership roles during their undergraduate study at a private, four-year university in New Jersey?

RQ2: How do former SI leaders describe their participation in civic engagement while working in an SI program at a private, four-year university in New Jersey?

RQ3: In what ways do former SI leaders who served at a private, four-year university in New Jersey connect their student leadership experiences to transformative learning?

RQ4: In what ways do former SI leaders apply their student leadership experiences to their post-graduation lives?

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**(Third Iteration: Application to Data Set/Interpretation)**

As a result of serving in an SI leader role during their undergraduate years, participants experienced increased opportunities to connect with others, build relationships, and engage in meaningful experiences on campus that contributed to both their personal growth and individual perspective transformation. In addition, participants gained tangible communication, academic, and leadership skills that have proven to be highly transferable to their post-graduation lives, whether in graduate school, professional school, or their current occupations.

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**(Second Iteration: Pattern Variables/Themes)**

1A: Skills Gained	2A: Connecting with Others	3A: Internal Changes	4A: Skill Transferability
1B: Personal Growth	2B: Engagement on Campus	3B: Interpretation of Role	4B: Post-Graduation Life

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**(First Iteration: Initial Codes/Surface Content Analysis)**

1A: Leadership	2A: Involvement	3A: Change	4A: Networking
1B: Academics	2B: Belonging	3B: Facilitator Role	4B: Employment
1C: Communication	2C: Patience	3C: Confidence	4C: Medical School
1D: Public Speaking	2D: Friendships	3D: Real World	4D: Graduate School

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## Conclusion

The final two chapters of this dissertation are intentionally written in manuscript format for publication and will provide a more thorough examination of the study's findings. Chapter 5, entitled "Perspective Transformation in the Supplemental Instruction (SI) Leader," is an empirical article connecting the perspective transformation of former SI leaders to the theoretical framework of transformative learning theory. This article adheres to the publication requirements of the *Journal of Transformative Education (JTED)*, which is a peer-reviewed, scholarly journal focused on advancing the understanding, practice, and experience of transformative education.

Chapter 6, entitled "Bridging the Supplemental Instruction (SI) Leader Experience and Post-Graduation Life," is a practice-based article highlighting the ways in which serving as an SI leader prepares undergraduate students for their professional and academic post-graduation lives. This article was written specifically for higher education practitioners and meets the criteria set forth by *The Learning Assistance Review (TLAR)*, which is an official publication of the National College Learning Center Association (NCLCA) and seeks to foster communication among higher education learning center professionals. Its audience includes learning center administrators, teaching staff, and professional or student tutors, consultants, mentors, and faculty members and administrators who are interested in improving the learning skills of postsecondary students.

Both manuscripts are co-authored by Dr. Ane Turner Johnson, who also served as my dissertation chair. The dissertation concludes with a comprehensive list of references,



encompassing all citations used within the first four chapters, as well as those included within the following two manuscripts.

## Chapter 5

### Perspective Transformation in the SI Leader

#### Abstract

This qualitative case study explores how former Supplemental Instruction (SI) leaders experienced transformative learning as a result of serving in a peer leadership role at a four-year, private university in New Jersey during their undergraduate years. Further, this study examines former SI leaders' individual perspective transformations through a blended theoretical framework of transformative learning based on the principles set forth by Mezirow (1997) and Nohl (2005). Through their participation in interviews and graphic elicitations, former SI leaders offered valuable insights concerning the transformative nature of student leadership and its correlation with increased campus engagement and relationship development that is inherent to the SI leader role. This study also assists in filling the void in research on how undergraduate students benefit by experiencing transformative learning as a result of serving in a leadership role within a peer-facilitated academic assistance program in higher education.

Higher education research throughout the decades has shown that extracurricular learning that extends beyond the confines of the college classroom walls is most significant to how students learn, mature, develop, and change (Kuh, 1993; Moffatt, 1989; Wilson, 1966). In-class academic experiences constitute only a fraction of the learning that occurs during a student's undergraduate career; co-curricular experiences provide powerful learning opportunities for leadership development that supplement students' formal classroom experiences (Astin & Astin, 2000; Kuh, 1993). Out-of-the-classroom experiences, such as serving in a student leadership role, can lead to the actualization of transformative learning opportunities, which may materialize in a heightened development of skills that are transferable to future academic, professional, and civic aspirations.

When colleges and universities provide intentional, high-impact, and immersive leadership opportunities for students, they are fostering learning experiences that are transformative rather than merely transactional in nature (Jacoby, 2009; Stripling, 2016). Assuming student leadership roles not only fosters academic learning outside of the classroom but also develops the essential skills needed to transform students into the effective change agents of tomorrow (Cress et al., 2010). Institutions of higher education must make a paradigmatic shift in viewing students as both learners as well as leaders, thus considering their out-of-the-classroom experiences as equally impactful indicators of success in order to open up new possibilities for transformation and change (Astin & Astin, 2000).

Supplemental Instruction (SI) provides an outlet through which undergraduate students can serve in a leadership role within a collaborative learning environment, which

strengthens their own community orientation and civic engagement responsibilities while concurrently inspiring others to take ownership of their own learning (Flanagan & Levine, 2010). The SI program targets traditionally difficult academic subjects—those that have a high rate of D or F grades and withdrawals—and provides regularly scheduled, out-of-class study sessions facilitated by SI leaders. As a non-traditional academic assistance program, SI does not identify high-risk students, but rather identifies historically difficult classes, thereby avoiding a remedial stigma. While all students may not take advantage of the voluntary service, it attracts an equal proportion of students from differing ability groups (Monmouth University, 2010a).

While the majority of research on peer-facilitated academic assistance programs, such as SI, examines positive effects on participants, few studies set out to examine the additional impact that the program has on undergraduate student leaders (Lockie & Van Lanen, 2008; Malm, Bryngfors, & Morner, 2012; Skalicky & Caney, 2010; Stout & McDaniel, 2006). The purpose of this qualitative case study is to explore how former SI leaders experienced transformative learning through perspective transformation within their student leadership roles as a result of working in an SI program in higher education. A particularistic case study framework was chosen to examine the occurrence of this phenomenon within a particular SI program at a four-year, private university in New Jersey (Merriam, 2007).

This study used the theoretical lens of Mezirow's (1997) transformative learning theory to frame the research on how SI leaders experience transformative learning as a result of serving in a peer leadership role in an academic assistance program in higher education. Understanding the meaning of transformative learning for the participant was

the focus of the current study, as it sought to understand how undergraduate student leaders develop subjective meanings of their experiences within the context of peer leadership and how such constructed meanings can be interpreted (Cresswell, 2014). Since SI leaders facilitate collaborate learning experiences that seek to transform how their student participants learn, Mezirow's (1997) transformative learning theory offers a compelling lens through which their own experiences can be framed during the process (Caruana, Woodrow, & Perez, 2015).

## **Literature Review**

**Transformative learning and perspective transformation.** Based on the principles of Kuhn (1962), Freire (1970) and Habermas (1984), Mezirow's (1990a) transformative learning theory defines transformative learning as "the process of learning through critical self-reflection," which allows "a more inclusive, discriminating, and integrative understanding of one's own experience" (p. xvi). The theory was originally proposed by Jack Mezirow at Columbia Teacher's College in 1978 based on his research on adult women reentering college and the subsequent internal changes that occurred as a result of their transition from homemaker to student (Hoggan, 2016; Nohl, 2015).

Mezirow continued to develop the theory well into the late-1990s with an increased focus on how adult students take control of their own learning in the classroom, a foundational aspect of Freire's (1973) concept of student conscientization (Hoggan, 2016; Patterson, Munoz, Abrams, & Bass, 2015). Mezirow (2000) termed this process *perspective transformation*.

Mezirow (1981) defines perspective transformation as "the emancipatory process of becoming critically aware of how and why the structure of psycho-cultural

assumptions has come to constrain the way we see ourselves and our relationships, reconstituting this structure to permit a more inclusive and discriminating integration of experience and acting upon these new understandings” (as cited in Kitchenham, 2008, p. 109). The foundation of this transformation involves the learner altering his or her own frames of reference through critical reflection, specifically in regard to problem-solving, and becoming critically aware of his or her encounters with the world, others, and themselves (Mezirow, 1990b, 1997).

For Mezirow (1990a), *learning* becomes synonymous with *meaning* when an individual uses an interpretation of his or her own experience to guide decision-making. Mezirow (1990a) further differentiates between two types of meaning-making: *meaning schemes* and *meaning perspectives*. Meaning schemes refers to “related expectations governing ‘if-then,’ ‘cause-effect,’ and category relationships as well as event sequences” (p. 1); in other words, meaning schemes are implicit rules for interpreting meaning based on expectations from previous experiences (e.g., turning a knob will open a door). Conversely, meaning perspectives are higher-order interpretations based on predictions, not expectations.

Meaning perspectives, according to Mezirow (1990a), “refer to the structure of assumptions within which new experience is assimilated and transformed by one’s past experience during the process of interpretation” (n. p.) Such perspectives provide principles for interpretation, which contribute to an individual’s frame of reference, which is defined by Mezirow (1997) as a “structure of assumption through which we understand our experiences,” thus, frames of reference “selectively shape and delimit expectations, perceptions, cognition, and feelings” (p. 5). Transformative learning, then,

is the process of altering an individual's frame of reference. When transformative learning occurs, individuals move toward a more inclusive frame of reference that is molded by critical reflection and personal experience, which allows them to consider a worldview that extends beyond prior preconceptions or assumptions (Mezirow, 1997).

Mezirow's (1997) original model of perspective transformation had ten stages: (1) a disorienting dilemma, an experience or situation which throws the learner off balance from their usual perspective or view; (2) self-examination; (3) a critical assessment of assumptions; (4) recognition that one's process of transformation is a shared experience; (5) exploration of options for new roles or actions; (6) planning a course of action; (7) acquisition of knowledge or skills for implanting the action plan; (8) provisional trying of new roles; (9) building competence and self-confidence in new roles and relationships; and (10) a reintegration into one's life on the basis of one's new perspective (pp. 168-69). These ten stages reflect the full cycle of perspective transformation, which includes learners' reflection, change and action (King, 2009).

**A practice-based approach to transformative learning.** Mezirow intentionally did not establish definitive constructs or parameters regarding what transformative learning is in order to ensure that the theory could be applied more broadly to a variety of contexts; as a result, transformative learning theory remains in transition nearly forty years after its initial development (Quinn & Sinclair, 2016). Thus, according to Hoggan (2016), "if transformative learning is used to refer to everything, then it means nothing" (p. 60). Mezirow's work on perspective transformation did, however, provide explicit description of the phenomenon of transformative learning through his delineation of concepts and process through which scholars were subsequently able to apply it within a

variety of disciplines. More recent studies of transformative learning theory (Taylor, 1997, 2007) differentiate Mezirow's phase model from alternative models that refer to the more general phenomenon of change (Nohl, 2015; Hoggan, 2016). One such alternative model proposed by Nohl (2015) offers a more general phase model in an effort to transcend contexts in the study of transformative learning.

Building off Mezirow's (1978) original 10-phase model, Nohl (2015) suggests a five-phase, practice-based approach to the transformation process: (1) the non-determining start, when novelty, neither anticipated nor planned, breaks into life; (2) the phase of experimental and undirected inquiry, when actors explore the novel practices without knowing the ultimate goal of their learning efforts; (3) the phase of social testing and mirroring, when actors expose their practices to others and have the opportunity to reflect on them in light of others' collective reactions; (4) the phase of shifting relevance, when the newly introduced practice turns into a focused experience; and (5) the phase of social consolidation and reinterpretation of biography, when actors find social relations that stabilize their new practices and perceive their biography through a new outlook.

According to Nohl's (2015) practice-based model of transformative learning, the initiating occurrence of a disorienting dilemma is not required for transformation to take place within the learner; transformative learning, when viewed in this light, "may begin incidentally, and sometimes even casually, when a new practice is added to old habits" (p. 45). The scope of transformative learning theory has increased as a result of this practice-based model, which allows the application of the theory to span a multitude of contexts. Given the ever-changing landscape of transformative learning as an educational learning theory, both Mezirow's (1978) transformative learning theory and Nohl's (2015)



practice-based model of transformative learning served as the theoretical foundation for the current study.

**Transformative learning in higher education.** Previous research on transformative learning in higher education has highlighted the significance that establishing relationships with others has on fostering transformative experiences for students (Langan, Sheese, & Davidson, 2009; Mandell & Herman, 2009; Taylor, 2009). For example, Taylor (1997) notes that building trusting and authentic relationships helps learners develop the confidence needed to establish a foundation for transformative learning to occur:

Transformative learning is not about promoting and striving for individual autonomy, but about building connections and community. It is through relationships that learners develop the necessary openness and confidence to deal with learning on an affective level, which is essential for managing the threatening and emotionally charged nature of a transformative learning experience. Without the medium of relationships, critical reflection is impotent and hollow, lacking the genuine discourse necessary for thoughtful and in-depth reflection. (p. 43)

Langan, Sheese, and Davidson (2009) concur that personal transformation is more likely to occur if the student is equally engaged with both the course content as well as with other students in the course.

Student-facilitator approaches reflect key components of transformative learning, including a focus on critical thinking and reflection (Sloan, Davila, & Malbon, 2013). Similarly, the context of collaborative learning provides students many opportunities to

share experiences and goals and develop mutually enhancing relationships, which ultimately results in students taking responsibility for their own learning and reversing the student-teacher dynamic (Langan, Sheese, & Davidson, 2009; Mandell & Herman, 2009). The construct of learner-centered teaching, in which the teacher's role is that of a facilitator who maintains balance among all group members through shared learning and decision-making, is perceived by Taylor (2009) as central to fostering transformative learning in higher education. In this reconfiguration of the educational experience, role shifts are apparent, and every student becomes both teacher and learner. Mandell and Herman (2009) find this unconventional approach to learning to have a strong link to transformative learning as it requires critical reflection on customary academic roles.

Critical reflection is inherent to mentoring and non-traditional academic assistance programs, like SI, in that “the mentor-student relationship could not exist unless teachers remind themselves that their role is not so much to profess as to facilitate” (Mandell & Herman, 2009, p. 79). Peer facilitators have the unique ability to connect with fellow undergraduate students on their level and relate difficult, abstract concepts in a more concrete and easily understood manner, ultimately serving as “a bridge between course ‘experts’ with extensive content knowledge and the lived experience of the student body” (Sloan, Davila, & Malbon, 2013, p. 86). In these leadership roles, students are required to make a cognitive shift from student to facilitator and to critically reflect on that personal transformation, which is the essential nature of transformative learning (King, 2009).

## Theoretical Framework

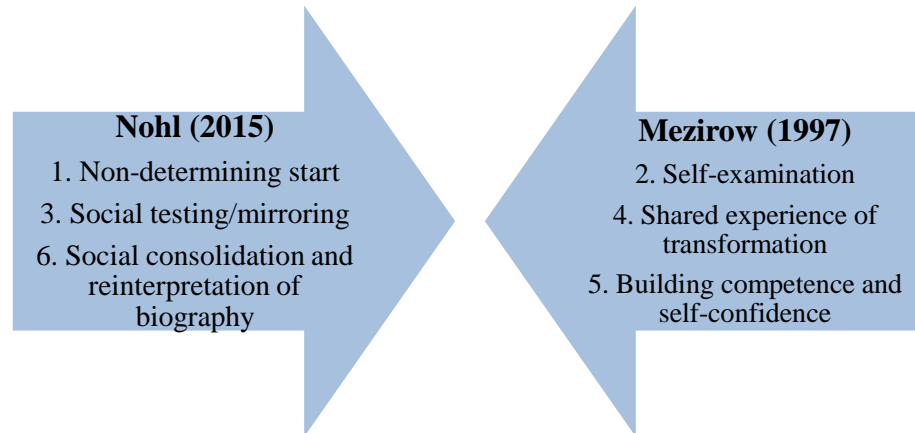
**Blended framework to assess how SI leaders experience transformative learning.** Nohl's (2015) practice-based approach to transformative learning, in combination with Mezirow's (1997) model of perspective transformation, serves as a framework for this study, as it seeks to understand how SI Leaders develop subjective meanings of their transformative experiences within the context of peer leadership and how such constructed meanings can be interpreted (Cresswell, 2014). The present study combines stages 2, 4, and 9 of Mezirow's (1997) model with phases 1, 3, and 5 of Nohl's (2015) approach into a six-stage, blended model to assess how students experience transformative learning, as outlined below:

1. *Non-determining start:* Although participants voluntarily chose to work as SI leaders, it is not possible to determine the exact moment while serving in their student leadership roles in which they may have experienced a transformation; therefore, the framework for the current study begins with Nohl's (2015) non-determining start phase, rather than with Mezirow's (1997) disorienting dilemma stage, as proposed by his original model of perspective transformation.
2. *Self-examination:* Since the current study is asking participants to reflect on their time before becoming an SI leader as well as to reflect on their time after becoming an SI leader, it is critical to include self-examination as the second stage in the study's framework. Although the framework does not acknowledge a determining start, it is necessary to acknowledge that participants would have examined their current student roles prior to becoming an SI leader and, thus, prior to experiencing any potential transformation during their undergraduate

years. Self-examination is the second stage in Mezirow's (1997) original model as well.

3. *Phase of social testing and mirroring*: The third phase in Nohl's (2015) approach serves as the third stage in the theoretical framework for the current study as well, as it serves to examine how both internal and external interactions shaped the SI leaders' experiences when transitioning from students to facilitators.
4. *Recognition that one's process of transformation is a shared experience*: Building off the previous stage, the fourth stage of Mezirow's (1997) model remains the fourth stage of the current framework as well, as it bridges the internal experience of the newly hired SI leaders with the experiences of the collective group, thus examining interactions between SI leaders and peers who are sharing the experience of transformation.
5. *Building competence and self-confidence in new roles and relationships*: The ninth stage of Mezirow's (1997) 10-stage model of perspective transformation serves as the fifth stage of the theoretical framework employed by the current study as it serves to critically explore how SI leaders continue to build confidence and further strengthen their relationships with faculty and peers as they take ownership of their new facilitator roles.
6. *Phase of social consolidation and reinterpretation of biography*: The final phase of Nohl's (2015) practice-based approach to transformative learning is the final stage of the blended framework as well, as it bridges the SI leaders' engagement from the campus to the larger community and beyond, thus exploring how their transformative experiences may shape their post-graduation lives.

The figure below represents this intersection of theoretical frameworks as it applies to the current study.



*Figure 2.* A six-stage, blended model to assess how students experience transformative learning combining elements of Mezirow’s (1997) model of perspective transformation and Nohl’s (2015) practice-based approach to transformative learning.

## Methodology

Most studies of transformative learning have used qualitative research methods in an effort to effectively align with the inherent exploratory nature of transformative learning itself, as the construct of transformative learning is also unique and personal to each individual (Merriam & Kim, 2012). For the purpose of the present research, a particularistic case study methodology was chosen to examine how former student leaders experienced transformative learning through perspective transformation within their peer leadership roles as a result of working in an SI program at a four-year, private university in New Jersey (Merriam, 2007). The unit of analysis was a group of former SI leaders, who have since graduated from the institution that serves as the context for this case study. Since “a hallmark of case study research is the use of multiple data sources,”

data collection methods chosen for the current study included both semi-structured interviewing and graphic elicitation (Baxter & Jack, 2008, p. 554).

The study was guided by the following research questions:

1. How do former SI leaders describe their participation in civic engagement while working in an SI program at a private, four-year university in New Jersey?
2. In what ways do former SI leaders who served at a private, four-year university in New Jersey connect their student leadership experiences to transformative learning?

**Context.** The scope of this research focused on the perceptions of former SI leaders who were employed within an SI program at a four-year, private university in New Jersey, between 2010 and 2017. The university that serves as the context for this study is a comprehensive, coeducational institution that offers 57 undergraduate and graduate degree programs to approximately 6,300 students (Monmouth University, 2017a). The SI program began as a pilot in fall 2010 to fill a void in academic support services provided by the university to better support historically difficult courses. The initial pilot supported seven sections of General Chemistry and employed seven SI leaders. The program has since grown both due to its effectiveness and by faculty demand and, as of fall 2017, supports 55 course sections across multiple disciplines, including biology, chemistry, physics, and accounting, with a staff of 30 SI leaders (Monmouth University, 2017c). This study concentrated on the experiences of former SI leaders who previously served in the role for at least one year while completing their undergraduate study.

**Participants.** An SI leader is defined as an undergraduate student (sophomore level or higher) who has successfully completed the SI-participating course with a B grade or better, has a 3.2 or higher cumulative grade point average, has been recommended by a faculty member, sits in course lectures with current students, and facilitates collaborative review sessions outside of the classroom three times per week for all students enrolled in the targeted course. For the purpose of the current study, the unit of analysis was a group of former SI leaders.

All qualifying participants worked in the program for at least one full academic year and completed the same two-day, mandatory new SI leader training before the start of their first semester working in SI. Since SI leaders facilitate sessions across a variety of disciplines, participants were selected through purposeful maximum variation sampling in an effort to capture the heterogeneity of the SI leader population and to ensure that participant responses satisfactorily represented the range of SI leaders employed by the program (Patton, 2002).

Fifty-one of the 77 former SI leaders who worked in the SI program between Fall 2010 and Spring 2017 (and have since graduated) were qualified to participate in the study. Of the 51 former SI leaders who met the established criteria, I had personal contact information for 31 and solicited their voluntary participation through an email that outlined the purpose of the study as well as informed consent procedures and next steps should they wish to participate. Twenty-two former SI leaders expressed their willingness to participate in the study. Six of the 22 participants were male, and 16 were female. The participants ranged in age from 21 to 32. Four participants worked as an SI leader for one year; seven participants served in the role for two years; two participants

worked two-and-a-half years; and nine participants maintained the position for three years while completing their undergraduate studies. Participants ranged from two months to six years post-graduation. The following table provides an overview of individual participants' demographics.

Table 3

*Participant Demographic Matrix*

<i>Participant (by pseudonym)</i>	<i>Age</i>	<i>Gender</i>	<i>Graduation Year</i>	<i>Length of SI Employment</i>	<i>SI Course(s) Facilitated</i>
Gina	28	Female	2011	1 year	Western Civilization
Michael	27	Male	2012	2 years	General Chemistry 1 & 2
Lily	26	Female	2012	2 years	General Chemistry 1 & 2
Siena	25	Female	2014	3 years	General Chemistry 1 & 2
Theresa	25	Female	2014	2 years	Intro to Cell/Molecular Bio
Kelly	25	Female	2014	3 years	Intro to Cell/Molecular Bio
Simon	25	Male	2014	2 years	General Chemistry 1 & 2
Caroline	24	Female	2015	3 years	Discovery of Natural Sciences
William	24	Male	2015	3 years	General Chemistry 1 & 2
Kandice	25	Female	2014	2 years	Anatomy & Physiology 1 & 2
Shawn	25	Male	2014	3 years	Anatomy & Physiology 1 & 2, Physics for Life Sciences 1 & 2
Krista	24	Female	2015	2.5 years	Discovery of Natural Sciences,
Molly	23	Female	2016	2 years	Intro to Cell/Molecular Bio
Allison	23	Female	2015	1 year	Physiology with Anatomy 1 & 2
Emily	22	Female	2017	3 years	Physiology with Anatomy 1 & 2
Felix	22	Male	2017	3 years	Intro to Cell/Molecular Bio
Sarah	21	Female	January 2017	3 years	Organic Chemistry 1 & 2, General Chemistry 1 & 2, Physiology with Anatomy 1 & 2
Kristin	22	Female	January 2017	2.5 years	Intro to Biodiversity/Evolution, General Chemistry 1 & 2
Sandy	23	Female	January 2017	1 year	Intro to Cell/Molecular Bio
Victor	32	Male	2013	1 year	Physiology with Anatomy 1 & 2
Francesca	25	Female	2013	2 years	Financial Accounting
Shae	24	Female	2015	3 years	Discovery of Natural Sciences, Physics for Life Sciences 1 & 2



**Data collection.** Data collection methods chosen for the current study included both individual interviewing and graphic elicitation. The rationale for interviewing participants in the current study is that the SI leaders' transformative learning experiences cannot be directly observed. Interviews are often used for evaluating transformative learning because they "focus on the learner's story of a particular experience to gain insight into the processes or outcomes of the learning" (Cranton & Hoggan, 2012, p. 524). For these reasons, a semi-structured, open-ended interview design was employed to allow the former SI leader participants to share as much information as they liked and to fully express their experiences given the nature of the open-ended questions. In addition, this design allowed me to ask follow-up, probing questions when additional information was desired (Creswell, 2007; Turner, 2010).

At the conclusion of each interview, participants were provided with a graphic elicitation instrument in the form of a participatory diagram and were asked to depict, whether through words or a visual representation, how they conceptualized their leadership role. The inclusion of graphic elicitation in the form of participatory diagramming allowed the respondents an additional opportunity to interpret their own experiences while serving as SI leaders during their undergraduate study. Graphic elicitations are particularly useful when implemented as complementary to another data collection approach, such as interviewing (Copeland & Agosto, 2012). Given the abstract nature of the transformative learning experience of the SI leader, graphic elicitations assisted in further defining the participants' perceptions of their role after the conclusion of their interviews.

**Data analysis.** This study employed single-case data analysis that was both inductive and deductive. The analysis of collected data was continuous as data collection and analysis occur simultaneously in qualitative research. During the first cycle of data analysis, I used a combination of process coding and in vivo coding to summarize basic topics of passages as well as to reference particular phrases that came up repeatedly throughout the participants' responses in an effort to create a preliminary categorized inventory of the data's contents (Saldaña, 2016). Through a second cycle of data analysis, I implemented pattern coding, which is "explanatory or inferential" and seeks to "identify an emergent theme" among data (Saldaña, 2016, p. 236). I extracted all similarly coded, first-cycle summaries and rearranged them into a smaller number of themes in a separate file for further analysis in an effort to develop the most relevant categories for the study (Saldaña, 2016). Each preliminary code was clustered together with similar codes in an outline form, which resulted in a list of tentative category names.

In addition, during this second phase, I analyzed the participants' graphic elicitation diagrams for triangulation purposes to determine if any consistent themes were present across the multiple forms of data retrieved for the study. I constructed a matrix to identify patterns, comparisons, and trends amongst and between the data collected in both the individual interviews and the graphic elicitations that were structured around the central research questions of the study (Maxwell, 2013). I also extracted passages within both participants' interview responses and graphic elicitation diagrams that exemplified a particular code and recoded the data based on any new emergent themes that arose. After the data analysis concluded, four final themes remained as presented below.

## Findings

Throughout their interview responses and graphic elicitations, former SI leaders who participated in this study expressed the various ways in which they experienced personal growth and perspective transformation as a result of serving in a peer leadership role in higher education during their undergraduate years. Participants communicated that working in an SI program provided them the ability to develop meaningful relationships with faculty, students, and peer SI leaders, which, in turn, fostered a greater sense of campus engagement and interest in other student leadership positions. Former SI leaders also expressed increased levels of confidence as they learned to navigate their student-facilitator roles. These findings are presented through the following themes, with data elicited from the participants serving to exemplify these themes and further illustrate the participants' personal experiences.

**Connecting with others.** In analyzing the interview and graphic elicitation data, the relationship-building opportunities inherent to the SI leader's role became apparent in three distinct categories: with faculty, with students, and with peer SI leaders. Participants voiced great value in having had the unique role of serving as a liaison between faculty and students, thus forging bonds with a larger network of faculty members. While some participants, like Emily, noted that they would have "never gotten as close" to a familiar faculty member had they not worked with him or her, other former SI leaders had the ability to connect with faculty members with whom they may not have otherwise had the chance to if it were not for their mutual participation in the SI program. As stated by our participant Sandy:

It definitely made me more involved in the sense that I got to know more students, but I also got to know more professors because a couple of the professors I

worked with, I had never taken a class with them or really interacted with them at all, so it gave me an opportunity to get to know them, to see what kind of research they were doing on campus, and to meet some of their students.

Working with a diverse group of faculty members also provided former SI leaders an opportunity to engage in conversations regarding their own academic and professional aspirations with experts in their fields; these interactions in some cases led to on-campus research opportunities for former SI leaders. Our participant Siena expressed that:

I got to meet one-on-one with the professors to talk about what they wanted me to do to improve their students' understanding of course material, so that built that relationship with those faculty members, and they look to you to help their students and they respected you for it, so when it came time to get research opportunities, they wanted you because they knew you and they trusted you were going to do a good job since you helped their students, so I feel like once I became an SI leader, a lot of things fell into place.

Participants also mentioned the added benefit of learning how to approach faculty members and viewing them in a different role outside of the classroom. According to Felix, "it helped so much just being able to get in contact with so many different faculty members. They knew who I was, they knew that I was an SI leader, and I knew who they were as well. I knew how to approach faculty." In the words of participant Molly, "faculty are more than just faculty. You can have other relationships with them as well." Further, as a result of serving as an SI leader, participants responded that they were better able to relate to faculty more than they had in their former student roles. Participant Allison commented, "I was able to definitely relate to my teachers more once I was kind of sitting in their shoes rather than just being a student."

Within their interview responses and graphic elicitation diagrams, former SI leaders also expressed the value of developing new relationships with students who attended SI sessions, which deepened their connection to other students on campus with

whom they may not have met in any other capacity. It was commonly stated by participants that their facilitator role also allowed them to build rapport quickly with the current students in the course because the students knew who they were by just seeing their faces in class, as noted by participant Simon:

I feel like after I became the SI leader, you know especially after sitting in the classrooms and people kind of get to see your face, and without even talking, it helps you build some type of rapport just because they know who you are.

Participants further communicated that the student-SI leader relationship extended even beyond the scope of the SI-participating course. According to participant Emily, “[students] ask you about other classes that weren’t even involved in SI. They need help in other things, and you become their friend. It’s just amazing, just an amazing experience.”

Participants also expressed how the SI program provided them with both an outlet and a medium through which they were connected to students who needed their help, thus satisfying a personal desire to help others as well as fostering a passion for civic engagement. Many former SI leaders noted that they “really enjoyed the opportunity to give back” and that the students “really did respect you for helping them so much.” In addition to helping students, former SI leaders also reflected on the reciprocity they received in return, specifically concerning the expansion of their social networks. As participant Allison stated, “While I was helping them, they were helping me just as much.”

Further, the diversity of SI participants provided former SI leaders an opportunity to “step outside their comfort zones” and interact with a greater intersection of students. One participant Sarah expressed that “because of SI, I can now pretty much strike up a

conversation or talk to people who are dissimilar to me, just because we had all kinds of people coming to SI with different backgrounds.” Participants also noted that some of their students would eventually end up being their classmates in upper-level courses. As participant Kelly expressed, “. . . some of my students ended up being in my classes, so it was coming full circle.” Additionally, participants expressed pride in developing SI students into future SI leaders themselves.

Former SI leaders also illustrated the bond that naturally formed among peer SI leaders due to their common involvement with helping others through a non-traditional academic assistance program that fosters a greater campus connection and student experience. Some participants responded that they were recruited to the position by their friends who served in the role and had positive experiences. For example, Simon mentioned, “I have a lot of friends who were also SI leaders, and they all had positive experiences, so I wanted to be part of that.” Other participants conveyed that they met their core group of friends during new SI leader training. For example, Kelly stated, “I branched out in terms of friends, too, because I saw some of the SI leaders in my classes, and we got along really nicely.” Former SI leaders commonly responded that their friendships with peer SI leaders continued throughout their undergraduate years and even after graduation. Krista noted that “most of the SI leaders, we’re still friends,” and William reaffirmed this notion by saying that “pretty much all the people I still keep in contact with are from the SI program.”

Given the variety of SI-participating courses, participants noted that friendships formed across academic disciplines and allowed them the opportunity to step out beyond the social confines of their undergraduate major. According to participant Caroline, “I

definitely made more friends, especially in different academic areas, because being in SI you see so many other SI leaders.” Additionally, participants recollected that their mutual experience granted them an opportunity to learn how to work together with fellow SI leaders toward a collective goal of how to best help their students. In Allison’s words,

I feel you learn how to build that type of relationship and you learn how to work together with people . . . that are learning new material but you also learn how to work with the fellow SI leaders . . . when everyone has to come together to try to benefit the whole group.

Overall, former SI leaders illustrated that the relationships they developed with faculty, students, and peers contributed to their engagement and involvement on campus during their undergraduate years, as they formed a larger social network and a greater sense of belonging to the institution (see Figure 3).

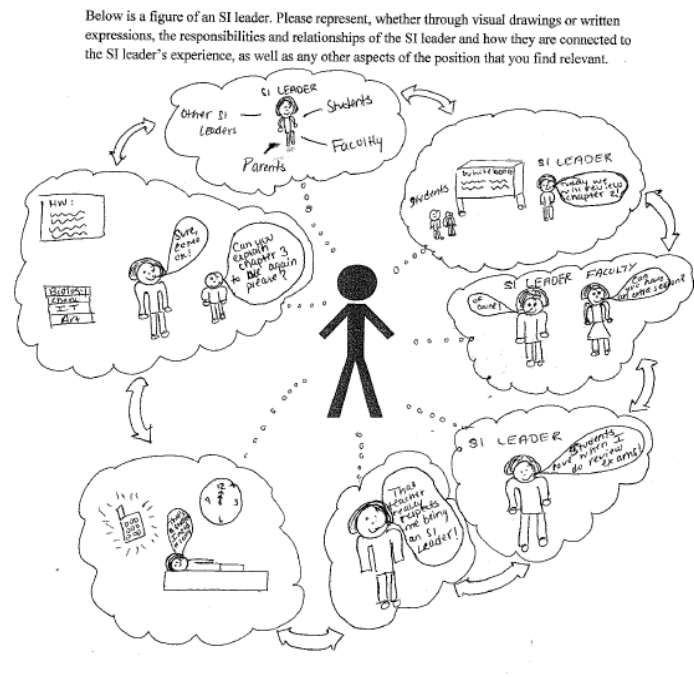


Figure 3. A sample of one participant’s completed graphic elicitation as part of the data collection conducted for the current study.

**Engagement on campus.** Participants responded that the relationship development they encountered as a result of working in the SI program positively impacted their levels of institutional engagement by opening doors to other opportunities and providing them with a sense of belonging on campus. Former SI leaders identified their involvement with the SI program as “the turning point in getting super involved” and building their confidence to pursue additional student leadership positions. For example, participant Lily became more involved on campus after becoming an SI leader: “I was also involved with the admission department the same two years, and I was also involved with undergraduate research.” Similarly, after participant Theresa became an SI leader, she “became a student mentor, a student alumni liaison, and started a mentoring program in the psychology department.”

For participants like Allison and Molly, who were commuter students and would otherwise just attend classes and go home, working as an SI leader required them to spend more time on campus. Allison noted,

I was a commuter, so it wasn't as easy for me to get involved, so I wasn't as involved in extracurricular activities or sports or things like that because I came to class, I just drove to campus for classes, and then I had work at home, so I wasn't here as much, and I definitely spent more time once I became a [SI] leader.

Molly reaffirmed that:

I don't know if I would have had the same opportunity if I was just going to my classes, seeing the same people, hanging out with the same people in the Student Center, and then I would just go home because I was a commuter.

Similarly, former SI leaders who transferred from another institution during their undergraduate years, like Kandice, commented that through their SI leader role, they were not only able to help students but, in the process, also found a community to meet other people and transition to their new environment:



I transferred from another university halfway through my freshman year, so during the spring, I didn't really know a lot of people because I was a transfer student, so once I heard about SI, I was able to, you know, not just help students, but also have a community to meet other people on campus and network.

For participants who were resident students, serving as an SI leader "enhanced" their overall on-campus experience.

Further, participants specifically noted that SI provided them with a physical space on campus that served as a home away from home, which was pivotal to their on-campus engagement and connection with the institution. Participants, like Siena, who lived far from home during their undergraduate years expressed they would come into the SI office every day and feel like part of a family:

After becoming an SI leader, I had a home away from home, which was so important. I was very, very close to my family, I still am, and it's upsetting sometimes to be away from the, but to come into SI every day . . . that just made me feel so good.

Similarly, participants, like Emily, who were student-athletes in high school but did not continue their sport in college conveyed that working in the SI program filled a void by allowing them the opportunity to belong to a different type of team:

It just makes you become a family of people and know people on a different level, and I think that was something I was looking for. In the beginning, when I came [to this university], I didn't have the best experience, but through this program, I feel like I became . . . part of something, and I was missing that because I used to be part of an athletic team, and then I wasn't anymore, so to be part of a different kind of team was something that I needed.

Throughout their interview responses and graphic elicitations, participants expressed that, through these shared experiences, they were able to connect on a different level and eventually find their niche in serving as an SI leader during their undergraduate years.

**Internal changes.** Former SI leaders expressed that, after finding their niche, they underwent numerous internal changes while navigating their new student-facilitator role that contributed to a perspective shift in how they viewed themselves. One particular constituent of internal change that was cited frequently throughout the participants' interview responses and within their graphic elicitation diagrams concerned building confidence. Former SI leaders noted several aspects of the student leadership role that contributed to increasing their confidence, such as their understanding of challenging content material, their ability to balance work and school, the recommendation of their respective faculty members, and their competence in communicating with a diverse group of individuals.

Participants responded that having to facilitate review sessions for a complex, foundational course developed their academic confidence in their ability to handle advanced content material in their own upper-level courses. Theresa expressed, "I just like the confidence of feeling like I could teach other people such a complex course." Further, participants, like Sarah, reflected on the time commitment required for the SI leader position and how their ability to effectively balance their time between work and school gave them the confidence to pursue additional employment opportunities during their undergraduate years and beyond—"the confidence to work even while studying."

Former SI leaders also commonly noted that the faculty recommendation needed to be considered for the position was a confidence booster because it proved that they excelled among their peers in the eyes of their former professors. For example, participant Krista commented that "It helped with my confidence because, at first, the professor was intimidating, so even the fact that she asked me to be her SI leader was

very, I don't know, it was a confidence booster.” In addition, participants expressed increased confidence in their ability to communicate with and provide guidance to individuals who were different from themselves. As participant Krista noted, “It helped with my confidence to speak to other people.” Similarly, participant Simon expressed that, “with regards to the specific effect that being an SI leader had, I would say it was definitely the aspect of being able to communicate with people that didn't want you to talk to them.”

Within the graphic elicitation diagrams, former SI leaders illustrated the overarching, internal transformation that took place by serving in this peer leadership role as “finding yourself.” When asked to reflect on how they have subsequently changed since their undergraduate years, participants identified taking on the SI leader position as a turning point in becoming less introverted, less timid, and more outgoing. According to participant Victor, “you go from being a little bit more introverted before getting involved with teaching students and helping them re-learn things.” Similarly, participant Sandy responded, “I'm not a very outgoing person, so I kind of need to be thrust into situations so I can meet new people,” and SI provided her with that environment. Additionally, participants commonly expressed that the SI leader experience resulted in them becoming “more open,” “more vocal in class,” and more brave in going out for different experiences” as they navigated through their undergraduate years and into their post-graduation lives as well.

**Interpretation of role.** Throughout their interview responses, former SI leaders also revealed that they experienced a perspective shift in how they interacted with the world around them, specifically regarding how they were viewed by others, after

transforming into their student-facilitator roles. Participants discussed the new level of respect they garnered from both faculty members and students once they became SI leaders. Gina commented that she was “viewed differently from the other students because now I was working closely with the professor, almost like a TA, so because of that, I felt like I got a little more respect from the professors.” Kelly expressed that “it’s just amazing to feel that level of respect even though you’re a student.”

By taking on the additional responsibility of assisting their peers in challenging courses, former SI leaders said that faculty members were impressed, as their commitment to the position proved that they were truly invested in the academic discipline. Participant William stated,

When [professors] knew you were an SI leader, they kind of just were impressed and saw you as maybe taking on more than you needed to . . . you’re going above and beyond, so I think for faculty, it really just showed that you care about the subject material.

Further, participants commented that, when faculty members knew they were SI leaders, they began to treat them like peers even though they were still undergraduate students themselves. Allison noted, “you just build a different relationship with them because you become more of a colleague than a student.” Participants commonly reflected on how they had to navigate their new relationships with faculty members on the student-faculty level, interacting as a colleague when performing their SI leader responsibilities, yet still functioning as a student in their own classes and faculty-sponsored research projects.

In addition, participants expressed that they were challenged in developing relationships with other students while interpreting their new peer-facilitator roles within the SI program. Former SI leaders commented that other students viewed them differently because of their close working relationships with faculty members despite the

fact that they were still their undergraduate peers. They also reflected on the difficulty in learning how to interact with younger students in a way that fostered mentorship and did not perpetuate an authoritative role. According to Allison,

You're learning how to interact with students that are younger than you, and you want to be a mentor for them, not just another person that's like, "Oh, you have to study this." It's a different kind of relationship. I feel like you learn how to build that type of relationship and you learn how to work together with people.

Participant Caroline reaffirmed that "you become sort of like, I don't want to say a friend, but kind of a friend, like a mentor." Participants commonly identified the complexity associated with "wearing two hats" during their undergraduate years as both SI leader and undergraduate student. One participant, Sarah, best expressed the interpretation of this new role as "a scoop of real life in between all this academia."

### **Discussion and Implications**

The former SI leaders who participated in the study expressed various ways in which they experienced personal development and perspective transformation as a result of serving as an SI leader, as evidenced by their interview responses as well as within their graphic elicitations. Findings revealed that participants believed that their SI leader experience provided them with a greater opportunity to connect with others, enhanced on-campus engagement, a sense of internal change, and a re-interpretation of their role as they transitioned from student to facilitator. All of these characteristics contribute to the perspective transformation of the SI leader as discussed below in connection to the blended theoretical framework of transformative learning that serves as the foundation for this study (see Figure 2).

While former SI leaders commonly identified their student leadership experience as a turning point in regard to their personal development, none of the participants in the

current study identified the exact moment that they experienced a specific transformation, which is consistent with Nohl's (2015) non-determining start stage of perspective transformation. However, findings do suggest that all participants experienced a period of self-examination when they became SI leaders and engaged in critical reflection both in action, during the time they served as SI leaders, as well as on action, during the time of the interview, which exemplifies the second stage of perspective transformation (Mezirow, 1997).

Based on the literature, perspective transformation occurs when an individual alters his or her own frames of reference through critical reflection, specifically in regard to problem-solving, and becomes critically aware of his or her encounters with the world, others, and themselves (Mezirow, 1990b, 1997). Findings of the current study confirm that, when examining their student roles both before and after becoming SI leaders, participants became cognizant of the assimilation of their emerging experience as a peer facilitator, thus offering them a new frame of reference through which they could extend their worldviews beyond the prior assumptions they held as a student (Mezirow, 1997). These findings also illustrate how former SI leaders experienced altered frames of reference when reflecting on their prior role as "just a student" and on their emerging role as a facilitator, specifically in regard to how that transformation would impact the remainder of their undergraduate years and, in some cases, their post-graduation lives. Experiencing altered frames of reference is one way that participants connected their student leadership experiences to transformative learning, which responds to the second research question of the study.

Additionally, findings suggest that both internal and external encounters shaped the SI leaders' initial experiences when transitioning from students to facilitators, thus supporting the third stage of perspective transformation as defined by the current study: social testing and mirroring (Nohl, 2015). During this stage, individuals begin to reveal their new selves to others and have the opportunity to reflect on how others react to their transformation (Nohl, 2015). In terms of SI leader development, this stage is exemplified through the collaborative nature of the SI program, which fosters shared experiences among students and leaders.

Findings of the current study that illustrate the complex nature of SI leaders' relationships with students, who were previously peers, support this claim. Within the confines of the SI session, SI leaders have the opportunity to test their new facilitator roles, make a cognitive shift from student to facilitator, and have the ability to reflect on that transformation with constructive feedback from students, faculty, and program administrators. This shift from student to facilitator represents an additional way in which participants connected their student leadership experiences to transformative learning, which was explored by RQ2. Further, actively participating in civic engagement within higher education involves students learning from others, thereby fostering a learning experience that is transformative rather than merely transactional in nature (Jacoby, 2009). Therefore, this finding also supports RQ1 in describing how former SI leaders participated in civic engagement while working in an SI program at a private, four-year university in New Jersey

Current findings also suggest that the team environment of the SI program fosters recognition that one's process of transformation is a shared experience, which serves as

the fourth stage of perspective transformation within the blended framework of the current study (Mezirow, 1997). The peer-to-peer bonds formed between SI leaders, which were commonly discussed by participants, bridge the internal experience of the new SI leader with the shared experience of the collective group. This is consistent with previous research on transformative learning in higher education that highlights the significance that building community has on fostering personal transformation, as “transformative learning is not about promoting and striving for individual autonomy, but about building connections and community” (Taylor, 1997, p. 43). Participants’ responses concur that belonging to a larger community of SI leaders serves as a support system and catalyst for personal transformation, as well as an opportunity for increased on-campus engagement.

As SI leaders began to navigate their new peer-facilitator roles, findings confirm that they built both competence and confidence, not just in themselves, but also in their relationships with others, which characterizes the fifth stage of perspective transformation (Mezirow, 1997). According to Taylor (1997), “without the medium of relationships, critical reflection is impotent and hollow, lacking the genuine discourse necessary for thoughtful and in-depth reflection” (p. 43). Current findings support this claim and suggest that the “trusting and authentic relationships” that SI leaders build with faculty and students are essential in fostering their transformative learning experiences (Taylor, 1997). These mutually enhancing relationships provide SI leaders with both an increased sense of confidence that they can effectively teach complex content material and an increased sense of competence as their own knowledge of foundational coursework increases.



In serving as “a bridge between course ‘experts’ with extensive content knowledge and the lived experience of the student body,” SI leaders continue to build confidence and further strengthen their relationships with faculty, students, and peers as they take ownership of their new facilitator roles (Sloan, Davila, & Malbon, 2013, p. 86). Through these relationships, SI leaders have greater interaction with individuals different from themselves, which represents an additional way in which participants experience civic engagement as a result of serving in a peer leadership role in higher education. Therefore, these findings also contribute to answering the first research question of this study by describing former SI leaders’ participation in civic engagement while working in an SI program.

The final stage of perspective transformation, the phase of social consolidation and reinterpretation of biography, occurs when SI leaders become fully aware of their enhanced personal growth and begin to discover how their new interpretation of self will continue to develop across the confines of the college campus and to the larger community and beyond, thus exploring how their transformative experiences may shape their post-graduation lives (Nohl, 2015). Actively participating in civic engagement in higher education requires students to make meaning of their own knowledge and experiences; therefore, participants’ reinterpretation of biography throughout their SI leader experience provides further evidence in response to both RQ1 and RQ2, as SI leaders are challenged to reinterpret their role and perceive themselves through a new outlook, even while still undergraduate students themselves (Flanagan & Levine, 2010; Jacoby, 2009; Nohl, 2015). Through this reinterpretation of role, learning becomes synonymous with meaning, supporting Mezirow’s (1990a) definition of perspective

transformation: SI leaders can reflect back on this experience to guide subsequent reinterpretations of self throughout their future career and/or academic journeys.

**Program recommendations.** Examining perspective transformations of former SI leaders offers just one example of how an out-of-the-classroom opportunity impacted the personal development of undergraduate students. In practice, faculty and administrators who have a vested interest in developing student leaders should provide increased leadership opportunities for undergraduate students to engage in high-impact and immersive experiences outside of the classroom, which by extension may transform them to into effective social change agents and civic-minded leaders of future generations. By providing opportunities, like SI, for students to work together on problem-solving tasks with practical significance, institutions of higher education will better prepare students “to engage with those who are different from themselves, and to apply what they learn in the classroom to real world settings” (Moore McBride & Mlyn, 2013, p. 3). Therefore, higher education practitioners are encouraged to use these findings to reflect on how they can leverage transformative learning opportunities for all students at their institutions.

### **Conclusion**

This case study was conducted to better understand how former SI leaders experienced transformative learning through perspective transformation as a result of serving in a student leadership role in a peer-facilitated academic assistance program in higher education. Findings from this study provide insight regarding the transformative learning experiences of former SI leaders who were employed at a mid-sized, four-year private university in New Jersey during their undergraduate study in an attempt to

partially fill the void in research regarding development of student leaders in higher education. In addition to filling the void in research on this topic, this study also serves as a stepping stone for future research on peer-facilitated academic assistance programs, including how serving as a student leader benefits future career and civic aspirations. Further, this study indicates that institutions of higher education should expand the availability of transformative opportunities outside of the classroom through which students can develop the skills needed to become civic-minded leaders of future generations.

## Chapter 6

### Bridging the SI Leader Experience and Post-Graduation Life

#### Abstract

This qualitative case study explores the experiences of former Supplemental Instruction (SI) leaders who worked at a four-year, private university in New Jersey while completing their undergraduate degrees. The insights offered by participants reveal the ways in which serving as an SI leader prepares students for their post-graduation lives through the transferability of skills. This study also seeks to fill a void in research as studies on academic assistance programs tend to explore benefits for student participants, such as increased retention and course grades, but fail to explore the development of the programs' student leaders.

The role of higher education continues to be questioned in today's society due to the lack of an engaged American citizenry and the rising cost of a college degree (AASCU, 2017). However, according to former college president Brian C. Mitchell, the case for American higher education "shouldn't abandon the idea that colleges exist to educate broadly and to prepare people to be productive citizens"; instead, it must also provide an antidote to current societal concerns in recognizing that "students and families do want postsecondary education and training to prepare them for career success" (Lederman, 2017, n. p.). Therefore, in addition to educating, institutions of higher education must also provide students the opportunity to develop skillsets that are most desirable by future employers. The National Association of College and University Business Officers (2017) has coined this concept "a new way of articulating the value of higher education" (n. p.).

Results from the National Association of Colleges and Employers' (NACE) (2017) *Job Outlook 2016* survey found that more than 80% of employers intentionally seek to hire "leaders who can work as part of a team" (n. p.). In addition to academic major and GPA, employers cite graduates' participation in leadership roles as having a significant influence on hiring decisions (NACE, 2017). Studies that focus on the intersection of civic engagement and student leadership in higher education found that students who are engaged in leadership opportunities during their undergraduate years demonstrate improved academic performance, critical thinking skills, communication, and leadership qualities that are transferable to real-world settings, such as post-graduate school and future employment (Cress et al., 2010).

Student leadership within the realm of peer-facilitated academic assistance programs has a long tradition in higher education and has proven successful in promoting student success (Ning & Downing, 2010). Student leaders “effectively serve as a bridge between course ‘experts’ with extensive content knowledge and the lived experience of the student body,” thus truly functioning as facilitators of learning rather than sources of knowledge (Sloan, Davila, & Malbon, 2013, p. 86). The role of the student leader, in this sense, supports the constructivist paradigm, which serves as the theoretical foundation for all peer-assisted learning. In this framework, student leaders as facilitators assist their peers in constructing their own knowledge rather than merely providing answers, which places the responsibility of learning back on the students themselves (Ning & Downing, 2010). One example of an academic assistance program that fosters peer-assisted learning is Supplemental Instruction.

Supplemental Instruction, or SI, is a free, peer-facilitated academic assistance program designed to help students succeed in traditionally difficult courses. SI sessions are regularly-scheduled, informal review sessions that involve collaborative learning activities through which students can clarify course concepts and practice the types of study strategies that will help them truly master the information and skills required by the target course. The sessions are facilitated by SI leaders—students who have previously done well in the course and who attend all class lectures, take notes, work closely with faculty, and act as model students. Studies have shown that students who attend SI earn higher mean final course grades and graduate at a higher rate than those who do not attend (Hurley, Jacobs, & Gilbert, 2006).

While the majority of research on SI examines increases in participants' course grades and the positive effects that the program has on students who attend sessions, few studies set out to examine the additional benefits of the program for the student leaders who are responsible for facilitating the sessions, which may result in increased preparation for future professional and academic aspirations (Lockie & Van Lanen, 2008; Malm, Bryngfors, & Morner, 2012; Skalicky & Caney, 2010; Stout & McDaniel, 2006). These perceived benefits of SI are not widely explored, which is why this qualitative case study seeks to uncover additional insight regarding how the SI leader's experience is transferable to his or her future career and academic goals.

## **Background**

The determination of the college years as a critical period for students' growth has led institutions of higher education to extend learning outside of the classroom in an effort to enrich the overall college experience (Logue, Hutchens, & Hector, 2005). This type of experiential learning is referred to by the Association of American Colleges and Universities (AACU) (2011) as "integrative and applied learning" and has been named one of the four essential learning outcomes of higher education for the twenty-first century (p. 7). One specific area of renewed focus has been on increasing peer leadership opportunities for students.

Studies in the field of peer-led academic support programs explore student leadership as a component of integrative and applied learning (Logue, Hutchens, & Hector, 2005; Shook & Keup, 2012). Peer-facilitated learning has deep roots in higher education as a means for promoting student learning; collective sense-making and problem-solving among peers foster a sense of belongingness for students and promotes

the social and cultural constructivist nature of learning itself. The role of the student leader in any type of peer-led academic assistance program, including SI, is that of a facilitator, assisting learners in the processing, comprehension, and construction of their own knowledge, with the ultimate goal of mutually transforming both their students and themselves into independent learners (Ning & Downing, 2010).

Examination of the current literature on SI programs in regard to student leader development yielded limited results. Most widely cited is a literature review conducted by Stout and McDaniel (2006), which reveals that benefits for SI leaders, in particular, include increased understanding of the course material; improved communication skills; enhanced interactions with faculty, students, and other SI leaders; enhanced personal development; and professional development. Additionally, Malm, Bryngfors, and Morner (2012) explored if serving as an SI leader has had any merit in terms of applying for future employment and if any skills learned as a result of the SI program are transferable to a professional setting post-graduation. Such research has found that students develop the following skills as a result of their SI experience: improved communication skills, the ability to organize collaborative learning groups, a deeper understanding of course content, improved self-confidence, and increased security in a leadership role, all of which are desirable by future employers (Malm, Bryngfors, & Morner, 2012).

Practical skills notwithstanding, these “soft” social skills and cultural lessons have plenty of value. . . . Employers want people who can write, who can intuit what others are thinking, who can learn from others,” all skills that have become critical “in an economy that is based more and more on social relationships” (Carlson, 2013, n. p.). Therefore, it is necessary to identify ways in which students are gaining practical and



social skills during their undergraduate experience, both inside and outside of the classroom, that make them desirable to future employers and better prepared for post-graduate academic programs (Peck et al., 2015). For this reason, the purpose of the current study is to explore how former SI leaders describe the impact of serving in leadership roles during their undergraduate study at a private, four-year university in New Jersey, and the ways in which they have applied their student leadership experiences to their post-graduation lives.

## **Method**

A particularistic case study methodology was chosen for this study to explore how serving as an SI leader prepares students for their post-graduation lives through the transferability of skills. The unit of analysis was a group of former SI leaders who worked in an SI program at a four-year, private university in New Jersey.

**Context.** The university that serves as the context for this study is a comprehensive, coeducational institution that offers 57 undergraduate and graduate degree programs to approximately 6,300 students (Monmouth University, 2017a). The SI program began as a pilot in fall 2010 to fill a void in academic support services provided by the university to better support historically difficult courses and, as of Fall 2017, supports over 60 course sections across multiple disciplines, including biology, chemistry, physics, and accounting, with a staff of 30 SI leaders (Monmouth University, 2017c).

**Participants.** An SI leader is defined as an undergraduate student (sophomore level or higher) who has successfully completed the SI-participating course with a B grade or better, has a 3.2 or higher cumulative grade point average, has been

recommended by a faculty member, sits in course lectures with current students, and facilitates collaborative review sessions outside of the classroom three times per week for all students enrolled in the targeted course. This study concentrates on the experiences of former SI leaders who previously served in the role for at least one year while completing their undergraduate study.

Since SI leaders facilitate sessions across a variety of disciplines, participants were selected through purposeful maximum variation sampling in an effort to capture the heterogeneity of the SI leader population and to ensure that participant responses satisfactorily represented the range of SI leaders employed by the program (Patton, 2002). Twenty-two of the 31 former SI leaders who met the criteria for the study volunteered to participate. Six of the 22 participants were male, and 16 were female. The participants ranged in age from 21 to 32. Four participants worked as an SI leader for one year; seven participants served in the role for two years; two participants worked two-and-a-half years; and nine participants maintained the position for three years. Participants ranged from two months to six years post-graduation.

**Procedure.** Data collection methods chosen for the current study included both individual interviewing and graphic elicitation. A semi-structured, open-ended interview design was employed to allow the former SI leader participants to share as much information as they liked and to fully express their experiences given the nature of the open-ended questions. In addition, this design allowed me to ask follow-up, probing questions when additional information was desired (Creswell, 2007; Turner, 2010). At the conclusion of each interview, participants were provided with a graphic elicitation instrument in the form of a participatory diagram and were asked to depict, whether

through words or a visual representation, how they conceptualized their student leadership role.

## **Results**

When asked to reflect on how their SI leader experience has impacted their lives beyond graduation, participants discussed how the skills they developed during their time as an SI leader have transferred to their current, real-world careers and post-graduate work. The skills with the highest level of transferability were broken down by participants into the following categories: application and facilitation of knowledge, communication and interpersonal interaction, and collaboration and teamwork.

In terms of knowledge, participants expressed that sitting in lectures as an SI leader offered a great review of the material needed for medical school as well as provided a solid foundation of key content in their chosen disciplines. One participant, Felix, expressed, “It increases your knowledge of the subject that you’re teaching, and for a lot of people, that’s gonna help them later on in their future professions and if they choose to do post-graduate work as well.” Participant Victor reaffirmed, “When I finished as an SI leader and I went off to graduate school, it was so much easier for me to apply that information for myself in my program just because I knew it so well from re-learning it to teach it to other people as an SI leader.” Former SI leaders commonly noted that having to teach the material to other people further increased their content knowledge, which made it easier to retain and apply these concepts to their graduate coursework and future professional roles.

Additionally, participants currently enrolled in medical school commented that serving as an SI leader prepared them for the MCAT exam because it kept key content

that they would need to know for their future careers, such as anatomy, fresh in their minds, as exemplified by Emily's response: "It helped me with my MCAT. It helped me even with my interviews for med school, so it definitely took the pressure off and kept the content fresh in my brain, and it's stuff that I'm gonna need to know forever." Former SI leaders who pursued teaching assistant positions (TA) in graduate school added that the different techniques they found helpful for their undergraduate students are the same techniques they are using again in their TA sessions. One participant, Victor, specifically credited his SI leader experience as the criterion that set him apart from his peers when applying for a TA position: "I think it definitely helped me get that TA position during PT school. . . . I think it helped for them to see that I had been in a situation where I was teaching and helping other students, so that definitely played a role for that." Former SI leaders collectively expressed that their participation in the SI program fostered their passion to become lifelong learners.

Throughout the interview responses, participants commonly highlighted how the communication skills they gained as a result of their SI leader experience transferred into increased involvement and socialization in their current academic or professional roles. Former SI leaders commented that they were more eager to meet new people and take advantage of on-campus opportunities as soon as they arrived at their current graduate or medical school due to their previous engagement in the SI program during their undergraduate years. As Kandice noted, "Through SI, becoming involved, being able to become more social, meet new people, actually helped me become more social, meet new people, and transfer everything that I learned into my medical school career, so I was able to talk one-on-one with professors and students." Participants highlighted their increased

comfort in their ability to talk one-on-one with faculty, which they attributed to the close faculty relationships they developed through the SI partnership, as well as in their ability to work with individuals different from themselves, which they noted was important when planning to enter a career involved with patient care, as “it makes you comfortable working with other people.”

Participants pursuing medical degrees further elaborated that aspects of communication that they learned and developed as SI leaders have proven helpful in fostering patience when talking with patients and their families and also when handling difficult situations. For example, participant Simon noted, “I feel like when I talk to patients, families, and things like that, definite aspects of what I’ve learned as an SI leader, they’re very helpful when I interview certain patients.” Participant Sandy expressed, “I think that being an SI leader will definitely help me as a doctor, not only in being patient, but also with learning how to explain things.” Former SI leaders frequently paralleled their ability to break down complex concepts in easy-to-understand ways for their previous students with their ability to break down similarly complex concepts for their current and future patients, which is helpful when “you’re trying to explain to them in simpler terms what’s wrong with them.”

Former SI leaders also stressed the importance of learning to work as a team in the SI program. Participant Sarah noted that she “gained administrative qualities working with the supervisor, working with faculty, working with students,” which has been transferable to her current position working with peers and supervisors. For medical school students, like Siena, “SI developed critical life skills and how to handle difficult situations and how to work with different people.” She further commented that “going

into a workforce is not just about being the best worker; you have to work as a team. In medical school, you have to work with nurses and social workers,” and serving as an SI leader prepared her for that challenge.

In addition to honing valuable skill sets, former SI leaders illustrated in their graphic elicitation diagrams how their experience serving in a peer leadership role during their undergraduate years helped shape their future goals and ambitions, which they are currently pursuing in their post-graduation lives. While some participants already planned on applying to medical school prior to taking on their SI leader role, other participants chose their career path directly as a result of their experience in the SI program. For example, participant Lily never considered a career in education until she became an SI leader: “It shaped my career as a teacher, and it kind of helped me determine that I did want to go into education. I don’t think I would have done that if I didn’t have the opportunity to be an SI leader.” Participants collectively remarked that they were grateful for the professional networking opportunities and transferability of skills that were inherent to their SI leader experiences.

## **Discussion**

This study suggests that serving in a student leadership position fosters the development and transferability of skills, particularly those related to collaboration, communication, problem-solving, leadership, and interpersonal interactions, all of which are cited by *U.S. News & World Report* as the top soft skills every college student needs (Holmes, 2014). Further, results of this study confirm Hall’s (2011) findings that students “see their work experiences as ‘a viable way to learn skills that are transferable to other settings,’” such as by enhancing their “ability to work with diverse people, solve

problems, communicate effectively, and develop confidence in their leadership skills” (Peck et al., 2015, p. 3). Since an increasing number of employers seek prospective employees with soft skills that are transferable across multiple disciplines and careers, institutions of higher education should provide additional opportunities for students to develop soft skills during their college experience in preparation for graduation and their subsequent entry into the workforce.

While the traditional “hard” skills taught inside the classroom, such as discipline-specific abilities, will always be desired in both academic and career domains, soft skills that are developed outside of the classroom, many of which are exemplified by the student leader experience, are equally prioritized by employers and contribute to the overall mission of higher education. In the current study, former SI leaders noted the ways in which these specific skills have benefitted their post-graduate academic experiences as well as their current professional roles and future career aspirations. Through their SI leader experience, participants had the unique opportunity to experience a slice of the real world while still undergraduate students themselves through facilitating review sessions, teaching complex content material, managing others, public speaking, and handling difficult situations, as well as through the involvement, socialization, and networking opportunities inherent to the student leadership role. Such leadership opportunities also provided students the ability to develop, apply, and transfer skills related to self-direction, communication, teamwork, and critical thinking (AACU, 2011). As evidenced by the results of the current study, participants’ development of these skills during their undergraduate years has already proven beneficial to their academic and professional pursuits in their post-graduation lives.

Results of this study also speak to the “return-on-investment” conversation that has infiltrated the space of higher education in recent years in that it connects the skills most desirable by employers to those gained in the outside-of-the-classroom experience of serving as an SI leader (Carlson, 2013). In doing so, however, it also accounts for other benefits associated with higher education, “like college graduates’ tendencies to get more involved in civic and intellectual life” (n. p.). As a result, in addition to bridging the SI leader experience with post-graduation life, this study also bridges both the traditional and “new way of articulating the value of higher education” (Lederman, 2017, n. p.). Therefore, “it is critical, in the current climate, that institutions provide opportunities for student leaders . . . to gain experiences and competencies that will not only make them more well-rounded citizens, but better prepared to enter the workforce and be successful” (Peck et al., 2015, p. 1).

Therefore, faculty and administrators who have a vested interest in developing student leaders, as well as a heightened understanding of both the traditional mission and the “new way of articulating the value of higher education,” can become advocates both within their own institutions and across colleges and universities in prioritizing the importance of soft skill development through outside-of-the-classroom experiences, such as SI, during their students’ undergraduate years (Lederman, 2017, n. p.). By providing opportunities, like SI, for students to work together on problem-solving tasks with practical significance, institutions of higher education will better prepare students “to engage with those who are different from themselves, and to apply what they learn in the classroom to real world settings” (Moore McBride & Mlyn, 2013, p. 3). Peer leadership experiences extend beyond the surface of merely developing desirable skills; these



experiences can also provide students an opportunity to integrate these skills in a way that can transform college learners into real-world problem solvers (Rhodes, 2010). This study provides one example of an out-of-the-classroom peer leadership opportunity through which undergraduate students can develop the competencies and skills that will impact their future post-graduate success.

### **Conclusion**

Results from this study attempt to fill the void in research on how SI leaders develop skills that are transferable to their future academic or career aspirations as a result of serving in a peer leadership role in higher education during their undergraduate years. By further exploring this area, program administrators will gain a better sense of how peer leadership positions may serve as a bridge to students' post-graduation lives. In addition, this study provides an alternative for program assessment; rather than just determining that a peer assistance program is, in fact, effective solely based on benefits for program participants, program effectiveness can be further assessed in regard to student success from both angles by uncovering additional program benefits for student leaders.

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## Appendix

### Interview Protocol

You have volunteered to participate in this interview to provide information for a study that I am conducting on how SI leaders experience transformative learning and the nature of civic engagement as a result of serving in peer leadership role in higher education. The interview will take approximately 30 minutes to complete and will be audio-recorded. At the conclusion of the interview, you will be asked to complete a graphic elicitation in the form of a participatory diagram to further express your SI leader experience. This study will be submitted in fulfillment of my dissertation requirement in the Ed.D. program in Educational Leadership at Rowan University and seeks to fill a void in current literature regarding the roles of SI leaders. The information that you provide in this interview will remain confidential, and pseudonyms will be provided in place of your real name. You can decline to answer any of the questions posed by the interviewer and choose to provide as little or as much detailed information as you would like in response to each question. If you have any concerns about the nature of the interview or its purpose for this dissertation in academic research, please contact my dissertation chair, Dr. Ane Turner Johnson, at johnsona@rowan.edu. I am also, of course, available for any questions you might have. Thank you in advance for your time and participation.

1. When did you graduate from this institution with your undergraduate degree?
2. How would you describe your undergraduate student experience before becoming an SI leader?
3. How would you describe your relationships with faculty and peers before becoming an SI leader?
4. How would you describe your involvement on campus before becoming an SI leader?
5. How long did you serve as an SI leader and for which course(s) did you facilitate SI sessions at this institution?
6. Why did you apply to be an SI leader at this institution?
7. In your opinion, what is the role of an SI leader within the context of this particular institution's SI program?

8. How did serving as an SI leader within this institution's SI program affect your own personal academic achievements (if at all)? Please provide specific examples.
9. How did serving as an SI leader within this institution's SI program influence your involvement on campus while completing your undergraduate study (if at all)? Please provide specific examples.
10. In what ways did serving as an SI leader within this institution's SI program develop your leadership skills (if at all)? Please provide specific examples.
11. How did serving as an SI leader within this institution's SI program foster your relationships with faculty and peers (if at all)? Please provide specific examples.
12. How (if at all) have you changed since your undergraduate years as a result of serving as an SI leader within this institution's SI program? Please provide specific examples.
13. What specific experiences in your role as SI leader within this institution's SI program may have contributed to this change?
14. Would you encourage other students to apply to be an SI leader at this institution? Why? Or why not?

*\*\*Include time for follow-up questions.*