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# Perceptions of supplemental instruction by nontraditional developmental students in a community college setting

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**PERCEPTIONS OF SUPPLEMENTAL INSTRUCTION BY NONTRADITIONAL  
DEVELOPMENTAL STUDENTS IN A COMMUNITY COLLEGE SETTING**

by

Michael S. Dillard

A Dissertation

Submitted to the  
Department of Educational Services and Leadership  
College of Education  
In partial fulfillment of the requirement  
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Dissertation Chair: Michelle A. Kowalsky, Ed.D.

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## **Dedication**

This dissertation is dedicated to the Dillard family. I thank each of you for allowing me to put my studies before various family obligations. I sincerely appreciate the sacrifices that each of you have made in order to allow us to accomplish this monumental undertaking. I also want to thank my many friends who supported me through this journey. Finally, a special feeling of gratitude to my mother, Tina Dillard for the many sacrifices you made. You always gave me that reality check when I needed it.

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## **Abstract**

### **PERCEPTIONS OF SUPPLEMENTAL INSTRUCTION BY NONTRADITIONAL DEVELOPMENTAL STUDENTS IN A COMMUNITY COLLEGE SETTING**

Michael S. Dillard

2016-2017

Michelle Kowalsky, Ed.D.

Doctor of Education

This qualitative study examined the perceptions of nontraditional developmental education students on the fidelity of a supplemental instruction program in a community college setting. This study was motivated by two research questions: What are non-traditional supplemental instruction (NTSI) students' perceptions of their experiences in the supplemental instruction program? What are NTSI students' perceptions of the supports provided to them at their community college? To examine these questions, a qualitative study was employed. Interview data were obtained from four students, a supplemental instruction leader, and a program manager. Participant responses offered insight into the experiences of the supplemental instruction program through descriptions of two major areas of interest: the conditions and challenges which nontraditional developmental students face, and the intentional engagement practices on the part of the college which students perceived to be most helpful and supportive to them. Students identified and reacted to particular strategies on the part of their instructors and program which were implemented to support diverse student populations. The data revealed a body of evidence which will likely continue dialogue between the program administrators and the targeted population, as well as among educators and students in similar programs in other colleges. Implications for policy, practice, and further research are also provided.

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## **Chapter I**

### **Introduction**

This qualitative study examined the perceptions of nontraditional developmental education students on the fidelity of a supplemental instruction program in a community college setting. Students who have developmental needs, who enroll in a community college employing the Supplemental Instruction model, and who are of nontraditional college age, present an interesting and informative case from which to study program elements. In this study, students and program leaders identify the educational design elements and experiences which were most important to students who present this combination of challenges. With aims of social justice and opportunities for success for all, this study provides information on the perceptions of these educational structures from the viewpoint of those most intensely engaged and dependent on its success.

### **Developmental Education**

Developmental Education is an educational support intended to provide under-prepared, incoming students of higher education with the skills necessary to succeed in college and gain employment in the labor market (Bettinger & Long, 2005).

Developmental Education is hardly a new concept at community colleges. The first proposed concept of developmental education was used as a means to relieve colleges and universities of the burden of under-prepared freshman students. These efforts prompted higher education to begin forming college preparatory departments with the sole responsibility of trying to improve the basic skills of under-prepared high school students and formed remedial programs (Markus & Zeitlin, 1993). Currently,

developmental education is now a common program in most, if not all, community colleges in the United States.

Developmental programs were established to determine a student's placement in or beyond a developmental course, whereas many of these institutions use standardized placement tests to determine a student's level in math, writing, and reading. Most institutions using Developmental Education as a support use a set of criteria to exempt students from required participation in assessment testing. These exemptions include high college entrance exam scores, high grade point average, statewide high school exams, advanced placement scores, and transfer status or any combination of these (Shults, 2000). The most common method of delivering the placement test was computerized assessment measures, but other methods included paper and pencil for standardized college entrance exams (Shults, 2000). Although this process appears to be of common practice at most community colleges, many educators continue to wonder if this is a best practice for measuring the placement for nontraditional students, or if a placement test provides a clear picture of nontraditional students' academic capabilities.

Developmental Education in American colleges has been traditionally organized in one of three ways: centralized, mainstreamed, or administered through one academic department within the two-year or four-year college, which has been the least common option over the past decade. Centralized Developmental Education is commonly offered in a single department within a two-year college, while mainstreamed remedial courses such as those in writing or mathematics are offered in academic departments with the main purpose of offering courses applicable to degree or certificate attainment (Perin, 2002). Regardless of how it is organized, Developmental Education provides necessary

instruction to improve individual academic performance thus enabling students to continue with their education at the college level.

A troubling gap exists between the necessary skills and knowledge of the country's current and projected workforce and the demands of existing and future jobs (U.S. Department of Education Office of Vocational and Adult Education, 2012). According to Bailey (2009), 60% of entering community college students are underprepared for college level work that leads to a college degree. Identifying these students and tracking their outcomes are essential when designing support services and programs that aim to improve student success. Student success, as measured by graduation and transfer rates, is also an important goal of current Obama administration, whose national 60 x 25 goal, proposes that 60% of the adult working population in the U.S. would obtain at least an Associate's degree by 2025 (Kelly, 2010). Therefore, it is important to examine current support systems for students to determine whether or not these services are congruent with our nation's mission of providing a quality education to all students while mitigating the effects of many current students' struggles to perform at the college level.

As a consequence, students enrolled in institutions that use developmental education as a support find it difficult to make the transition and develop peer relationships for college completion. Such types of students are more likely to not persist due to the lack of preparation and peer support (Di Tommaso, 2012). Although not all developmental education students experience the same issues as students who are not required to take developmental supports, research suggests that developmental education students do encounter more issues that negatively impact student learning (Di Tommaso,

2012). For example, developmental education students are required to participate in developmental classes that are costly and provide no credit toward degree attainment. These two factors alone are frustrating to students, given that they may have either been downsized from a job or are coming back to education after taking care of their families and homes (Choy, 2002; Johnson & Nussbaum, 2004). Which leads to question the quality of services designed for these students, and specifically for non-traditional students, whose challenges may be magnified by their life circumstances. For example, most non-traditional students are working fulltime, which means they are attending classes as part-time students, attending classes with a traditional schedule from their place of work.

Changes in the student population can help practitioners drive development of new theories or modify existing theories to enhance our understanding of the world. For instance, most baby boomers worked many years to build a career and a legacy for themselves, while generation x-ers were more self-indulgent (Oblinger, 2003). Generation X students seek out constant feedback and may also frequently change jobs due to the uncertainty of the changing times. Millennial students are more technology savvy, exhibit multiple learning styles, and are most times ethnically diverse (Oblinger, 2003; Strange, 2004). On college campuses, students are fascinated by new technologies, often have at least one immigrant parent, are racially and ethnically diverse, and gravitate toward group activities (Oblinger, 2003). The modern collegiate student body must take into account these student engagement characteristics when designing strategies for academic success for all.

## **Community Colleges**

Thus, the creation of community colleges created broader education reforms relevant for all student groups to engage in the college experience. Community college is often referred to as “the people’s college” (AACC, 2016; Bouge, 1950; Vaughan, 1997). Community colleges were created to meet the needs of and serve the local community. These institutions have a strong relationship to their communities. They emphasize civic participation, extend educational opportunity, and value diversity (Castillo, 2013; Gleazer, 1994). Over the years, the American community college had worked to develop a skilled workforce to maintain its competitive advantage within a global society (Castillo, 2013; Gleazer, 1994; Kane & Rouse, 1999). The community college president work with community members, their leaders, and other community-based organizations to resolve community issues to address the social, cultural, intellectual, economic needs of the community through educational services (Castillo, 2013; Cohen, 2003; Dougherty & Townsend, 2006; Kane & Rouse, 1999; Quigley & Bailey, 2003; Vaughan, 2006). Brint and Karabel (1989) posited that community colleges had become a huge part of the American higher education landscape. These institutions had established itself as a unique establishment among higher education institutions because they were designed to increase access to higher education without burdening the existing four-year institutions (Brint & Karabel, 1989; Kane & Rouse, 1999).

The first public community college began as a small junior college (Joliet Junior College). This institution sought to establish itself as a first responder for the United States to meet its need to develop a skilled workforce and maintain its competitive advantage within a global economy (Brint & Karabel, 1989; Castillo, 2013; Cohen, 2003;



Dougherty & Townsend, 2006; Quigley & Bailey, 2003; Vaughan, 2006). The junior college was created to meet the needs of the community it serves to promote a greater social and civic engagement in the community. This institution was closely integrated with the work of the high school and of other community institutions that served the community (Hollinshead, 1936). By the mid-1800's, there were a small number of two-year postsecondary schools in existence (Brint & Karabel, 1989; Cohen, 2003; Dougherty & Townsend, 2006). By the end of the twentieth century, there were over 1,200 public community college campuses located throughout the country (Brint & Karabel, 1989). By the 1940's, enrollment increased to well over a million students (Brint & Karabel, 1989; Tillery & Deegan, 1985).

After the World War II, millions of former military personnel were given a tuition voucher under the GI Bill to attend college and enrollment soared (Brint & Karabel, 1989; Kane & Rouse, 1999). By the end of the Korean War, enrollment continued to increase. By the 1960's, the first baby boomers began to reach college age. Vietnam War veterans began to return home and Americans enrolled into college to avoid the military draft (Beach, 2012; Brint & Karabel, 1989; Calhoun, 1999; Castillo, 2013; Kane & Rouse, 1999; Witt et al., 1994). Public community colleges experienced a boom in the student population during the 1960's and 1970's. African Americans, woman and other minority groups found residence at community colleges as the social, political, and economic happenings of the nation prevented them from attending a traditional four-year institution (Brint & Karabel, 1989; Calhoun, 1999; Castillo, 2013; Cohen, 2003; Quigley & Bailey, 2003).

By the 1980's, society doubted the relevance of obtaining a college education because they were confronted with an array of social problems that affected them as a whole. This wave of problems stemmed from racial conflict, economic changes, environmental conflicts, rising disputes across ethnic, geographic, gender, political, and economic lines, and the increase in the number of homeless and hungry families (Franco, 2002). This constraint became a drawback because community colleges were faced with modeling the demands of other higher education institutions to meet the diverse needs of the students. In initiating these changes, community colleges faced greater risks. State and local officials began to focus on institutional accountability because society began to regard community colleges' standards as below university level, enrichment courses, and a hobby, recreation, and social activities (McKinney, 2011). Students were accepted into community college without conforming to specific academic standards. The colleges offered open admissions policy that did not require a high school diploma, low, or no tuition, and were accessible to the homes of students making travel unnecessary (Kane & Rouse, 1999).

Community colleges offered general education courses to serve as the first two years toward a university education. Leaders who helped to establish the public community colleges sought to relieve the university from offering the first two years of college as extensions of high schools and responded to the needs that traditional liberal arts colleges and universities had feeder or transfer schools (Brint & Karabel, 1989; Castillo, 2013; Cohen & Brawer, 2003; Dougherty, 2001; Tillery & Deegan, 1985).

Literature on the community college mission illustrated an evolving mission in an ever-changing landscape (Brint & Karabel, 1989; Castillo, 2013; Cohen & Brawer,

1996). The mission of many community colleges sought to serve all members of the community by proposing open access, provide a wide-range educational program, serve the community as a higher education institution, commit to the values of teaching and learning, and promotes lifelong learning (Cohen & Brawer, 1996; Gleazer, 1994; Vaughan, 2006). Thus, the institutions began offering vocational degree programs (Brint & Karabel, 1989; Castillo, 2013; Cohen & Brawer, 1996; Dougherty, 2001; Kane & Rouse, 1999; Townsend, 2001) and they expanded to include a range of other activities, including workforce preparation, remedial, continuing, and general education (Brint & Karabel, 1989; McGrath & Spear, 1994; Spann, 2003), and community service (Cohen & Brawer, 1996; Gill & Leigh, 2004).

Community colleges have been criticized by a host of policy makers and scholars for placing too much emphasis on students gaining practical skills as opposed to rigorous academic preparation. They criticized the diluted academic curriculum. They conceded to the urges of business and industry landscape. They failed to transfer entering students who state an intention to transfer to a four-year institution. They perpetuated separation between those who are better well off than others, and for other offenses (Brint & Karabel, 1989; Cohen & Brawer, 2003; Dougherty, 1994; Levin, Cox, Cerven, & Haberier, 2010; Levin, 2001; McGrath & Spear, 1991; Shaw, Rhoads, & Valadez, 1996).

National accounts document changes within community colleges, such as increased the female enrollment at about 58%, of the population of community college students. While 50% of the students in community colleges are less than 25 years of age, those aged 40 and above represent about 16% of the enrollments. Nearly, 63% of community college students attend part-time, as compared to 22% of those who attended

a four-year college. Minority student enrollments increased by 5% from 1992 to 1997 due to the increase in Hispanic and Asian students (Bragg, Kim, Barnett, 2006; Phillippe & Patton, 2000).

According to the American Association of Community Colleges [AACC] (2016), there were approximately 1,108 community colleges in America (982-Public, 90-Independent, and 36-Tribal). During the Fall of 2014, approximately 12.3 million students were enrolled in a community college in the United States (AACC, 2016). Student demographics included 49% White, 22 % Hispanic, 14 % Black, 15 % other ethnic, minority groups. The average age was 22-39 years at 49 %. There were 57 % of women and 43 % of men enrolled in community college. Other student demographic included first generation to attend college at 36 percent, single parent at 17 %, student with disabilities at 12 %, non-United States citizens at 7%, and veterans at 4% (AACC, 2016).

Notwithstanding the gain in student enrollment, the research suggest that more than half of them exhibit characteristics that have been illustrated to reduce their chances of degree completion or transfer to a four-year institution. These characteristics range from part-time student enrollment, full-time employment, financial independence from parents, returning veterans, caring for a sick loved one, or single parenthood (Brint & Karabel, 1989; Hagedorn, 2010). Moreover, low income students and students of color are more than likely to model these characteristics (Lamkin, 2004; Saenz et al., 2011).

Community colleges play a critical role in providing access to affordable postsecondary education and a degree or certificate that can provide a path to a career or further education (Bremer et al., 2013). These institutions delight in being open-access

institutions, serving the educational needs of underserved populations in their local areas. Studies have shown that those students who choose to enroll in a community college are racially and ethnically diverse and are more at-risk for being unsuccessful due to poor academic skills, being first generation college students, and being burdened by family and work pressures as compared to traditional college students who attend four-year institutions (Bean & Metzner, 1985; Brint & Karabel, 1989; Castillo, 2013; Cohen & Brawer, 2003; Dougherty, 1994; Levin, Cox, Cerven, & Haberier, 2010; Levin, 2001; McGrath & Spear, 1991; Shaw, Rhoads, & Valadez, 1996).

Education comes at an enormous price; increased need to equip all students with the tools needed to succeed is an expensive proposition. Approximately \$1 billion USD is spent each year on developmental education (Gallard, Albritton, & Morgan, 2010). With all of the challenges related to college readiness and developmental education, additional information is needed to understand how community colleges support developmental education students, in particular those who are nontraditional.

### **Supplemental Instruction**

Supplemental Instruction (SI) was a program model developed in 1973 at the University of Missouri at Kansas City. The issue of attrition created demand for new academic support programs. This change was based on the demographics at the institution. Initially, the school had a reputation of only admitting well-prepared students. The university's faculty did not support the traditional remedial route to further assist student's poor academic performance and began admitting academically challenged students. The student affairs officer realized that something needed to be done to further support academic success at the institution. Instead, SI was introduced by then doctoral

student Deana Martin, who was able to use her knowledge from her graduate studies along with a national survey of learning center directors to develop a list of common concerns with traditional learning approaches. The goal of SI became to further assist students with course content by developing effective learning, critical thinking, and study strategies (Arendale, 1994; Blanc, DeBuhr, & Martin, 1983).

The SI model was created to improve student retention and overall success in college courses; however, SI is now used in developmental educational courses (Phelps & Evans, 2006). SI is supported by peers and students that have completed the course successfully and can now mentor other students to make the transition into supportive learning. The SI model consists of several key elements that are used to create out-of-class study sessions. SI sessions tend to avoid the remedial stigma often attached to traditional academic assistance programs (Arendale, 1994; Blanc, DeBuhr, & Martin, 1983; Zaritsky & Toce, 2006).

SI support is challenging for the majority of enrolled students, so all students in the course are invited to participate in SI sessions voluntarily (Blanc, DeBuhr, & Martin, 1983; Zaritsky & Toce, 2006). Prior to the beginning of a semester, selection of courses for SI support is made by the SI coordinator, with the concurrence of the faculty and administrators responsible for the targeted course. Since attending SI sessions is voluntary, instructors should not have access to attendance records for SI sessions until after the course grades have been submitted (Arendale, 1994; Blanc, DeBuhr, & Martin, 1983; Etter, Burmeister, & Elder, 2000; Zaritsky & Toce, 2006).

The SI coordinator chooses students or university staff professionals recommended by the course instructor to serve as SI leaders. Students selected to serve as

SI leaders usually have successfully completed the target course, have a GPA greater than 3.5, and have the interpersonal and communication skills needed to lead others (Malm, Morner, Bryngfors, Edman, & Gustafsson, 2012). Supervisors train the leaders to serve as facilitators for the SI sessions. In addition, SI leaders serve as model students and attend all course sessions throughout the term (Etter, Burmeister, & Elder, 2000). SI sessions are often scheduled close to the class time and are often located in the academic building the same as the class (Etter et al., 2000; Malm et al., 2012).

While holding SI sessions, SI supervisors monitor and evaluate the program's effectiveness by observing individual sessions and by examining attendance and exam data (Blanc, DeBuhr, & Martin, 1983; Zerger, Clark-Unite & Smith, 2006). Supervisors meet regularly with SI leaders to discuss the strategies used and group dynamics observed during the SI sessions, thus aiding SI leaders' efforts to continually improve the sessions (Blanc, DeBuhr, & Martin, 1983; Zerger, Clark-Unite & Smith, 2006). At the end of the course, the SI coordinator, faculty and supervisors evaluate the overall success of the SI sessions based on SI attendance rates, differences in final grades between SI participants and non-participants, and successful course completion by SI participants (Blanc, DeBuhr, & Martin, 1983; Etter, Burmeister & Elder, 2000).

### **Nontraditional Students**

One particular group of developmental education students who experience greater difficulties are nontraditional students. Nontraditional students are those students also characterized as adult learners. Nontraditional students are those students over the age of 25 who may have performed satisfactorily in their high school studies, but have lost their skills because of disuse (Luzzo, 1999). These students are considered delayed enrollers.

They either attended classes part-time or work full time, are financially independent, have dependents other than a spouse, are single parents, may not have high school diplomas, or are intimidated upon returning to college (Bauman, et al, 2004; Choy, 2002; Johnson & Nussbaum, 2012; Luzzo, 1999).

Nontraditional students come with many special characteristics that are not yet realized by their traditional student counterparts. These characteristics suggest that they possess a greater sense of maturity, experiences, and values as well as different learning goals and objectives. They may bring with them their individual learning patterns, interests, and responsibilities into the learning community (Goda, Yamada, Kato, Matsuda, Saito, & Miyagawa, 2015). Accordingly, these students require different learning strategies in order to persist towards graduation. Therefore, colleges and universities must support the whole student, with all of their nontraditional characteristics. In recognizing their obstacles, educators must not make the assumption that these students' needs are being met. More importantly, academic support programs are only good if they are truly designed for their intended participants. If not, colleges and universities will continue to devalue the learning experience and increase the attrition rate of this important segment of learners.

Although not all nontraditional students experience the same challenges, experiences, and issues with persistence, these students are afraid that they will not fit in because they have been out of school too long and that they will not succeed (Johnson & Nussbaum, 2004). As a result, this fear will manifest itself into anger, sadness, inertia, and/or overcompensation (Johnson & Nussbaum, 2004). These issues create difficulty toward persistence in graduating and in acquiring new skills that may be entirely



unfamiliar. Moreover, it is believed that most nontraditional students are likely to possess fewer career-related needs than traditional students and are engaged in using experiential knowledge as the foundation for career development (Super, 1984). In understanding the changes in the student population, higher education administrators must espouse new adult learning philosophies or modify existing philosophies to enhance their understanding of the world in which we live in (Manning, Kinzie, & Schuh, 2006). Therefore, it is important to understand the experiences of supplemental instruction from the perspective of the nontraditional student.

According to Manning, Kinzie, and Schuh (2006) one size of learning does not fit all. Colleges and universities should view current trends critically in order to shape the learning community and to remain influenced by traditional theoretical constructs that meets the needs of nontraditional college students. For example, the Internet is the quickest way to obtain up-to-date information about current events; as a result, a strategy that colleges and universities can employ is to ensure that all students are taught the technology skills essential to keep up with current technological trends. In contrast, this strategy can present many challenges for students. Perhaps some members of the student body cannot afford up-to-date technology, or the older student body may struggle with learning to use new technology because of the changes in cognition (Johnson & Nussbaum, 2004). In knowing that one size does not fit all, trial and error will continue until it is determined what works best for the intended population. In fact, these practices show us that community colleges are actually recognizing that one size does not fit all; subsequently, supplemental instruction is being used as a model to determine if this approach is noteworthy.

Since nontraditional students face many barriers upon re-entry, colleges and universities must provide initiatives that aid students in identifying goals and strategies to ensure degree attainment. In a perfect world, all higher education institutions should implement open enrollment for nontraditional college students. Since tuition is increasing at alarming rates, another initiative for higher education administrators to consider is the idea of commissioning affordable childcare and providing counseling services to help with balancing family and schooling life. According to Chao and Good (as cited in Johnson & Nussbaum, 2004), nontraditional students could benefit from counseling and child care to help cope in the absence of family and emotional supports toward their education. These suggestions are very broad, but they are feasible if colleges and universities are honest in promoting a student-friendly and a diversified campus culture and climate.

### **Problem Statement**

A key question to investigate is to determine whether or not SI leads to persistence for nontraditional students who take the developmental college courses based on how they perceive their abilities to continue in the program. Since these students face additional challenges such as scheduling and location of courses, family responsibilities, and the cost of obtaining a college degree (Johnson & Nussbaum, 2004), it is important to examine persistence of these students' who are enrolled in a SI program. When students attend SI regularly, they learn the material more effectively and their grades improve (Zeger, Clark-Unite & Smith, 2006).

When nontraditional students enroll into a community college they present various struggles causing them to either drop out or take longer to complete (Johnson &

Nussbaum, 2004). Prior to enrolling in college level courses, a nontraditional student must take a placement test. The placement test is for administrators to gauge the students' academic capabilities in English, mathematics, and reading. If the student scores below the required score, the student is then categorized as a developmental or remedial student.

Surprisingly, about 60% of incoming students are assigned to at least one developmental course (Bailey, Jeong & Cho, 2010). This is a problem for most community colleges throughout the country, and developing solutions present more problems for college administrators and faculty. "It will be difficult to meet the Obama administration's goal of increasing the number of community college graduates by 2025 without making significant progress on improving outcomes for students who arrive at community colleges with weak academic skills" (Bailey, Jeong & Cho, 2010). Hence, there is a need to further evaluate what is currently working at community colleges by examining current practices and determining if those practices should be further studied and shared.

SI is based on collaborative learning and is used at many universities around the world to develop the students' study strategies (Lockie & VanLanen, 2008; Malm, Bryngfors, & Morner, 2011; Ning & Downing, 2010), but it is important to note that SI may need to be tailored differently depending on the institution. Accordingly, there are several institutions that offer innovative student supports and learning strategies for traditional students. Programs such as distance learning, accelerated course formats, and prior learning assessments are all common in mainstream institutions or departments for traditional students (Ross-Gordon, 2011). Consequently, these supports and learning

strategies are not fully designed to equip SI nontraditional students with additional supports that require constant feedback and reassurance that motivates the student.

College administrators also cannot assume that all nontraditional students are the same, and students themselves cannot assume that all colleges' SI programs are equivalent. Therefore, it is difficult to examine persistence quantitatively, since so many factors of program design, deployment, and effectiveness cannot be controlled. Instead this study will examine aspects of persistence which are most valued by student participants themselves, capturing details of the college experience using qualitative methods which will provide a rich explanation of "what works" from those who have experienced successes (and possibly failures) in an SI program.

Specifically, when nontraditional students enroll into a community college they present various struggles causing them to either drop out or take longer to complete (Johnson & Nussbaum, 2004). Prior to enrolling in college level courses, a nontraditional student must take a placement test. The placement test is for administrators to gauge the students' academic capabilities in English, mathematics, and reading. If the student scores below the required score, the student is then categorized as a developmental or remedial student. Surprisingly about 60% of incoming students are assigned to at least one developmental course (Bailey, Jeong & Cho, 2010).

While the intake problem for most community colleges throughout the country, it is important for local institutions to develop their own solutions, and for each college administration and faculty to understand the perceptions of their constituents. "It will be difficult to meet the Obama administration's goal of increasing the number of community college graduates by 2025 without making significant progress on improving outcomes

for students who arrive at community colleges with weak academic skills” (Bailey, Jeong & Cho, 2010). Hence, there is a need to further evaluate what is currently working at community colleges by examining current practices and determining if those practices should be further studied, modified, and/or shared.

### **Purpose Statement**

The purpose of this qualitative study is to examine the perceptions of nontraditional developmental students on the fidelity of a SI program in a community college setting. Although SI is a peer support service provided to all college students at the proposed location, nontraditional developmental students are the targeted population for the study. Nontraditional students are especially vulnerable to the older-adult life challenges which may not affect most traditional younger adults, such as those 18-21 year olds who move directly from high school right into higher education. The older or returning community college student may provide explicit and additional details of their experience of program elements, thus helping program leaders insure that their academic supports assist *all* students in a manner which speaks to their particular needs, challenges, or styles.

In a typical SI program, peer support is provided by former students that have passed developmental education courses and feel confident in supporting and assisting those students enrolled in the program by providing additional academic assistance after class (Phelps & Evans, 2006). Therefore, it is important to understand the strategies employed by this program, since it encourages supportive learning by students who are teaching other students the strategies behind the skills taught when completing coursework. Nontraditional students themselves will provide their reactions to the

educational methods employed by the college, and provide a first-hand critique and feedback in a more detailed way than previously sought.

This study also will be an effort to understand the perceptions of nontraditional students in a SI program for the purposes of informing college administration of current needs and successes. Information from this study will help educators and managers at the college better design SI elements and identify areas of both strength and improvement for future program review. These processes will help program leaders define how the students experience learning, and how that experience has shaped their attitudes toward knowledge and expertise. This study could also potentially assist in better academic advising, support and understanding of nontraditional adult learners in order to offer more tools with which faculty could better serve the needs of this growing student population.

The study will be a valuable resource for community colleges across the country because they will benefit from the exchange of ideas and experiences that nontraditional students will share from the study, and they can use a similar process in studying their own SI students. In addition, the findings will support current policy to ensure adequate funding for these types of programs. Nontraditional developmental students will benefit from this study since they may be able to demonstrate increased self-sufficiency, self-confidence and course knowledge. Additionally, since research suggests that these students can earn higher test grades, course grades and persist more often than their non-participating SI counterparts, these outcomes may also be benefits for the participants, and can be potential future studies. Accordingly, these inferences will be treated as a

baseline to improve policy, practice, and research concerning nontraditional developmental students in this community college and in others in New Jersey.

## **Chapter II**

### **Literature Review**

This chapter will discuss the theories and literature which formed the background of this study. The hermeneutic approach, theoretical lenses of social justice and learning theory, specifically McClusky's Theory of Margin and Knowles' Androgogy, as well as prior studies on supplemental instruction are addressed. These lenses provide insight into existing views of nontraditional supplemental instruction students' context and learning, and the viewpoints and philosophies which influenced the research questions.

#### **Hermeneutic Approach**

Hermeneutics research identifies the ways in which specific cultural views are conveyed through the language a person uses to express their personal meanings (Dreyfus & Wakefield, 1990; Gadamer, 2006; Heidegger, 1962). The hermeneutic model is an iterative process aimed to achieve the methodological practice to interpret a text, draw upon a philosophical view of the research process, and create a general model of the practice by which understandings are formed (Gadamer, 2006; Heidegger, 1962; Lejano & Leong, 2012; Thompson, Pollio, & Locander, 1994).

The first iteration of hermeneutics is the methodological practice to interpret qualitative data. This iteration is interpreted and reinterpreted in relation to the developing sense of a body of text in its entirety. This iteration is required to develop a holistic understanding of what is presented before me. Early understanding of the text are informed and later modified as the readings provide a more developed sense of the text's meaning (Gadamer, 2006; Heidegger, 1962; Lejano & Leong, 2012; Thompson, Pollio, &



Locander, 1994). Thus, the hermeneutic interpretation of the interview transcripts was analyzed through this iterative process.

The second practice of the hermeneutical iteration process reflects the philosophical suggestion that scientific knowledge is based on assumptions and beliefs that follow from a culturally situated perspective (Gadamer, 2006; Heidegger, 1962; Thompson, Pollio, & Locander, 1994). This viewpoint differs from more traditional conceptions, because it suggests that presumptions operate as a positive as opposed to a negative function (Arnold & Fischer, 1994; Gadamer, 1976; Heidegger, 1962). These presumptions are used as a frame of reference rather than act as personal biases that distort or hinder understanding (Gadamer, 1976; Heidegger, 1962; Ricoeur, 1974). Thus, as this iteration takes place the earlier understanding of the text is then modified or changed because more information presents itself (Gadamer, 1976; Heidegger, 1962; Lejano & Leong, 2012; Thompson, Pollio, & Locander, 1994). The revised understanding of the text would not be less interpretative, but would produce an alternative view to provide a better account of the broader cultural viewpoints that motivate the participants' articulated meanings (Gadamer, 1976; Heidegger, 1962; Lejano & Leong, 2012; Thompson, Pollio, & Locander, 1994).

The third practice of the hermeneutical iteration process functions as the principal theoretical model for the research approach. This model illustrates the relationship between those meanings handed down by cultural tradition and personalized meanings of an individual (Christopher, 2001; Gadamer, 1976; Heidegger, 1962; Lejano & Leong, 2012; Thompson, Pollio, & Locander, 1994). As a result, these personal understandings are culturally shared knowledge, beliefs, ideals, and assumptions that influence social life

(Christopher, 2001; Gadamer, 1976; Heidegger, 1962; Lejano & Leong, 2012; Thompson, Pollio, & Locander, 1994).

For any individual, this network functions as a preexisting background in which the personal meanings of their experiences and choices are formed (Christopher, 2001; Gadamer, 1976; Heidegger, 1962; Lejano & Leong, 2012; Thompson, Pollio, & Locander, 1994). Thus, personal meanings of the participants do not exist separately and are established by various sources of cultural knowledge and socialization, such as media, religious traditions, economic and political organizations, and ethnic traditions (Gadamer, 1976; Heidegger, 1962; Shweder, 1991). While each person is the author of their experiences, the texts of these personal meanings are written in culturally connected terms (Gadamer, 1976; Gergen, 1990; Heidegger, 1962; Hekman, 1986). Therefore, using the hermeneutic approach to gain insightful information concerning the perceptions of nontraditional students and their viewpoints about supplemental instruction.

Equally as important, when students need to make meaning of their experiences, these integrative theoretical concepts should be applied to learning. From an integrative perspective, students are taught to construct their own internal power, rather than allowing external sources to objectify their realities (King & Baxter Magolda, 2011). Self-Authorship is a foundation for holistic and transformative learning and is used to teach students the processes to construct and interpret their own thoughts, feelings, and beliefs by trusting their conscious (King & Baxter Magolda, 2011). This approach is often used in the classroom because most times students are fearful of the unknown. Some students tend to feel vulnerable to the learning process because they are usually older than the traditional student. Consequently, it is not the nontraditional student's

group membership that describes their fear of returning to college, but rather the experiences that are associated with their membership, such as being older.

As a higher education administrator and a former developmental student, I recognize the importance of providing academic support services for students, particularly nontraditional students due to the increase of their return. They require a different type of strategy to support both their academic and student support needs. I am not suggesting that supplemental instruction is the sole contributor of student success, however it is a start. The enrollment of nontraditional students now has faculty realizing that different teaching strategies are required. Also, it has administrators at the decision making table examining what support systems are in place and whether or not it meets their population's needs.

### **Theoretical Lenses**

The theories framing this study were found in adult learning theory. Adult learning theory is a process of how people learn. This study was written and guided by adult learning theorists Malcolm Knowles study of andragogy and Howard McClusky's Theory of Margin. Knowles work in relation to this investigation speaks solely to nontraditional student learning. Using Knowles as the one of the theoretical lens to help guide this study recognizes that adults have special learning needs and they learn by performing tasks. Thus, adult students learn from self-direction, gain insight from experiences, acquire learning regardless of their social roles, and gather knowledge that can be used later in life. Knowles andragogy fulfills the prophecy that adults have special learning needs that speaks to their interest and leadership within the group. Additionally, this theoretical framework encapsulates the life experiences that allows the student to

generate knowledge outside of the mainstream. Finally, this theory fortifies a commitment to learning when information is relevant, attainable, constant, structured, and offers legitimate feedback (Knowles, 1980).

Another important framework that will guide this study is McClusky's theory of margin. McClusky's theory is relevant for understanding adults' physical and mental health during their later years when various demands are placed them (2000). This theoretical framework involves the continuous growth, change, and integration, in which constant effort is made to wisely use the energy available for meeting normal living responsibilities. McClusky describes load and power as external and internal forces that evade daily life activities, such as family, employment, school. The internal load is representative of the internal motivations that will allow one to persist, such as self-esteem, self-acceptance, desires. Power is a combination of external and internal resources that will either help or hinder one from learning. This theoretical approach has an interpretive method that allows for greater identification and explanation of complex issues due to the frequent social roles the adult learner. Thus, McClusky's theory is not about how students learn, but is about how they persist in learning or decide to engage in learning.

These theoretical frameworks were selected because they are useful lenses that will influence the manner, in which nontraditional students perceive supplemental instruction in a community college setting. Moreover, these frameworks will give great input to what community college leadership can do to help students create meaning of their educational experience.

## **McClusky's Theory of Margin**

An adult learning model that is of importance to this study is McClusky's Theory of Margin. McClusky's Theory of Margin highlights that adulthood is a time when individuals seek to evolve with the means made available to them (Merriam, Caffarella, & Baumgartner, 2007). This theory assumes that as adult's age they are faced by increasing demands or pressures, or what McClusky describes as a "load" (Kasworm & Marienau, 2002; Merriam, Caffarella, & Baumgartner, 2007). A load is comprised of those internal and external responsibilities and obligations required of adults. The internal load consists of life expectancies developed by people themselves, such as aspirations, desires, and future expectations. The external load consists of tasks involved in normal life requirements (family, work, community responsibilities, and so forth) (Day & James, 1984). McClusky hypothesized that the main factors of adult life are the pressures and social demands that an adult carry in living, and the resources that are made available for them to carry those demands or pressures (Merriam & Caffarella, 1999).

McClusky's Theory of Margin dictates that an adult must have some margin of power as an available resource in order to engage in learning or meet life demands (Merriam & Caffarella, 1999). Power is comprised of internal power, intelligence, social skills, health, fitness, and persistence. External power, such as wealth, leisure activities, family, employer, and community support and other factors encourages student success in the learning environment (Day & James, 1984; Kasworm & Marienau, 2002; Merriam, Caffarella, & Baumgartner, 2007). Interestingly, the internal and external factors are connected since external resources, such as family and socio-economic status internalizes acquired experiences such as coping skills and personality. McClusky hypothesized that

margin equaled load, divided by power, illustrates how successful a learner can cope with obligations and responsibilities with the resources made available to them (Day & James, 1984; Kasworm & Marienau, 2002; Merriam & Caffarella, 1999; Merriam, Caffarella, & Baumgartner, 2007).

McClusky's Theory of Margin, as well as Knowles' Androgogy discussed below, could help students conceptualize their ability to link external factors, such as family, work, and school with the internal factors that can potentially affect physical and psychological functioning. This theory is similar to Andragogy, but looks at personal life experiences of adult learning (Merriam, Caffarella, & Baumgartner, 2007). Learners may need guidance to understand what learning activities are helpful for them to meet their learning goals and should be informed as to what is acceptable within the direction of the course (Blondy, 2007). Suggesting that learners draw on their current and past experiences and relate their learning activities to their current life situations could help them focus on the process of learning (Conrad & Donaldson, 2003). Taking a holistic approach to teach students how to shift from unhealthy reasoning, to reasoning that is more conducive to societal norms operationalizes the complex workings of adult developmental practices.

### **Knowles' Andragogy**

Andragogy means leader of man (*andr-* is Latin for "man" and *agogus* is Latin for "leader of") (Hiemstra, & Sisco, 1990). The term defines an alternative to pedagogy and refers to learner-focused education for people of all ages (Hiemstra, & Sisco, 1990). The andragogic model asserts that five issues are considered and addressed in formal learning. They include (a) letting learners know why something is important to learn; (b) showing

learners how to direct themselves through information; (c) relating the topic to the learners' experiences; (d) people will not learn until they are ready and motivated to learn; and (e) often this requires helping them overcome inhibitions, behaviors, and beliefs about learning (Knowles, 1985).

Knowles' Andragogy model posits that adults are self-directed learners and are capable of assuming responsibility for their action (Merriam, Caffarella, & Baumgartner, 2007). Knowles assumes as adults mature they assume more autonomy and responsibility for the decisions they make (Merriam, Caffarella, & Baumgartner, 2007). The life of an adult is filled with many responsibilities. Most adults try to balance their professional life with their personal life. Adults must keep a job to pay their bills while not neglecting their families for which they care. When it comes time for an adult to enter an educational environment, that education needs to find its place in the balancing act. Because of this, adults want to know exactly why they must learn something to ensure that it will be worth their time (Fidishun, 2000.). Without knowing why they need to learn something, adults will struggle to find value in the process that is taking them away from their other responsibilities. Therefore, instructors need to be very clear about the need that is being met by the learning.

Andragogy suggest that instruction for adults needs to be focused more on the process and less on the content being taught. Strategies such as implementing case studies, role playing, and self-evaluation are most useful for instructors to adopt while in the role of facilitator rather than lecturing or grading (Knowles, 1985). This approach to learning assumes that adults need to know why they need to learn something and how to learn experientially through problem solving (Knowles, 1985). Unlike children, adults

have already been learning through personal and professional experiences. When considering adult learners, that experience must be included in the learning (Atherton, 2005). Adults have a desire to share what they have learned with others. Instructors need to find ways to allow for that sharing to occur. Without the opportunity to share, the adult learner might not find as much value in the learning because they are unable to demonstrate how it relates to their own lives. The principles of andragogy are most reflective when adults are involved in the planning and evaluation of their instruction, when their experiences provide a basis for learning activities, when they are interested in learning subjects that have immediate relevance to their job responsibilities or personal life, and when learning is problem-centered rather than content-oriented (Knowles, 1985).

### **Supplemental Instruction Studies**

This literature review seeks to examine successful Supplemental Instruction (SI) programs that are designed to help nontraditional developmental students fulfill their educational and professional goals. This academic assistance program attempts to increase student's academic performance and retention through its use of collaborative learning and study strategies. Accordingly, these extensions of the classroom are imperative to ensure that students are provided an educational experience that engages intellectual inquiry inside and outside of the classroom. SI is an effective learning model that is useful to carry over into nontraditional developmental student's individual area of study.

Harding (2012) found that SI did have an immediate impact on student academic success. The students suggested that having structured time to work through practice test



questions was beneficial in assisting them improve their approach to testing and their ability to evaluate and critically apply needed knowledge. Fowler and Boylan (2010) discovered that SI programs can effectively engage students in improving academic performance, and that non-academic and personal factors are relevant to student success as are academic factors, especially with those students who were underprepared in all subjects. SI is an effective tool for student success in nursing. The additional assistance provided students with many strategies that support student success.

Wolf reported that SI had a positive effect on special populations, such as developmental and minority learners (1998). Conditional Acceptance Program (CAP) is a program designed to give those students who have the potential for success the opportunity to be admitted into college under special circumstances, such as acquiring an ACT score of 16, taking a university placement test, providing a writing sample, and participating in an interview. If accepted, the student will be required to attend tutoring once a week, attend weekly meetings with a small peer group, and take developmental courses in both college reading and study strategies. Additionally, personality factors were attributed inversely to both retention and college GPA. Laskey and Hetzel (2011) found that students who scored higher with an extraverted personality trait were less likely to be retained. At-risk students who were conscientious and agreeable were retained and achieved higher college GPAs. There is significant evidence that the SI program affected success and retention rates (Wolf, 1998). This SI model in connection with personality traits, are indicators on academic performance and success.

Kenney (1989) uncovered that there is a significantly higher course grade mean for the students who participated in SI, operating in connection with factors such as

mathematical aptitude, prior academic success, and attendance rates. The students who had experienced SI performed at a higher level of achievement than those who did not receive the additional assistance. SI is an effective strategy to support persistence in Science, Math, and Engineering majors. Students who participated in SI in Physical Chemistry were enthusiastic, grateful for the resource, and expressed interest in its availability for other challenging courses (Bronstein, 2007). Therefore, this SI model captured the essence of learning through difficult course content.

In a similar study, Lundberg (1990) found that SI contributed to higher mean final grades and lower rates of D, F, and course withdrawals for SI participants who participated in a Chemistry course. Six major findings were highlighted. The first was that SI accommodated the needs of diverse learners. SI encapsulated understanding not memorizing. SI provided depth versus breadth of discussions. SI enhanced relationships between ability, knowledge, and confidence. SI improved social relationships among students, and SI challenged SI leaders' knowledge (Lundberg, 1990). Moreover, researchers posited that SI participants received a higher mean score course grade because the participants reported that working the problems out on the board and seeing others work out problems on the board was helpful. SI provided the students with the opportunity to share information about the complexities of the course and the SI activities helped them in their studies of chemistry (Van Lanen & Lockie, 1997).

Castator and Tollefson (1996) found that students who were recommended to take developmental courses and did so earned higher grades in their college-level courses than students who did not take the remedial course before enrolling in college-level courses. These under prepared students' skills had a negative effect on all their course grades, and

this negative effect was found to be significant in 100% of the courses studied. In another study, Karabenick and Knapp (1988) uncovered that found that students with the highest (and lowest) need for learning assistance sought help the least. Help-Seeking was found to occur with the highest frequency for those students in the B-to C+ range, while those students with a D average and lower grades exhibited almost no help-seeking behavior. In looking for reasons for this lack of help-seeking behavior, Karabenick and Knapp (1998) suggested that attribution theory might hold the answer. Attribution theory is the cycle of a person attributing his or her lack of success to low ability and that attribution to low ability causes an expectation of future failure (Karabenick & Knapp, 1998). Accompanying this expectation of failure are feelings of guilt, embarrassment, hopelessness, and resignation which would also hinder help-seeking behavior.

The literature has suggested that SI is effective in raising student grades, increasing student persistence and student graduation (Arendale, 1994; Isher & Upcraft, 2005; Rheinheimer, Grace-Odeleye, & Francois, 2010). Students also gave positive feedback about SI. When asked a series of questions on a mid-semester and end of semester evaluation, student responses were positive (Stone, Jacobs & Hayes, 2000, p.134). More specifically, students reported enjoying the organization of SI course material. Students found that reinforcing major instructional concepts in SI sessions allowed them ask questions during the SI session, identify key content, learn in a safe environment, voice understanding, exposure to other interpretations, and deeper understanding and increased confidence (Stone, Jacobs & Hayes, 2000, p.134-135). Doty (2003) found that students who volunteered to participate in SI versus those who did not had a significantly better GPA than non-participants. In a study conducted at LaGuardia

Community College, 95% of respondents reported that SI was very helpful in giving them a better understanding of the course material; 73% reported their work as SI leaders helped them choose a career; and 98% reported that being an SI leader helped them gain self-confidence and gave them an opportunity to strengthen their leadership and communication skills (Zaritsky, & Toce, 2006, p.28).

### **Rationale and Summary**

SI enhances service delivery and serves as a catalyst to improve student performance. The literature on SI emphasizes that these extensions of the classroom are helpful and essential to student learning processes. Moreover, the SI sessions allow students to receive continuous feedback and help them to modify study behaviors. The small group sessions are supported by supplementary skill-building that teaches students to become more effective learners. These strategies have resulted in higher grades and retaining students longer.

Supplemental instruction programs were designed to be a proactive method of peer assisted learning to reduce student attrition. The literature review illustrated the benefits and advantages of the learning communities that participate in SI programs. The literature presented a thorough summation of SI programs and its inclusion of a student-centered, pedagogical process that facilitates a comprehensive and collaborative instructional environment.

The research shared that when a student participated in SI courses they recognized the additional academic support received from the program. Organizing and managing a successful SI program depends on the effectiveness of four independent entities: the SI leader, the course instructor, the SI Supervisor, and students who volunteer to participate

in the program (Arendale, 1994; Bowles et al., 2008). Accordingly, the SI leader models the behaviors, then guides students away from teacher-directed, dependent learning, and moves towards self-directed, independent learning (Stone & Jacobs, 2006).

In addition, the research suggested that student retention is generally high in SI learning communities because they feel they are active participants in the educational process (Smith & Hunter, 1988; Tinto & Russo, 1994). The research noted that SI is an alternative teaching method used to help students develop multiple perspectives other than the teacher's (Tinto, 1997). Thus, when the student feel that they benefited from participating in the program, they placed greater value and emphasis on completing the course.

The research posited that supplemental instruction brought academic credibility to college campus support services. SI was not created to be a remedial program (Arendale, 1994), but was designed to enable students to master course content while developing and integrating effective learning and study strategies. This increased level of academic performance is a result of a collaborative learning approach that engaged the student in a process of mutual inquiry. The research illustrated that when the instructor related to students, as knowledgeable co-learners they were more inclined to challenge one another in regards to course content material and outside experiences.

SI programs are traditionally linked to high-risk courses that served first and second year students (Arendale, 1994). The research advised that SI does not find fault in the deficiencies of a student's prior knowledge, because it helps the student transition from where they are and provides them with the tools to increase learning. Thus, these extensions of the classroom are helpful and essential to how students process academic

content. The sessions allowed students to give and receive feedback and helped them modify their study habits. These small group sessions were supported by supplementary skill-building strategies used to teach students to become active learners. Also, these skill-building strategies have resulted in improved grades and retained students longer in college.

### **Research Questions**

Any investigation of “what works” for developmental students must necessarily begin with views of the current practices that students experience in a program, as well as their reactions to decisions made for them by program designers. Students usually have a good sense of what helped or hindered their progress, so their perceptions are paramount in beginning to understand how well a program is speaking to their needs, concerns, and learning styles.

Therefore, the primary research questions for this qualitative study were:

RQ1: What are NTSI students' perceptions of their experiences in the supplemental instruction program?

RQ2: What are NTSI students' perceptions of the supports provided to them at their community college?

These questions allow the researcher to define elements of the supplemental instruction program, as well as elements of the developmental student experience which are perceived to be most important or influential. These elements may or may not contribute to their success as students, according to the students' views, but all of the elements offered by students in answer to open-ended questions will be those which they conclude are most important ones from their experiences.

## **Chapter III**

### **Methodology**

The goal of this study was to determine perceptions of SI programs as they relate to nontraditional developmental students. According to Stake (2005), using a single case methodology is sufficient for this study because this case does not characterize other cases or illustrates a specific problem, but rather this study generated an interest in, specifically, the reactions of nontraditional developmental students to their SI program. The single case approach provides an opportunity for innovation and can be used as a preliminary or pilot in multiple cases (Rowley, 2002). The single case approach was the best method to employ since it entails understanding the lived experiences and the perceptions of nontraditional developmental students and their leaders as they engage in SI programs.

#### **Strategy to Inquiry**

Qualitative research was appropriate for this study because qualitative research is subjective, specifically since different people can perceive the truth differently. Qualitative research attempts to explore how people perceive their lives (Creswell, 2013). The purpose of most qualitative research is to increase knowledge of people or situations that are not usually studied. According to Kemmis (1980) the true value of non-experimental research lies in its connection to the real world, its ability to describe actions in their social and historical contexts, and its ability to rationally critique these descriptions. Stake (1995) discusses two forms of knowledge when conducting qualitative research.

The first form of knowledge is tacit knowledge. Tacit knowledge is those unspoken and unwritten experiences, insights, observations and internalized information held by individuals (Stake, 1995). The other form of knowledge is propositional knowledge. Propositional knowledge constitutes all interpersonal shared statements and different from tacit knowledge which may also dwell on shared statements and events, but it is more importantly the knowledge gained from experience with interactions as well as experience from propositions and reflections about them (Stake, 1995).

Qualitative researchers share mutual goals of coping with subjectivity, describing the complex lived experiences, and appreciate realities when holism is valued (Creswell, 2013). Qualitative methodology is conducive to research that attempts to understand such human experiences. Therefore, a qualitative research design consisting of interviews and notes will be used to provide well-substantiated conclusions to study the perceptions and experiences of the nontraditional students and leaders participating in an SI program.

### **Setting and Participants**

This study was conducted at a northern New Jersey community college. This institution is a Middle States accredited institution. It was selected as the site for study because it is a two year, urban public institution with a disproportionate number of nontraditional students. In 2013, the total enrollment and demographic profile of students at Essex County Community College (ECCC) was 12,175 (AACC, 2016). The student population was 47.5 % part-time and 52.5 % full-time. Student characteristics were 41.5% male and 58.5% female. The race of the student demographic was 48.2 % African American, 24.7% Hispanic, and 8.9% White. Understanding the landscape of the student demographic characteristics reflect and mediate interactions between the adult student,



the institutional context, and the adult life role identities of self, learner, worker, family provider, and community participant (Bauman, 2004; Kasworm, 2005). Since this case draws upon the social and psychological context for learning by connecting one's academic studies and adult student life, ECCC's Center for Academic Foundation (CAF) program is an exceptional case to study since the institution reflects a significant representation of traditional and nontraditional adult learners.

Research suggests that there are many perspectives to consider when conceptualizing the dynamic of nontraditional students who participate in the predominately younger undergraduate student classroom. Something to consider here is the broader influence of the younger student in the collegiate environment. Some researchers consider as older adults enter the predominately young classroom setting they present themselves with higher levels of anxiety and self-consciousness about their place and ability to perform as an undergraduate student (Bauman, 2004; Kasworm, 2003; Levin & Calcagno, 2008). In addition, researchers suggest that collegiate leadership have shared that the college environment has often been intimidating, inequitable, or nonresponsive to those nontraditional adult students that require additional support. These concerns have affected their sense of identity and acceptance (Bauman, 2004; Kasworm, 2003; Levin & Calcagno, 2008).

ECCC's CAF program concentrates on the adult student population in need of additional academic study and support (ECCC.edu, 2016). This program was selected because a key feature of the CAF initiative is to form Learning Communities for student growth and development through block scheduling. Each of the nine blocks contained Math, English, and a Computer Literacy course. Thus, by providing students with a set,

no hassle schedule, they benefit from all services offered. The block scheduling includes Learning Associate's to assist faculty in the classroom and mandatory additional tutoring. In addition to the nine blocks of classes, there are five standalone sections that are also created for those students who tested at a higher English level. Mandatory tutoring sessions are also incorporated after classroom instruction.

The mandatory tutoring sessions are scheduled to begin immediately after the first class with the Learning Associate facilitating the session. The learning is reinforced in a more comfortable atmosphere with a "peer" leading the session. As a part of the instructional strategy, students are required to develop a portfolio that is calculated towards their grade. For example, an English portfolio is a compilation of completed essays and work produced from the textbook. The Math portfolio is a Math vocabulary list, which in turn is guaranteed to strengthen students' English skills. These two portfolios increase students' knowledge through repetition and reinforcement of materials.

The structure of the classroom then changes from the traditional teaching methods of the current Math and English classroom structure. Although there is an existing curriculum, it is modified to include College Success Skills pertaining to subject matter while incorporating mandatory computer lab time. The schedules are structured to accommodate the lab component. The student schedule reflects two days of lecture instruction and one day of mandatory lab facilitated by the instructor. The use of computers with under prepared students will help to strengthen their skills in remedial courses and contributed to their academic success. Additionally, the use of the computers in both classes serves to reinforce existing skills and build upon new knowledge through

mastery learning. This strategy helps students to master the material in one unit before progressing to the next unit. This emphasis on mastery learning is beneficial to students in the remedial courses because it provides regular reinforcement of concepts through testing.

The CAF program is a student support service aimed to help students overcome barriers to success and to improve academic outcomes. The program provides students with academic assistance and career planning. The program teaches techniques to improve study habits and gives students opportunities to develop personal skills. The goal of CAF program is to help direct students to the various services offered at the college, facilitate their adjustment to the college environment, and offer them the tools they need to be successful at the institution.

The operation of the Center for Academic Foundations (CAF) at this college is administered and operated by the Assistant Dean of Academic Foundations who is involved in curriculum development, organizational structure, and oversight of the operation of the program. Additionally, the full-time staff for the CAF program is comprised of a Coordinator, Math teacher, Advisor, English teacher, and Secretarial support. The part-time personnel include Math and English adjuncts and Learning Associates. In addition to the Teacher Advisor instructional load, their additional time during their work week focused on classroom preparation, additional counseling services and providing additional workshops to CAF students especially during Midterms and Finals.

Moreover, an intensive counseling component provides students with additional support services to help them focus and stay on course while being active participants in

the CAF program. The CAF program also created an early alert system to provide student counselors and Center staff with information regarding students' skill deficiencies and absenteeism. The role of the counselor is to focus on student follow-up and intervention at the earliest stage possible in order to prevent the student from being placed on academic probation, falling behind in their coursework, and taking ownership in their academic success. In addition to individual counseling sessions, the Counselor and Coordinator visit each classroom during various stages of the semester to reinforce the importance of education and personal well-being. Accordingly, these illustrations are consistent with participant narratives and therefore focus on the procedures that teach, strengthen, and support student learning and engagement.

Six participants were selected to participate in this study. A purposive sampling frame was used for this study. Creswell (2013) describes purposive sampling as the means of intentionally selecting individuals for the purpose of understanding the phenomenon. This non-probability sampling method was selected to better understand the SI program from the nontraditional student's perspective. Therefore, there were four SI students, one SI instructor, and one program director. The best way to approach obtaining a holistic outlook about SI programs was purposely selecting individuals who were vested in the program and offered first-hand knowledge about SI programs.

I gained approval from the college's Institutional Review Board (IRB) and Rowan University Institutional Review Board (IRB) to conduct the study. There were no participants under the age of 18; therefore, no parental consent was required. In addition, informed consent was obtained from all participants prior to the interview-only data collection method. The respondents received full disclosure of the research conducted,

and their names and identifying information were purposely kept confidential. Each participant giving consent signed two copies of each of the consent forms; one for consent to take part in a research study (See Appendix A); another giving consent to be interviewed (See Appendix B); and a third giving consent to be audio recorded (See Appendix C). Each respondent received one copy of the signed documents for their records, and the researcher kept the second copy. Generic indications as Jessie, Kendell, etc. were used to prevent further identification of the participants who agreed to take part in the study, other than their gender as it appears in the manuscript. The participants were advised that they could withdraw without any consequences at any time for any reason.

Rowan University's Office of Research ensures compliance with applicable Federal, State and University rules and laws. All signed consent forms, interview transcripts, field notes, analytic memos, and flash drives were stored and retained under lock and key in a secured file cabinet and on a password protected computer. Paper records, such as transcripts, field notes, and analytic memos will be shredded and recycled at the conclusion of the study period. Records stored on a computer hard drive, flash drives, and as audio recordings will be erased using commercial software applications designed to remove all data from the storage device. As the researcher, I have agreed to keep records stating what records were destroyed, and when, and how this was accomplished. All research records will be maintained and disposed of five years after the day of completion of this study.

### **Data Collection**

Qualitative data collection methods were employed during this study. Interviews were conducted with four nontraditional students, one SI instructor, and one program

director. Interviewing requires good listening skills, exploring alternative responses, and follow-up. All interviews were audio recorded to ensure accurate transcription while writing up the results. Each student interview lasted approximately 45-60 minutes because they were asked ten semi-structured, open-ended interview questions. The SI leader interview lasted approximately 15-30 minutes since they were seven semi-structured, open-ended interview questions. The Program Director interview lasted approximately 15-30 minutes as they were asked eight semi-structured, open-ended interview questions. Interview Protocols were created to address each participant's role that was employed in the study. The protocols were used to solicit rich, descriptive information from the study's participants to understand the fidelity of SI programs to ensure that the interview questions and the research questions were connected (See Appendix D). I reviewed the protocol with critical friends for suggestions to improve the line of questioning and to solicit a more complete dialogue with the participants. The critical friends were the most helpful because they viewed the interviews questions as outsiders of the community college system. They elicited clarification and additional information in areas of the protocol that appeared disconnected from the study.

Prior to conducting data collection, I received approval from the Rowan University, Institutional Review Board (IRB) and that of the Community College being studied. Data were collected over the course of one month by questionnaires that I designed. Researcher notes were used during the planning, implementation, and final stages of the interviews. Glesne (2006) proclaimed that maintaining a researcher journal to document field notes during the research process stimulates reflective writing. After each interview, I documented my interview experience. Reflexivity involves self-

awareness and self-reflection about potential biases and predispositions that may affect the research process (Rubin & Rubin, 2005). In particular, I addressed the participant's level of comfort with answering the interview questions. These conversations occurred during every exchange of information to facilitate an ongoing dialogue.

A letter was emailed to the SI Program Director requesting that members of her academic community participate in my analysis of perceptions of the SI program. The only criteria to participate in the interviews were that the participants: a) participated as non-traditional SI student; and b) were willing to spend approximately one hour answering interview questions. The interviews were scheduled and conducted on a first-come, first-served basis. I conferred with each participant on dates, times and locations that were feasible to permit them to take part in the interview.

Data was collected via semi-structured interviews using open-ended questions. Seidman (2006) posited that interviewing is a highly structured data collection methodology that requires open-ended questions to help understand the meaning of an activity. The semi-structured interviews were designed to gather a person's perception on a specific topic of interest, as opposed to leading the person toward preconceived choices (Seidman, 2006). I created an interview protocol to organize the interview questions in order to solicit thoughtful responses. The interview protocol was used as a conversational guide to highlight main questions, follow-up questions, and probes (Rubin & Rubin, 2005). The interview protocol provided consistency while gathering data across participants during the interviews. The interview protocol was created to achieve depth from the participants' perceptions, beliefs, and attitudes about SI programs. Also, I used responsive interviewing, which are extended conversations that allow relationships

between the researcher and the interviewee to be formed in order to elicit depth and detail of information (Rubin & Rubin, 2005). The responsive interviewing techniques captured additional information to follow-up and clarify responses with the participants.

Prior to conducting the interviews, I posed several background questions. The participants were asked their years of employment, ethnicity, gender, and age. These questions were asked to help the participants get into a conversational mindset in an attempt by me to develop rapport. After, I discussed informed consent and confidentiality, I had each respondent sign two consent forms to take part in a research study, two forms to be interviewed, and two forms to be audio recorded. Each respondent received one copy of the signed documents for their records. Also, the participants received full disclosure of the research conducted.

During the interviews, the participants had the opportunity to address additional thoughts or questions related to the study. Each interview lasted approximately 25-40 minutes. Immediately after each interview, I reiterated the issue of informed consent and confidentiality. I reflected upon the conversations, tested the recorder to ensure that the entire interview was captured, and filled in any gaps of data. Moreover, note taking guided the process for documenting any additional thoughts, observations and feelings about the interviews and how I should proceed in the research process. The field notes were used to document the progression of the interviews and to ensure that I elicited thick, rich, and descriptive information about the study.

### **Data Analysis and Coding**

Data from semi-structured open-ended interviews was transcribed and coded. Coding is most appropriate because it captures behaviors or processes and provides



metaphors and imagery to obtain a rich description of the categories and identify themes (Saldaña, 2009). In addition, a code list of topics offered by the participants was created to underscore the codes that emerged during the first iteration of data analysis. The codes were then categorized in the second iteration of data analysis. During the third iteration themes were emerged. Examining the themes with the existing research helped to substantiate the data, and to determine if the themes were linked to the main goals of the research as well as the theoretical frames.

Extracting data from multiple sources facilitates reaching a holistic understanding of the phenomenon under study. According to Craig (2009), further examination of data sets and subsets are required to provide a descriptive story of what took place in the research environment. This was achieved by systematically arranging, categorizing and reorganizing the information to create a descriptive picture of events (p. 189). Therefore, the researcher endeavored to identify and categorize common and relevant themes, antecedents, and patterns of behaviors that surfaced from the interviews (Creswell, 2007; Saldaña, 2009). To begin the coding process, I first coded my data using holistic coding in the first iteration (Saldaña, 2009). Holistic coding helped me to conceptualize my data, in other words, to make sense of it by identifying the major topics offered by participants. Then, I used *in vivo* coding to capture behaviors or processes to obtain a rich description of the categories and to identify and develop themes (Saldaña, 2009). I collapsed the original number of first cycle codes into a smaller number of items create categories, and then I reanalyzed the data to develop themes in the final cycle analysis.

Coding categories were developed based on patterns and relationships from the interviews. For example, the data was coded sentence-by-sentence to generate a list of

relevant phrases, concepts, and words. After, the data was then summarized question-by-question to highlight categories and themes for each interview question; this was further re-analyzed by thematic categories across questions. Additionally, the field notes were transcribed, coded, categorized, and interpreted based on common patterns and themes observed during the interview sessions. The analysis was completed by asking the following questions: who, what, where, when, why and how, to link the findings with the participants' own words in the interviews. Topic codes, categories, and themes describing the data are provided in the findings in Chapter 4.

### **Limitations**

This study was designed to understand and evaluate SI programs within the context of one community college. Consequently, there were several limitations that impacted the findings for my study. The first limitation was evaluating the SI program within the context of one community college. Thus, this was a limitation since the institution and its population is not representative of all community colleges in northern New Jersey, the state of New Jersey, nor anywhere else. The results of this study are not generalizable. Another limitation was my role as the researcher. This limitation was significant because I brought personal values and beliefs into the study. To address this limitation, I sought the assistance of critical friends and professionals in the field to ensure that my personal views concerning this topic did not taint the research findings.

Also there was a limitation in the research design. Initially, I wanted to review student transcripts to assess grades; consequently, recent changes at the institution made it impossible to assess the documents. To address this limitation, I reevaluated the

research design and formulated a new research strategy that allowed for me to carry out the study in the intended timeframe and without disclosing participant details.

As with any study, there are limitations associated with the data that hinders the quality of the findings. I was aware of these limitations and I attempted to address them throughout the research process. This study used qualitative data from respondent interviews. Critical friends assessed and ensured that the questions on the interview protocols were relevant to the topic. Research suggests researcher bias occurs when the researcher interprets findings based on personal values and selective observation at the expense of other data (Lincoln & Guba, 1985). I highlighted this threat because, if unmonitored, it affects the fidelity of the data. Re-assessing my role as the researcher was critical to the outcome of the study. Therefore, I examined my personal assumptions and found strategies for challenging my biases. I consistently redirected myself from appearing intimidating or intrusive in my line of questioning, while documenting those experiences in my researcher's notes. I reflected on those actions that occurred before, during and upon completion of the interviews. I assessed what drew me to the topic and my personal investment in the research. Also, I checked and rechecked the data to search for contradictions. I examined the data collection and analysis procedures. I reevaluated whether interviews were the most appropriate methods for this study. In addition, I made judgments about potential bias and distortion of the data and sought feedback from critical friends during the construction, analysis and interpretation phases of the study.

During the research study, understanding the credibility and validity threats of the interview protocol was important to minimize errors that might arise. Credibility ensures that the results of the qualitative data was credible and was from the

perspective of the respondents participating in the study (Toma, 2006). Therefore, to satisfy the credibility threat a selection of participants from within the target population was selected. Confirmability determines if the results can be confirmed or corroborated by others and are driven by the respondents and not by the researcher (Toma, 2006). Checking and rechecking the data was used to search for contradictions, examine the data collection and analysis procedures, and make judgments about potential bias. Member checking occurred throughout the inquiry to review for accuracy (Cho & Trent, 2006) and to ensure that the respondent's experiences were similar to my interpretation of the data.

I also kept an audit trail of documentation. Field notes were written and used to clarify notes, interpretations, ideas, and impressions of activities (Glesne, 2006). In this study, I kept field notes to keep a running record of the research process. In my researcher notes, I made regular entries to record methodological decisions and the reasons for them, the logistics of the study, and reflection upon what was happening in terms of my own values and interests.

Validity is the degree to which a study accurately reflected or assessed the specific concepts or constructs that the researcher was attempting to measure (Toma, 2006). Content and construct validity of the interview protocol was established prior to implementing the study. Content validity is the extent to which the interview questions are representative of all possible questions (Toma, 2006) about supplemental instruction. The wording of the interview questions were referred to and examined by critical friends to assess whether the questions were relevant to the topic and if any of the questions yielded potential bias. Construct validity seeks agreement between a theoretical concept

and specific measuring procedures (Toma, 2006). Therefore, I identified the responses from the open-ended questions that illustrated a correlation between themes and non-observable undeveloped variables in the study.

Overall, this study was designed to understand nontraditional students' perceptions of a Supplemental Instruction program. A qualitative approach was applied to better understand the programs as it related to nontraditional students at a community college. The literature was helpful in understanding the programs purposes. My overall goal was to highlight the benefits of such a program while understanding what could be improved upon as well. I do understand that this study presented limitations, however something must be resolved to support nontraditional developmental students' success in courses during their college experience. Faculty are doing their best, however additional support services must be provided to meet the needs of today's students as they further advance their education.

## **Chapter IV**

### **Findings**

The findings from interviews with SI program leaders and student participants centered around several themes. When observing the data, it was clear that SI leaders' use of structure applied in the community context challenged the students to increase social awareness and responsibility, demonstrate the effectiveness of cooperative learning, and achieve learning objectives through active and hands-on learning experiences.

Leaders' themes included a discussion of the personal characteristics which motivated them to care for this student population; elements of learning reinforcement and a structured environment; and management practices which insured compliance and quality. Good instructors work tirelessly to create a challenging and a nurturing environment for their students (Beavers, 2009). SI leaders highlighted several personal characteristics that they thought encouraged students in the learning process. SI leaders illustrated that to motivate their students time must be spent to get them into the mindset that they want to learn. These tasks were accomplished by presenting coursework in ways that were interesting and involved the student. Leaders spoke fondly about relating materials to the student's world and to real life scenarios, and maintaining a respectful and caring attitude to make clear that support was available to them. Other characteristics included conversing with the students inside and outside of the classroom to illustrate a personal interest in them, and doing what needs to be done to keep them apprised of their progress, success, and needs.

Educators who uses praise to reinforce desired behaviors motivates a student willingness to learn (Willingham, 2006). Leaders spoke about searching for new ideas,

approaches, and methods to create a structured learning environment with the aim to encourage the students to become actively involved in their education. Active involvement in the learning process is the behavior that instructors expect to reinforce positive outcomes. Thus, the theme reinforcing desired behavior in the structured environment was lauded with various non-verbal cues (smiling or a thumbs up), a comment (good job), and or a compliment (keep up the good work) in order to acknowledge that all efforts of learning and retaining information were met and deserving of praise.

Another theme that emerged was classroom management practices that insured compliance and quality. Larrivee (2005) noted that classroom management is important to the mix of effective teaching strategies, which includes meaningful content, powerful teaching strategies, and an organizational structure to support productive learning. Effective classroom management involves the use of many essential teaching processes as well as the ability to respond appropriately to the emotional, social, ethnic, cultural, and cognitive needs of students (Brown, 2004). Leaders posited that the management practices used in the classroom dictated how the class was structured, how situations were handled, and how student social and emotional characteristics vastly affected student outcomes. Research suggests that certain structures, such as the design of tasks and learning activities, evaluation practices and use of rewards, and distribution of authority or responsibility impact motivation, especially how students view their ability and the degree to which ability becomes an evaluative dimension of the classroom (Ames, 1992).

I conducted six face-to-face interviews at the host agency. The questions focused on a typical SI session, teaching and learning strategies, challenges, and learning experiences. The questions were broad enough to allow the participants latitude to construct an answer of substance. The interview participants consisted of two male and four female participants. The interview participants varied in terms of race and ethnic identities, and included three Black/African Americans, two Hispanics, and one White/Caucasian. Two were between the ages of 35-40, one was between the ages of 30-34, and three were between the ages of 41-45. Four participants had more than 15 years of work experience. Two had 10 to 14 years of work experience. Commonalities in perceptions between leaders, between students, and among both types of interview participants provided important information on the program elements which are perceived to be most helpful to nontraditional developmental students in a supplemental instruction program.

### **Interviews with Program Leaders**

The backgrounds of the program leaders were varied, yet their personal characteristics were remarkably similar. SI program director had 17 years of experience in higher education administration as of the interview date. Additionally, the program director indicated that he attended a training at the International Center for Supplemental Instruction and modified the program for ECC based on the college's needs, the program features and the student population. The SI leader was an English tutor for the Learning Center for six years prior to becoming a supplemental instructor, and it was this leader's first-ever encounter in helping other students with their coursework.



Interviews with the SI program leaders helped to gauge their knowledge of student development and to detail particular elements of the program or decisions on program operations about which student participants felt most strongly. The professional backgrounds of the program director and SI leader speak to their effectiveness to adequately prepare and offer SI services to the student population. The series of interview questions elicited the leaders' accounts of teaching and learning while working with non-traditional student populations, as well as of their structural decisions in program management.

**Personal characteristics.** The program leaders shared several personal characteristics which seem to have had an impact on the program's style and implementation. Overall, the program leaders exhibited a "take charge" attitude as well as an unshakeable belief in the students' ultimate success. Leaders shared that controlling all aspects of the environment provided students with comfort in knowing that their learning environment is one of belonging, empowerment, and support.

For example, the SI program director described how she has "established a reputation as 'the person who gets things done.' The teams that I lead and the staff I supervise all know that together, we have to produce results that make a difference to our students and the entire college community. As the Director of the Learning Center, we recognized the need to assist students in need of additional assistance."

The leaders also exhibited a strong belief in the students' aptitude for success once the proper supports were in place. The Program Director also stated, "With this student population, I believe that they needed an extra push, a little more hand holding and definitely more time on task."

These characteristics also seem to have affected the participants' perceptions in several ways. Research revealed that attitudes toward learning, and the perceptions and beliefs that determine them may have a profound influence on learning behavior (Bandura & Schunk, 1981; Bernat & Gvozdenko, 2005). Leaders experienced these student learning curves as they balanced multiple demands and roles at work, school, and in their personal lives. Going back to school for them was another role that required coping mediators to address areas of academic deficiency.

**Purposeful actions.** Leaders were proud of their accomplishments in providing extra help and opportunities for reinforcement, and they believed in truly being available and accessible. Providing extra help, both required and optional, at a convenient time and place was also noted as a strong belief of program leaders. Positive reinforcement was provided as a vehicle for motivation and encouragement so that the students' social and emotional wellbeing was aroused by challenging situations. Additionally, availability of the instructor encouraged pro-social and cooperative behaviors to establish a warm and supportive relationship in the learning environment. These instructional supports were significant factors that affected the student's level of engagement in learning and quality of learning. Accordingly, these instructional strategies assessed and evaluated the students' success.

For example, the SI program director stated:

“The SI Leader role at ECC sat in the Math and English classes to listen to the lecture and assist students as needed. After the class the SI Leader and the students would attend a mandatory, Scheduled tutoring hour. The SI leader would then go over concepts that the students did not understand

that needed additional reinforcement. The SI Leaders also worked in the Learning Center and were available for additional tutoring hours.”

This belief about structure and reinforcement is a central construct which students also later mention as invaluable. The program director also shared, “Tutoring, peer instruction, mentoring, and an academic role modeling. These activities are the basis of our program at ECC.” Leaders strongly felt their roles and responsibilities as role models and mentors, as well as aligning their efforts to the needs of the students.

The SI leader was posed similar questions as the program director, but was asked to “Describe themselves, background, and path to becoming an SI leader for developmental English?” The SI leader shared:

“As a tutor, I helped students perfect their grammar and their class essays. I reviewed their essays and guided them as they improved their writing skills. As a SI, I attended the class alongside the students. I aided students who requested help. I also helped the teacher grade papers and exams. It was my duty to make sure that the students were clear on all subject matters that were discussed in class but that the teacher may not have had enough time to go over in detail. I served as a mentor for students to help smooth their transition into college level courses.”

Similarities between the leaders in the timeliness of their services and the feelings of being right alongside students as they struggled were important components of all of the leaders’ strategies and philosophies.

**Providing a structured environment for students.** Program leaders also indicated that a structured environment was a key to nontraditional developmental

students' success. Research suggests that there are five key ingredients impacting student motivation: student, instructor, content, method/process, and environment. For example, the student must have access, ability, interest, and value education. The instructor must be well trained, must focus and monitor the educational process, be dedicated and responsive to his or her students, and be inspirational. The content must be accurate, timely, stimulating, and pertinent to the student's current and future needs. The method or process must be inventive, encouraging, interesting, beneficial, and provide tools that can be applied to the student's real life. The environment needs to be accessible, safe, positive, personalized as much as possible, and empowering. Motivation is optimized when students are exposed to a large number of these motivating experiences and variables on a regular basis. That is, students ideally should have many sources of motivation in their learning experience in each class. (Debnath, 2005; D'Souza & Maheshwari, 2010; Palmer, 2007). Thus, leaders posited that structure in the classroom is important to facilitate orderly movement, minimize distractions, reduce the number of disruptions, and disseminate information.

The program director shared: "The additional hour of mandatory tutoring with the SI Leader proved successful in both Math and English courses. The supplemental software packages which accompanied the texts were also a mandatory part of the program which also gave the students more time on task." Again, structure provided by both humans and technology proved to be vital decisions that were continually reinforced for the students as pathways to their success. Students later report similarly valuing these components and the leaders' ongoing efforts toward predictable structures.

The final question asked the program director to, “Think back to the time before you became a program director,” and to explain any changes on their views of teaching. The program director noted that a structured response for developmental students shaped, influenced, or changed their views on teaching and effective teaching practices. The program director explained,

“I know that the program worked and additional time on task for any student is a best practice. I also know that peer tutors/mentors are a very large part of any student’s success. I believe incorporating an SI Leader into any class can have its benefits as long as it is a structured environment. Here at ECC structure is very important because without it it can make or break a student’s academic success.”

This excerpt illustrates why SI Leaders find it important to maintain a structured environment for their students. They realized and understand that the students they serve require additional supports and these supports must be in the form of structure, additional time, mentoring to name a few. Leaders must have authority to clarify roles and responsibilities as well as to outline specific interventions strategies to focus on relevant academic and social needs of the student.

**Management practices and quality improvement.** In response to effective classroom management practices, both students and instructors must behave out of a sense of shared responsibility for a healthy learning environment rather than to avoid punishment or earn rewards (Jennings & Greenberg, 2009). Leaders posited that the management practices used were guided by self-regulating behaviors, both for managing faculty and students, as well as for managing the quality improvement process. The

practices of group work, panel discussions, concentric circles, reaction papers, and role-playing all required a level of self-awareness, awareness of others, and the ability to make responsible decisions to observe, understand, and respond to individual student behaviors. These classroom management efforts were designed to regulate student behavior while integrating positive behavioral supports into the learning process. Managing faculty required setting boundaries and limits to deliver course content with a level of ambiguity and chaos that allowed for thoughtful decision making and reflection. Managing faculty communicates individual and group dynamic awareness that emphasizes the importance of developing and teaching classroom rules and norms that people carry out. Quality improvement infrastructure relates to the ability to modify instruction based on the classroom make-up. Creating a learning infrastructure that integrates social and academic supports activates combined effects of learning and performance orientation on achievement.

The program director was asked, “Did you ever discuss with the SI leader your classroom observations? If so, please explain. The program director indicated, “In terms of observations, I never performed them because my role is primarily administrative. Rather, I had the classroom instructor provide me with feedback on their performance.” The next question asked, “Did you ever provide feedback regarding teaching practices?” The program director replied, “We worked extensively with the Math and English Divisions at the College. I had faculty members provide feedback based on their observations in the classrooms. They also provided additional coaching and mentoring to our CAF Teacher Advisors.” The program director was asked, “Did the SI instructor

solicit feedback from you regarding his/her teaching practices?” The program director shared:

“For the most part, SI instructor reports are from student evaluations. The evaluations outlined whether the instructor was excellent, good, or poor in his or her teaching style. The reports ask if the instructor was diligent and punctual, well-prepared for class meetings, makes clear and well-organized presentation, makes assignments clear and relevant to coursework, shows interest in the subject, fair in grading assignments, encourages students to see him/her during office hours, shows concern for the academic development of students, allows differing viewpoints to be expressed, and use lab time and developed use of software to student needs. We use these characteristics to determine whether are instructors are effective in their roles.”

Again, the management feedback loop between leaders, instructors, and students appears to be an essential aspect of the success of this program as similarly reported by all participants. When things went well, the lessons were well-organized, clear and relevant, and adaptable to student needs and interests. While this may seem obvious to most educators, it is even more important to make explicit for nontraditional developmental students, and is especially valued by the adults on both sides of the instructional transaction.

### **Interviews with Student Participants**

Findings from interviews with student participants showed many similarities with those of the program leaders, such as communicating expectations, nontraditional student motivation, and personal maturity. Communication with program leaders about program

expectations provided NTSI students with the internal support and encouragement they may not see outside of the classroom environment. Communicating expectations is important because it references the personal communication between the NTSI students and program leaders to cultivate a friendly and personable relationship beyond the classroom environment.

In addition, the communication practices played an important role in determining nontraditional student motivation. Reflecting in this view, the generational perspective on nontraditional student motivation and classroom dynamics accepts the idea that nontraditional students bring their personal values, attitudes, culture and lifestyle preferences in the class to use as a foundation for learning. Understanding the unique characteristics of these students is highly dependent on the level of maturity through which they acquire, structure, connect, and interpret their life experiences.

**Commonalities among student responses.** Student participants also reported commonalities among themselves, beyond their basic identification as a nontraditional student, as supplemental student, and a community college student. Some of these commonalities were a result of external commitments they shared in addition to their education. These commitments included familial responsibilities, such as caring for children and older family members. Employment routines, such as a career change, working multiple jobs, or losing a job. Extended social commitments, such as religious affiliations, and other financial obligations. These similar personal and environmental challenges are overwhelming life circumstances that do not give appropriate attention to any one of the responsibilities. NTSI students face an ongoing struggle to make their place in the learning community where their personal characteristics are not the norm.



However, this student body’s resilient make-up has driven them to become successful in their educational endeavors regardless of their challenges.

The following table details the codes derived from key concepts in participants’ interview transcripts and researcher notes.

Table 1

*Commonalities among Participant Topics and Resulting Themes.*

<i>Topics Offered by Participant</i>	<i>Which Participants Emphasized Topic</i>	<i>Subsequent Theme Category</i>
Classroom Teaching Practices of Professors / Functional Instruction	1,2,3,4	2
Life Challenges	2,3,4	1
Practical Applications	1,3	2
Connections with Other Students	1,2,3,4	2
Program Features and Communication Structures	2,3,4	2
Overall Learning Conditions	1, 2, 4	2
Financial Challenges or Supports	1,3,4	2

The key concepts that helped to generate the above topics evolved from overarching categories that were dissected to highlight patterned behaviors that shaped the cultural context. The theme “Classroom Teaching Practices of Professors and Functional Instruction” are the motivational instructional practices that promoted open

channels of communication in order to create an inclusive classroom environment built on shared inquiry and dialogue. The theme “Life Challenges” reflected the different barriers that impeded NTSI students from attending college, such as conflicts with family, employment, debt, among other things. The responsibility that NTSI student’s professed about not being available for their children during class and study times was challenging and warranted acknowledgment. The theme “Practical Applications” mirrors the broad range of effective actions that program leaders took to help students achieve their academic goals. For example, program leaders offered unwavering support to ensure success, improve persistence, and heighten performance when NTSI students were faced with anxiety and task aversion.

The theme “Connecting with Other Students” illustrates how peer-to-peer learning elevated NTSI students social and emotional motivation and engagement. For example, NTSI students were unsure of their abilities and were easily fearful about returning to school. They worried about competing in the classroom with traditional students. They also experienced lower confidence and self-esteem concerning their perceptions of their skills. On the other hand, they gained a level of confidence that supported their educational endeavors when they worked with their peers. Peer-to-peer learning offered NTSI student’s new and alternative viewpoints concerning coursework topics that required problem-solving, discussion or debate. The theme “Program Features and Communication Structures” illustrated the types of applications used to further the classroom agenda. These applications offered guest lectures, group projects, field trips, service learning experiences, and an array of other communication structures that inspired learners to engage in the learning process.

The theme “Overall Learning Conditions” reflect of classroom climate for NTSI students. Overall Learning Conditions speaks to the contribution that teaching and learning must be viewed as behavioral, such as attending class and completing coursework and psychological, such as engaging in the learning process and mastering critical thinking skills. For example, learning conditions directly and indirectly influenced the behavior, emotional, social, and personal academic achievement of the students. Lastly, the theme “Financial Challenges and Supports” suggests that NTSI students opted to pay for their education as much as they could out of their personal income instead of using student loans. Finances was linked to the success of NTSI student’s post-secondary educational endeavors because many of them sought to find alternative options to service their education.

The following excerpts from the data illustrate the topic categories and detail the particular individual responses for each category and theme. Details of the question prompts are included when they seem to have had an influence on the particular terms used by participants in their responses. Interpretations accompany the excerpts as needed to further explain their meanings.

**Participant responses for theme A: Classroom teaching practices of professors / functional instruction.** Students were prompted to identify features of SI that assist them in the learning process. I referenced functional instruction as the activities that are beneficial for student engagement. The participants highlighted group work, instructor support, guest presentations, peer-to-peer learning, forming study groups, training, mentoring, use of movie clips, and tutoring as the activities that are beneficial to their learning. These interrelated responses are synonymous to active learning and they

create an interactive learning environment. Therefore, the SI program administrators must recognize that students need an array of teaching strategies to aid them in developing the basic learning tools to advance in their quest for academic achievement. The secondary category code teaching practices was highlighted as the theme ‘Foundational Instruction.’ Foundational instruction suggests that when students value their membership in a group, their status as members must be affirmed and supported. Thus, service delivery, supportive resources, and opportunities that advance the well-being of students are believed to be important. Foundational instruction is critical to a student’s educational growth since it speaks to the quality rather than the quantity of education.

For example, Jessie stated: “My most memorable, bad learning experience was when the instructor wasn’t able to meet everyone’s needs and they had to group all of us together. To further elaborate, my needs as an individual student. I remember when we were all grouped together and not in terms of learning styles. That made it more difficult for me to learn.”

When asked, how did the negative encounter make her feel? Shawn revealed, “I was happy that the teacher stepped in to support me because she knew that I was hurt.” This was echoed when Jessie revealed, “When the instructor would often find different ways to assist students individually in learning.” Students really seemed to need the instructor to know when to insert himself into the conversation to put students back on track or to identify an error in students’ thinking.

Group work was mentioned yet again as Lindsey shared, “I loved when my teacher would pair us up in groups. I like the group work, but only when it’s two people. When there are more than three people it gets to be too much.” Although participant

reactions to different groups seemed to differ by class, course, and group members involved, this teaching practice definitely resulted in strong reactions from NTSI students.

Jessie imparted, “The instructor really tries to connect with all of the students. Most of the students enjoyed her as an instructor. She was unlike no other instructor that I ever had. She always went above and beyond.” When asked, “Is it the extra practice?” All of the students indicated yes the extra practice is very helpful especially when they have tests to perform. The theme of instructors really trying (and ideally succeeding) to reach the students was a definitely appreciated by this group of students.

The participants were also asked: “How satisfied are you with the course specifically the SI session?” All of the participants were very satisfied with the instruction presented. Jessie and two stated, although it is not a credit bearing it was a very good experience. Lindsey disclosed, “In the beginning I complained, but after a few sessions I was open and receptive to what was being taught.” Shawn stated, “You know, the course was a good course. It was helpful, but I just wish that I could receive credits toward my degree for it. I guess writing the portfolio helped a little, but it wasn’t much” When asked, “Did you feel supported by the SI leader?” All of the participants indicated that they felt supported with the SI leader’s guidance.

When asked, “Were you comfortable asking questions? Why or Why not?” Jessie disclosed, “I always felt comfortable asking questions.” Kendell shared, “The instructor always encouraged us to ask questions. She always made us feel comfortable.” Lindsey shared, “Yes, I felt comfortable because she always presented different opportunities to ask questions. She always would encourage us to email her.” When asked, “Do you

prefer group or individual sessions? Why or Why not?" All of the participants indicated they enjoyed both with the exception of one. Jessie indicated, "I liked the sense of one-to-one because I am extremely introverted both professionally and academically." Again, the idea of meeting multiple needs at once, or at least attempting to address differences in student reactions, was an important aspect of the teachers' classroom practices for their students.

**Participant responses for theme B: Life challenges.** The respondents were asked to describe the barriers that hinder their learning in SI programs. Challenges referenced included caring for a sick loved one, single parenthood, working multiple jobs, finances, stress of returning to school, competing with peers, and lack of confidence. These first cycle codes are acknowledged as the category of 'life circumstances' and the theme 'Conditions and Challenges'. Conditions and challenges are those circumstances by which a student is adversely affected by personal circumstances. Conditional challenges speak to how the students assess their own learning styles when interacting with others. This assessment emphasized how individual attitudes are carried into the classroom and is reflected in the coursework. Assessing one's circumstances can help students create practices to help them to fully engage in their education.

For example, Lindsey shared, "My bad learning experience was when I felt inadequate to keep up with the other students. I felt like everyone in the class was smarter than me." Shawn stated: "I have a husband and three beautiful children that all need me to succeed." Kendell shared, "My most memorable learning experience was when I was in high school. In my high school days, I had teachers who really cared. My teachers

poured positivity into me. They were encouraging and supportive. Those were the good ole days.” Feelings of pride about their experiences, their aptitude, and their likelihood of success were common among these students, and many felt close connections to their high school learning experiences even if they occurred many years ago. Interestingly, students sometimes mentioned high school examples as some of their best and worst experiences even though they were being asked about the community college specifically. This may relate to the strength of their previous memories and to the longer histories which nontraditional students bring to any learning experience.

Naturally, negative examples were plentiful in participants’ answers to these questions. Kendell exclaimed, “Not fully being engaged in the learning experience because I lacked the motivation.” When asked, “Can other people negatively influence your learning?” Shawn indicated, “At this point in my life, no one can influence me.” All of the participants indicated that when they were children they could easily be influenced, but now as adults they cannot. This was an interesting viewpoint, which may also relate to cultural factors, self-identity, or self-motivation aspects of these individuals’ lives.

Students also provided personal issues and ways of thinking or dealing with them as particular hindrances to their learning experiences. For example, Shawn revealed, “If I got a lot of personal stuff in my life I just can’t stay focused.” Lindsey and Shawn suggested that they lost a lot of the proper English and grammar skills over time. Kendell also stated excitedly, “I have not been in school in over 25 years!” which is a common response requesting empathy for the struggles of adults as they enter college for the first time. Not all participants offered details of what they meant by this, but when asked to describe a typical SI session, Shawn stated: “It looks like a lot of work. It’s a lot of stuff

that I had forgotten about. I haven't been in school for about 10 years now. Like they say if you don't use it, you will lose it. And I lost it." Some students were able to provide a well-thought-out reflection or rationale for their circumstances such as this, yet others were still searching for solutions and understandings which could help them be more positive and move forward with their studies.

**Participant responses for theme C: Practical applications.** Additionally, the students were asked to name some educational practices that are useful to their success. The students referenced their instructors' uses of reinforcement, high self-esteem, motivation, accountability, engaging in the process as primary characteristics teaching and learning. The secondary codes referenced practical applications used by students to develop a thriving educational experience. In other words, connection with a student's own life focuses on increasing a student's capacity to assess their learning in their classroom.

For example, Jessie shared, "The best learning experience I had was most recent. I enjoyed taking a class where I was able to apply my personal life to my class work." Jessie also indicated, "The teacher gave me a lot of helpful tips to assist me with using my life as the framework to write. She said if you can't find anything to write about, write about what you know."

About a particular section of SI, Lindsey revealed, "It was a laid back session where the SI instructor felt like they were like us. They understood what we were going through. We were very comfortable with discussing issues that we would have perhaps felt uncomfortable talking about. Like personal stuff. You know, my instructor was just that receptive to what is going on in our community. I also know that when I got stressed



there was always a counselor available to help me talk things out. The staff here was very helpful and I am grateful.”

**Participant responses for theme D: Connections with other students.**

Relationships with other students, both positive and negative, were a feature of these students’ experiences with the SI program. Shawn revealed, “The only negative experiences I had were when I was in high school when a student laughed while I read aloud. That really hurt my feelings. I will never forget it.” When asked about the interaction with other community college classmates, they all shared that the interaction with their peers motivated them to continue on their academic journey and persevere. Most often, these positive influences were their NTSI peers in particular.

The participants were also asked to describe the SI sessions in terms of the class and its leader. Jessie shared, “My overall experience is good because it reinforces what I actually learn in the remedial course. The SI instructor is able to break down the information further compared to when I am in the actual remedial course.” Kendell expressed, “I just have a better relationship with my SI instructor than I do with the rest of the class.” Lindsey shared: “It seems to me that my friends and I rely on each other in the SI sessions than in the other courses because we feel like it’s more informal in the SI session. We can kind of shoot ideas off of one another and it works for us.” Shawn seemed to most clearly capture the climate of the SI program by indicating, “It is less pressure and more laid back than the other classes.”

**Participant responses for theme E: Program features and communication structures.** Several respondents identified and discussed particular program features related to SI and to the communication structures of the SI program. Kendell responded,

“Having my peers mentor me and assist each other in being able to understand the information.” Jessie also stated, “For example, one of my past instructors would bring in guest speakers in order to assist in learning the topic.”

Often, the program features and the teaching techniques were interchangeable in students’ minds, and in their responses. For example, Shawn explained, “When my teacher would have events at different organizations outside of the classroom to support learning.” When further probed, “It’s like we would have events at different companies and we are able to use that experience in connection with the assigned work. This was very helpful to me.”

When asked about SI sessions in particular, Lindsey communicated, “I have to regain back all of those skills that I once had, but I am happy once this is over with I can begin taking regular classes. I know it will be beneficial to me, but right now I feel it is a waste of time.” A feeling of knowing that supplemental instruction is necessary for them, but also anticipation and periodic discouragement were present for many of these developmental students. Yet they still seemed to be optimistic overall.

All of the participants were asked: “Are there any specific characteristics of the SI session that enhance your learning?” All of the student participants indicated yes. When probed, they revealed that some of the characteristics ranged from proper note taking, using critical thinking, discussing courses, proper ways to study for exams, and writing outlines. The student participants were also asked, “How was their learning in SI enhanced?” The student participants shared that forming study groups, test taking strategies and additional tutoring after class helped them tremendously.

In response to “How was their learning in SI enhanced?” the student participants shared that forming study groups, test taking strategies and additional tutoring after class helped them tremendously. When asked, “How was the interaction with the SI leader?” All of the participants stated that their interaction with the SI leader was encouraging because she demonstrated real compassion toward teaching.

Jessie and two stated they could not think of any particular session that they remember didn’t feel like it contributed to a good learning experience. Lindsey imparted, “Well it wasn’t that many. For the most part, we had very informative classes. Only a few were crappy.” Shawn expressed, “Yes, I can name a few but I chose not to.” Student participants seemed to be defensive about the positive aspects of the program, and were reluctant to discuss the few negative encounters they remembered.

Kendell shared, “One of the things that has been helping me is relying on other students. We have study groups. We meet up once a week and we have study sessions.” Lindsey indicated, “The idea of the SI session itself is a study session. That’s another great way to study.” Shawn revealed, “I am able to go the instructor office and having one-on-one sessions. My instructor has been very helpful in getting me different strategies in how to study.”

When asked, “Are you using what you are doing outside of the SI session?” Jessie stated, “Yes, of course. Because those same study strategies and skills are applicable outside of the SI sessions because I have to use them in my other classes.” Kendell imparted, “The skills learned have given me a sense of accountability because it forces me to studying for all of my classes. Lindsey shared, “Yes, it motivated me and I felt empowered because the skills helped me to study for both exams and the courses taught.”

Shawn expressed, “Yes, the study strategies helped me because in one of my classes there was a student who was struggling and I taught them how to effectively study for a test.”

Jessie stated, “My relationship with the SI leader and group was good. The overall class was informative and informal because it was not an actual formal class session. Like just sitting in rows and the teacher lecturing to us and writing everything on the board was a little boring.” Kendell communicated, “I like the way the instructor structured the class. Each day we would discuss strategies for how to best position papers when typing and writing. This was very helpful for me. Also she assigned us a day for mandatory tutoring.”

Shawn stated: “The overall experience was fun because the actual work was done in the SI session. A lot of the material was covered during that time. It was structured time.” When asked, “How did the leader make you feel?” All of the participants stated they felt like SI leader was their biggest supporter and dedicated her time and talent so that all of her students achieve their academic goals.

**Participant responses for theme F: Overall learning conditions.** When asked, “How was the learning enhanced?” All of the participants shared they had a strong support system to guide them through achieving their academic goals. This is not surprising, given their motivation to return to college later in life.

When asked, “Are there any specific characteristics that you feel detract from your learning?” Jessie shared, “If the subject is boring, the teacher can forget it. I will not be engaged in the class.” Kendell and three shared similar responses, “If the teacher is boring I will not be motivated or engaged to work.” A combination of subject and

teacher practices seemed to both enhance and detract from their learning, as is likely the case with most students.

The participants were asked, “Why are you attending SI? All of the student participants indicated they are attending SI because they scored low on their English placement test. Lindsey and four further elaborated suggesting that they lost a lot of the proper English and grammar skills. Again, perhaps this information is obvious.

The participants were asked, “Are there any specific characteristics that you feel detract from your learning?” All of the participants shared that the interaction with their classmates was challenging especially when there are immature students in the class. Jessie communicated, “Sometimes it’s hard to get focused because those high school kids did not respect the instructor.” All of the student participants also revealed that when fellow students would come to class late, talk on the phone during class, and be disruptive. Kendell disclosed, “My experience has been up and down. Sometimes class was engaging, other times it was pure hell. I don’t understand if they (traditional students) don’t want to be in school why do they come.”

Shawn revealed, “Yes, I personally have but I have no problem with putting them (traditional students) in check, especially when they act like they have no home training. I come to school to learn, not play around.” Similarly, but not clearly an example from the same course, Lindsey indicated, “It was only when these three particular students who come to the class and disrupts it. It takes the teachers a minute to get control of the class again.”

When asked, “Were there any session that you thought was a waste of time?” Lindsey shared, “I remember when we had a substitute. Our regular instructor was not in.

People were doing what they want and would not listen. Especially the younger students, they were very disrespectful.” Shawn exclaimed:

“Yes, we had a fill-in on a particular day and she had no idea in what she was doing. I could not understand why the college chose to send us a new instructor. The class was out of control. I had to leave. You know, the school provides counselors for us, so I went to the counselor to express how I felt about how the session was going. I was happy to have someone to go to just take a break from everything.”

In general, the more effective the teacher, the better the learning; likewise, the less structure or targeted instruction, the weaker the learning, at least in the eyes of these particular students. The nature of the classroom interaction appears to be very important to the learners, although they report being very self-motivated and self-directed at times.

**Participant responses to theme G: Financial challenges or supports.** Not many details were provided about the students’ financial challenges or supports in being nontraditional students or particularly related to being developmental students. Lindsey indicated, “The best and most memorable learning experience was making the decision to go back to school. I was offered a promotion and I realized that I cannot get it if I do not pursue a degree. So, I am here.”

All participants shared that their learning is very important to them because their families benefit from their success. Shawn stated: “We are trying to move out of the state and I need my degree to enroll into nursing school.” Similarly, Kendell stated, “I know if I want to get a raise at my job, I have to get a degree.” Jessie also shared, “I got my

G.E.D. last year and really needed to get back into school. I am a single parent and just had my third kid. Working at Taco Bell is not enough. I need more.”

All of the participants shared that they felt a sense of camaraderie because they all had similar aspirations to graduate and pursue lucrative careers after graduation. None mentioned the ability of the college to help with financial aid, nor any assistance from grants, their parents, or families. It appears that the expense and hardship of college is worth the ultimate goal they intend to realize.

### **Summary of Student Responses**

Several of the interview questions were developed to elicit the thoughts of the participants so as to illustrate their intellectual development, their learning background, and any generational experiences relevant to their perception of teaching and learning. These student narratives were reflective of their lived experiences. Highlighting these experiences offers insight into whether SI impacts student learning. The participants shared their thoughts about what they considered as positive and negative learning experiences. They identified one or more experiences that either enhanced their learning or detracted from it. The student participants were extremely vocal about learning strategies such as group work, interactive discussions, and application of experiences. These opportunities offered the participants to share in personal and interpersonal experiences to aid in their educational, psychological and social growth. In addition, they shared their educational experiences that distracted them from actively participating in the learning process. Consequently, these experiences formed their perceptions of the education they were receiving, and the formal educational process in general.

## **Alignment of Leader and Student Responses**

The interview data from the program leaders and the NTSI students revealed that their overall perceptions were remarkably similar. Positivity among students about the overall experience in college was observed. Program leaders and student interaction inside and outside of the classroom had a profound effect on NTSI student's attitudes. Program leaders altered their classroom communication to meet all their students' needs. These small changes led to differences in NTSI student expectations and motivation to learn. Program leader's responsiveness accounted for NTSI student empowerment levels and increased levels of motivation.

For example, the SI leader was asked, "Describe the most important learning experiences you facilitated in SI sessions? Please explain." She communicated:

"Students respond best to a friendly face and a helping hand. Therefore, I would always make sure to be as pleasant and helpful with the students so that they felt comfortable coming to me for help. If I did not provide a comfortable environment they would not feel free to open up and seek the help they needed. Lots of encouragement on a daily basis was all I needed to help them succeed. They needed to know that they were capable of succeeding and moving on to the next developmental or college level with confidence."

The participant's narratives outlined their experiences and the effectiveness of the SI program. They considered the program as an effective resource to assist them with fulfilling their educational aspirations. SI provided one-to-one and group instructional practices that solicited cooperative learning. Moreover, the SI leader aided the



participants in identifying learning strategies that were relevant to their style of learning. These learning tools encouraged the participants to contribute their knowledge while in the SI sessions; whereby, inspiring others to do the same. When the participants felt connected to the teaching and learning process they were more apt to embrace the formalized training. In many examples like this, the leaders' perceptions and the students' perceptions were aligned.

Problems and challenges of program administration were also perceptions which aligned between leaders and students. This alignment of problems and challenges ranged from a generational gap filled with societal changes that shaped the ideas and perceptions of NTSI student body. NTSI students highlighted their maturity level in relation to the traditional student, their sense of belonging, feelings of inadequacy, and poor self-image. These problems and challenges helped to shape their academic expectations and experiences. NTSI students lacked the cultural and social capacity to make full use of academic and social learning environment because of the perceived threat traditional students brought into the classroom. For that reason, they were active in handling those perceived threats to their learning by planning solutions to remedy the problem to focus more on their achievement.

For example, claims from students about other disruptive students were similar to the position taken on the matter by the SI instructor. When the SI leader was asked, "Are there specific circumstances that you feel have negatively impacted students' learning experience in the SI session? Please explain." She revealed:

"The only thing that might have taken away from the student's learning would be disruptive students. These students' bad behavior seemed to

influence others to do the same. Getting the whole class back on track was a challenge but it certainly was doable.”

The student participant’s narratives delineated the challenges they encountered with their peers while participating in SI. Research suggests traditional and non-traditional students encounter several barriers that affect their learning. The students addressed a number of commonly identified barriers that ranged from, age, enrollment status, and social involvement (Grabowski, Beaudoin, & Koszalka, 2016). The students were candid in their responses relating to engagement with their peers. NTSI students were more motivated and had the intellectual stamina to manage their academic responsibilities. Enrollment was also a factor for non-traditional students. Unlike their traditional counterparts, NTSI students expressed that the demands of family, employment, and finances was a struggle to fully engage in the learning process. Also, it was more difficult for NTSI students to build and maintain relationships with their instructors and peers because they spent less time on campus.

And lastly, convergence was clearly seen in the types of teaching and learning activities perceived to be most helpful to NTSI students. As NTSI students engaged with the classroom structure, they were more receptive to learning. The classroom structure provided NTSI students with learning activities that created an active learning environment. NTSI students engaged in brainstorming to problem solve and find the best possible solutions to a problem. Discussions were held to create formal conversations on a given topic. Debates were conducted as a verbal activity so students are able to offer differing viewpoints. Journaling activities allowed NTSI students keep a written record of their intellectual and emotional reactions to assignments and material on a regular basis.

Lectures were conducted to convey materials verbally or using visual aids. Peer exchanges allowed the students to exchange their work to engage them more about the materials discussed. Tests and quizzes determined the level of the NTSI student understanding of the work imparted. Web searches were assigned about differing topics to reinforce source validity of course work assigned, and a myriad of other learning activities to motivate NTSI student learning.

For example, the SI leader was asked, “What are specific teaching and learning strategies that you implement in the SI sessions for the developmental students?” The reply was:

“The job of the SI is to reinforce what the professor already taught in class. Therefore, I would try and implement mastery learning strategies so that the students felt fully comfortable when doing their tests or essays because we had reviewed and practiced the lesson several times. I would also seek feedback from the students to ensure they were grasping what was being taught.”

The participants were asked, “What kind of study strategies are you learning in SI?” Jessie communicated:

“My professor was very helpful allowing to record notes because I am a horrible note taker. By me having the recorder by my side it allows me to repeat the concepts over and over to get it. I used it as a frame of reference in moving forward with the class. We also created portfolios to show us how we can transfer our personal skills to professional skills. That was really helpful.”

The many examples of positive learning experiences, and the interconnected aspects of learning course material and learning how to be a productive college student and professional were provided from the student interviews, and nearly perfectly reiterated by the program leaders. While these details may be unique to the individuals involved, or the college itself, the importance of checking perceptions of all constituents is clearly a benefit to any program review.

### **Identification of Final Themes**

Using the emergent coding process, two themes emerged from the participants' experiences with supplemental instruction at the community college level. Fittingly, examining the themes with the existing research helped to substantiate the data, and to determine if the identified themes were linked to the topic. The interview data sources used for this study were coded first by keyword, then by category, and then finally merged into main themes. In this study, it was critical to obtain pattern recognition in the frequency of the participant's responses in order to describe and interpret their answers. Sandelowski (2001) asserted that quantifying qualitative data is important in the data analysis process to generate meaning, confirm, and test interpretations. Quantifying requires converting qualitative data into quantitative data by tallying qualitative codes or themes found in text data. After reading through all of the data, I looked for common answers that used similar words or expressed similar ideas so as to formulate categories and convert them into themes.

A code map was crafted to highlight the codes that materialized during the first iteration of data inquiry. The codes were then categorized in the second iteration. During the third review of coding themes emerged. I examined the themes with the existing

research to authenticate the data, and to conclude if they were linked to the research questions. In doing this, I discovered a number of repeated phrases and statements that were relevant to the study and are highlighted in Figure 1 below.

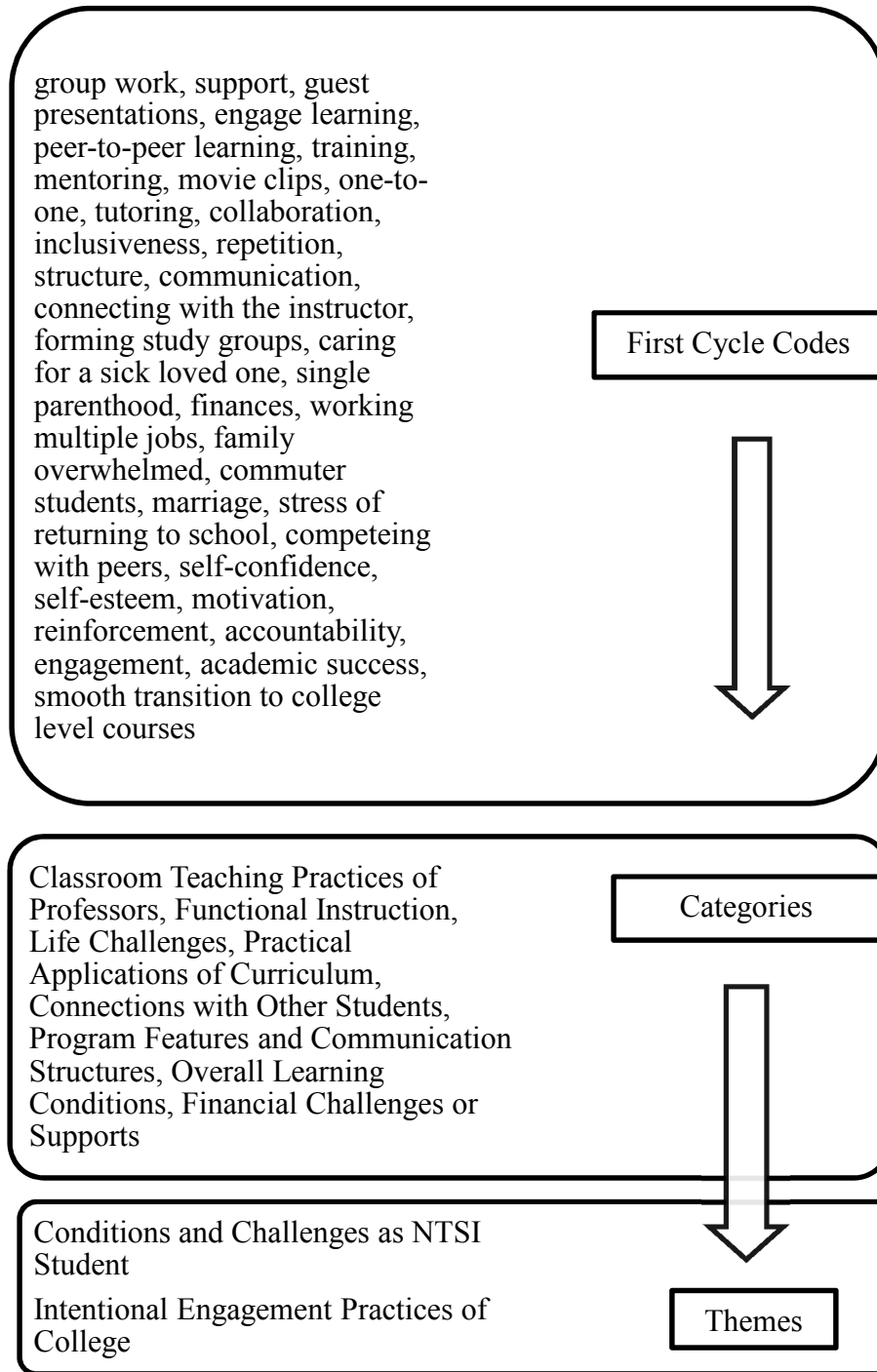


Figure 1. Participants' Responses as First Cycle Codes, Categories, and Themes.

This segment is dedicated to the raw data of specific responses and observations delivered in narrative form by theme related to each of the research questions. Primary coding of data included all interviews and journal writings, organized into sets and structurally coded using annotations and a variety of inquiries to label sections and phrases. Thirty-three primary codes were used: Group Work, Support, Guest Presentations, Engage Learning, Peer-to-Peer Learning, Training, Mentoring, Movie Clips, One-to-One Tutoring, Collaboration, Inclusiveness, Repetition, Structure, Communication, Connecting with the Instructor, Forming Study Groups, Caring for a Sick Loved One, Single Parenthood, Finances, Working Multiple Jobs, Family Overwhelmed, Commuter Student, Marriage, Stress of Returning to School, Competing with Peers, Self-Confidence, Self-Esteem, Motivation, Reinforcement, Accountability, Engagement, Academic Success, Smooth Transition to College Level Courses. For the second level of the coding process, the first round of items labeled above were sorted into patterns that created eight main themes in the data. These themes include: Classroom Teaching Practices of Professors, Functional Instruction, Life Challenges, Practical Applications of Curriculum, Connections with Other Students, Program Features and Communication Structures, Overall Learning Conditions, Financial Challenges or Supports. The third level of coding triangulated the results of the first two levels of coding against the raw data collected. Two main themes were determined while analyzing the data. These themes include: Conditions and Challenges as NTSI Student and Intentional Engagement Practices of College. These themes are the most important to consider for any community college or college which serves NTSI students because they

are reflective of NTSI students satisfaction, quality of academic advising, retention, and attrition.

**Theme 1: Conditions and challenges as NTSI students.** Conditional challenges are unique conditions of each participant, and while the community college may not have been the cause of the conditions, understanding of the characteristics and needs of nontraditional students could greatly assist program administrators to evaluate nontraditional students accordingly and develop academic programs and services to help them overcome stressors associated with their challenges (AACC, 2011; Cushman, 2006, Jinkens, 2009). The most common conditional challenges for nontraditional students were family, employment, and time conflicts (AACC, 2011).

In this study, the participants were candid in their responses concerning internal and external challenges reflective of their personal lives. They gave examples of caring for loved ones, demands on the job, weak study skills, and low self-confidence to complete academic studies. The participants spoke about being single parents, revealed how they had family responsibilities that placed precedence over their education. They shared they were all employed and that their work roles were important for income to raise their families. Thus, this lack of confidence, strong family obligations, and financial stress were determining factors concerning whether they will finish their academic studies. Research suggested that nontraditional students have strong determination and motivation to resolve potential barriers that may impede on their college education (Chao & Good, 2004; Kasworm, 2008). These barriers were evidenced when they gave accounts of the emotional challenges drawn from the lack of cohesion and camaraderie working with disruptive students.



These challenges were very important to acknowledge because they spoke to the students' life circumstances and personal characteristics that are life changing. Family, marital status, and occupation were crucial elements to these student's academic success. Participant's roles contributed to either helping or hindering their path to learning. Participants shared how they lacked the confidence to achieve their educational goals because they found it difficult to balance a school and work load. For example, one participant indicated that maintaining classes and a family was difficult, but all she needed was the support from her husband and three children to keep her focused. Another participant spoke specifically about a supportive campus environment. She indicated, "that if it wasn't for the flexibility of the instructor, I don't think that I would have ever gotten out of this class." Participant accounts are directly related to academic support they need to meet their educational obligations. The conditions and challenges of being a nontraditional student is noted as a natural progression connected to a set of circumstances that needs occasional balancing.

**Theme 2: Intentional engagement practices of college.** Intentional engagement practices are the practices of the instructors, practical applications of the curriculum, connections with other students, and program features and communication structures that help to engage students in the learning process. Intentional engagement practices were highlighted as a theme because they are a reflection to how the instructor engages students in their learning. Research cites that students view formal academic assessments as threatening experiences more anxiety (Conroy & Elliot, 2004) and use adverse study strategies such as memorizing content when studying for exams (McGregor & Elliott, 2002). The experience was evidenced when the participants shared how they did not

measure up to the traditional undergraduate students. Research stated that nontraditional students often participate in higher education to enhance job skills, retain their professional positions, or learn new skills to prepare for career changes.

Participants shared that the informal classroom arrangement was flexible and made comfortable for the entire class. One participant highlighted that the design of the SI program offered her much needed support, especially when it came to the instructor providing the class with using life experience as an academic resource. Another student reflected on the peer-to-peer learning concept. The student found that this form of learning was beneficial because it helped him to increase his confidence which allowed him to gain another perspective in learning. In this study, intentional engagement practices are reflective of those active learning process that allow students to gain a higher level of thinking outside of the norm. Traditional teaching may be ineffective if all-round sensory stimulation is not used (Long, 2014). Nontraditional students, those adults participating in supplemental instruction, must be supported as they learn. Therefore, there must be an array of teaching and learning tools such as peer-to-peer learning, tutoring, use of media, presentations, or guest lecturers to stimulate student senses for engagement.

An integral component of any educational program is the support services available to the students (Scheer & Lockee, 2003). Sheer and Lockee's research concluded that certain student support services should be offered as adult students participated in learning. In addition, the researchers conducted a needs assessment to determine whether learners desired access to wellness resources. The study participants, all nontraditional students, overwhelmingly indicated a need for access to wellness

resources that would assist them in balancing academics with all other aspects of their lives. Participants underscored the importance of understanding their roles in the classroom value their higher education experiences. Therefore, the intentional engagement practices used by the instructor must reinforce the foundational skills of writing, oral communication, critical thinking, reasoning, and information literacy, so that nontraditional students are likely to approach the classroom with a clear purpose while valuing the relationships they create with faculty and peers (Donaldson, 1999).

### **Perceptions about Program Improvement**

When asked, “Would you recommend SI supported classes to others? Why or Why not? Jessie stated, “Yes, I would recommend it because motivated me to do well, why wouldn’t do the same for others.” Kendell stated:

“I would recommend it because it might be able to help other student’s that has been out of school for a number of years to regain the learning skills that are applied both in and out of the class room. Also, the program offers free child care. I actually brought my daughter to school with me on days that my mother could not babysit for me.”

Lindsey shared, “Yes, I would recommend it because it kind of serves as a refresher for me. Those skills that I lost over the years, it helped me to regain them.” Shawn stated:

“Absolutely not, it is not credit bearing. Although, I understand why these sessions are important, I believe that the college could come up with other options for non-traditional students. For example, if I feel the need to go to tutoring I can just go to the department to get the tutoring. If I am

struggling in my English class I should be able to go to the instructor and ask for assistance.”

When asked, “What suggestions would you make for future SI sessions attendees?” Jessie stated, “I would say just be prepared, it is a long journey but it is worth it.” Kendell communicated, “Begin with the end in mind because initially you may feel like giving up. You feel that the journey is going to be too long if you have to start at the very bottom like this.” Lindsey stated, “Don’t be afraid to establish relationship with the instructor early on because that was what helped me.” Shawn imparted, “If I can do this all over again, I would tell people to take the placement test seriously.”

When asked, “What suggestions would you make for future SI leaders?” Jessie stated, “Nothing, I enjoyed my instructor.” Kendell imparted, “My SI leader may want to recommend that the professor joins her in one of the sessions. Like co-teaching or something.” Lindsey indicated, “I am more of a technology person. I wish my SI leader could have incorporated more visuals in the class structure.” Shawn stated:

“I would suggest that the SI leader encourage the students take more ownership in the session. You know something like where the students can kind of lead the sessions as opposed to the instructor. You know, have some time set out of the schedule for the students to lead part of the session”

The final question posed to the SI leader asked, “Is there anything else about the SI program you would like to share?” She responded:

“The SI program was an excellent added resource for the students. Not only did it help them to master their assignments but it helped them forge

bonds with someone else besides their professor. A SI denoted mentorship, guidance and a friendly face to turn to when school became too difficult to deal with alone.”

The participant’s narratives explored the learning experiences of the student. Research suggests that enhancing a student’s learning experience provides the opportunity for students to explore, share, process, reflect, and apply what they learned during the experience (Darling-Hammond, 2008). The program must be reevaluated when there are changes in the student population to determine its effectiveness. Therefore, reflecting on student learning experiences helps to gauge the depth and breadth of learning that occurs in SI programs. This evaluation can be influenced and controlled by the SI instructor and program director, as they have the means to bring about change in teaching strategies as necessary.

SI serves many functions in teaching. SI programs can be used for experiential exercises, case studies, or presenting unusual experiences to students (Gosen & Washbush, 2004). SI instructors can introduce a variety of useful learning strategies in order to further assist students in areas where they feel they are lacking. Therefore, the SI instructor must continuously find ways to engage this special population of students. Peer-to-peer learning, group work, and media clips regarded as teaching strategies can be used as a foundation to learning not often addressed through textbooks. In addition, these teaching strategies helps to analyze and integrate the topics normally taught through text, such as power, politics, personality, gender roles, ethics, and organizational context (Mertens, 2014) to coursework. Thus, using various teaching strategies along with

reflective individual and group activities introduces and engages students about unfamiliar course material.

The SI leader stated most clearly the challenges which would be encountered by any program leaders on any college campus:

“Sometimes you have a student who does not have any motivation to do well in his/her class. The most challenging thing is to get the student to see why his/her assignments are valuable not only grade wise but also for life. As a result, this entails going beyond the benefits of the classroom and trying to paint a picture of a life that is better having learned these lessons. Other logistical challenges included making sure all students attended the tutoring sessions. Some students did not see value in tutoring and so they choose not to attend. Talking with the student and making sure he/she understood that tutoring was crucial to passing the class was a challenge. Thankfully this did not happen very often.”

The participants’ narratives highlighted the teaching and learning strategies that were used to assist them with their educational endeavors. Research suggests that developmental educators must modify their teaching strategies to reintroduce non-traditional students to coursework that requires them to explore different strategies to examine and include information (Kenner & Weinerman, 2011) that is relative to their personal experiences. Thus, the students embraced their learning because their instructor was instrumental in creating alternative methods of instruction that piqued their interest by encouraging them to use life experience as the vehicle to complete coursework. Group work and peer-to-peer learning allowed the students to develop their own voice and reinforce the learning. Also, developing a portfolio based on prior work and life

experiences was essential to the learning process. Therefore, these informal strategies were collaborative approaches to effective teaching and learning.

This section highlighted the central findings that emerged in this study. The interview reports offered insight into the experiences of the participants' perceptions of the SI program through descriptions of three major areas of interest: foundational instruction, conditional challenges, and intentional engagement. The data revealed a body of evidence evoking thought provoking dialogue between the programs administrators and their targeted population. In reviewing the data the past practices, traditions, and norms of the SI program were examined and assessed to determine what measures were used to support diverse student populations.

## **Chapter V**

### **Discussion**

The purpose of this qualitative study was to examine the perceptions of nontraditional developmental students on the fidelity of a SI program in a community college setting. For the purpose of this study, four nontraditional developmental students, one SI instructor and one program director were the targeted population. Research suggests that the practice of SI programs empowers students to take responsibility of their learning, reflect on what they have learned and create goals for themselves (De Volder, De Grave, & Gijsselaers, 1985; Grow, 1991). As a result, this study assessed the integrity of an SI program in order to examine how the targeted population experiences teaching and learning and how those experiences influence social interaction and personal development in the classroom. When students are confident in their capabilities to perform at maximum levels, it yields positive personal growth (Braxton, Milem, & Sullivan, 2000). Therefore, it was important to understand the dynamics of this teaching and learning strategy because it encouraged student engagement, development, and collaboration.

Knowles' Andragogy and McClusky's Theory of Margin were the lenses used to implement this study. Within this context, Knowles Andragogy guided the change process to ensure that the respondents critically examined their personal values when executing their educational responsibilities. To do this, the participants carefully reflected on their personal, professional and educational obligations that were essential to their well-being. Knowles assumes that as adults mature they are responsible for their



decisions. As a result, it is important for the non-traditional student to be a part of the change process in order to reshape the way learning occurs in developmental education.

McClusky's Theory of Margin was the other lens highlighted that captured adulthood as a time when individuals seek to grow and evolve. This theory assumes that as adult's age they are faced by increasing internal and external power that influences life's demands. For example, parenthood, employment, caring for a sick parent, exercise, and healthy nutrition can all affect the outcome of student development. Consequently, participation in developmental education is costly because the students who are required to take developmental classes accumulate debt, forfeit financial aid eligibility, and lengthen the time required to complete a degree. All of which impact internal and external power influences.

### **Conditions and Challenges**

The theme of conditions and challenges found through the current study supports those of prior research and may help to extend them with additional detail. Research suggests various adult life responsibilities create barriers for non-traditional students. These responsibilities include fulltime employment, family responsibilities and pursuing a degree or certification at the same time. Managing these responsibilities can be very difficult (May & Akin, 1998). Thus, non-traditional students persist because they tend to have more life experience than their counterparts. One of the most consistent underlying assumptions of traditional and non-traditional students was that non-traditional students are more advanced in terms of life experience, maturity, and their commitment to the process. Consequently, they were still lumped into the same category of the traditional student. Implicit in this view was the request that SI programs must improve

opportunities for non-traditional learners in order to actively engage in the learning process without negative interaction with their traditional peers. This finding was consistent from all of the non-traditional students. The students expressed that when dealing with immature students they are relegated to disengaging in the learning process because they have to cope with a reluctant learner who does not take their education seriously. Additionally, they shared that social interaction with their traditional peers is marginal since they are not relatable. The research suggests that non-traditional students assume primary responsibility for their own participation in class and are less likely to conform to normative traditional student pressures or engage at all with their peers (Weaver & Qi, 2005).

### **Intentional Engagement**

The second theme of this study detailed perceptions that the participants shared about the reoccurring strategies and methods of instruction used to engage them in learning and deliver information to keep them on task. The intentional engagement strategies used by their college appeared to fit their learning styles. These strategies ranged from peer-to-peer learning, group work, using personal experience as a tool to engage learning, guest presentations, and a supportive instructor to stimulate the instructional process. Research already suggests that when an instructor assist students to develop a deep learning, support surface learning, apply and demonstrate what they are learning, and give immediate feedback to students, they are promoting an interactive learning environment in order to think critically, explore personal attitudes, and reflect on the learning process (Lumkin, Achen & Dodd, 2015). Colleges can continue to address challenges by taking steps to integrate technology, where appropriate, into other activities

and experiences that students have on campus (Cooper, 2010). During the interviews, these characteristics were highlighted as a foundation for student learning and engagement, and confirm those found in the literature to date. The students shared how the instructor created a learning environment supportive of their learning styles and gave them the resources needed to academically excel.

This study required support from the SI leader for successful execution. Backing from the SI program director, SI leader, and the four participants brought into the learning environment experiences that were critical foundations for student success or hindrances in the academic community. The participants shared the supplemental instructional program promoted accountability, developed their self-confidence, and motivated them academically. Reinforcement of programs goals and instructor accessibility was needed from the SI program director and SI leader in order to support the program's efforts. Research suggests that today's learners want to connect and communicate with their instructors. They want to build stronger relationships with their instructors in order to know them as people. They want their instructors to know how they learn, and take into account what they do and do not know to use as a guide for continued learning. Students want educators to create learning environments that create collaborative relationships and promote a strong culture of learning (Parsons & Taylor, 2011). Thus, the SI instructor's interview illustrated that the vision was clear and the direction of the program was one of inclusiveness and supportive practice regardless of a student's non-traditional, adult learning status.

## **Implications for the Future**

The results of this qualitative study have several implications for policy, practice, and research that are directly applicable to improving supplemental instruction in a community college setting. These implications are a valuable resource for community colleges across the country because community colleges will benefit from the exchange of ideas and experiences that nontraditional adult learners will share. In addition, the findings will help to support current policy and to lobby for adequate funding for supplemental instruction programs. Nontraditional developmental learners will benefit from this study since they are able to demonstrate increased self-sufficiency, confidence and course knowledge compared to those students not participating in SI (Lechuga, 2011). Additionally, the research suggests that while participating in SI the students can earn higher test grades, course grades and persist more often than their non-participating SI counterparts (Arendale, 1994). Accordingly, these inferences will be treated as a baseline to improve policy, practice, and research concerning nontraditional students in New Jersey community colleges.

Taxpayers spend approximately \$1 billion a year on developmental classes and because the taxpayers are already funding K-12 education, the research suggests that taxpayers pay for the same student to be educated on the same material twice, once in high school and again at the college level (Cloud, 1988). The policy measures that may evolve as a result of this study will be intended to meet the diverse needs of nontraditional developmental students. Future policy provisions may include developing and implementing a program for nontraditional adult learners that will allow them to use their professional experience as educational credit toward or in lieu of developmental

education classes since these courses can become costly to the student, as well as to taxpayers.

This study also has implications that impact nontraditional student success. Students who fail developmental courses do not go on to take any credit courses. Because of pre-requisites assigned to many of the courses, these same students are prohibited from taking other courses in other fields. The successful completion of developmental courses is a mandatory pre-requisite for admission into several education programs and transfer into a four-year college or university (Shults, 2000). Therefore, a student's failure to successfully pass developmental courses limits educational options of the student's.

Research written about SI programs is vast. However, there is very little research conducted on nontraditional developmental students in conjunction with SI programs. As a result, these findings will be used to obtain aggregate data that will enhance community efforts in order to provide nontraditional developmental students with increased confidence to carry out their roles as adult learners. While the literature provides a great deal of information on SI programs and nontraditional students, there is still a need for a more accurate description from the perspective of the students'.

## **Conclusion**

The literature supports that colleges can benefit from using multiple teaching methods in their classrooms to bridge the gap between themselves and their role as a non-traditional student (Endedijk, Brekelmans, Slegers, & Vermunt, 2015). Accordingly, SI instructors must use several teaching methods to stimulate the senses, engage emotions, and make abstract concepts come to life for non-traditional students (Dachner & Polin, 2016). This study has demonstrated how active learning activities elicited intensified

brainpower. The non-traditional students altered how they thought and felt about themselves, the sessions, and the course content. In addition, as they began to share their learning experience, they discovered that there were others who shared similar experiences. The students viewed each other as personal resources when it came to working together on assigned tasks. Moreover, they discovered important connections between the structure of the sessions and the course material imparted. In making the connections, they instinctively approached the course more refined. They learned to tailor the course material to make connections to topics presented in the textbooks. They used course material to reevaluate issues that they faced as single parents, full time employees, care takers, and returning veterans. As a result, they learned to value education as they experienced its significance to their own way of thinking.

## References

- Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology, 84*(3), 261-271.
- Arendale, D. R. (1994). Understanding the supplemental instruction (SI) model. *New Directions for Teaching and Learning, 60*(4), 11-22.
- Atherton, J. (2005). Learning and teaching: Knowles' andragogy. Retrieved from <http://www.dme.ac.uk/~jamesa/learning/knowlesa.htm> on April 22, 2014.
- Bailey, T., Jeong, D. W., & Cho, S. W. (2010). Referral, enrollment, and completion in developmental education sequences in community colleges. *Economics of Education Review, 29*(2), 255-270.
- Bandura, A., & Schunk, D. H. (1981). Cultivating competence, self-efficacy, and intrinsic interest through proximal self-motivation. *Journal of personality and social psychology, 41*(3), 586-598.
- Bauman, S. S. M., Wang, N., DeLeon, C. W., Kafentziz, J., Zavala-Lopez, M., & Lindsey, M. S. (2004). Nontraditional students' service needs and social support resources: A pilot study. *Journal of College Counseling, 7*(1), 13-17.
- Beavers, A. (2009). Teachers as learners: Implications of adult education for professional development. *Journal of College Teaching and Learning, 6*(7), 25-30.
- Bernat, E., & Gvozdenko, I. (2005). Beliefs about language learning: Current knowledge, pedagogical implications and new research directions. *TESL-EJ, 9*(1), 1-21.
- Blanc, R. A., DeBuhr, L. E., & Martin, D. C. (1983). Breaking the attrition cycle: The effects of supplemental instruction on undergraduate performance and attrition. *The Journal of Higher Education 54*(1), 80-90.
- Blondy, L. C. (2007). Evaluation and application of andragogical assumptions to the adult online learning environment. *Journal of Interactive Online Learning, 6*(2), 116-130.
- Braxton, J. M., Milem, J. F., & Sullivan, A. S. (2000). The influence of active learning on the college student departure process: Toward a revision of Tinto's theory. *Journal of Higher Education 71*(5), 569-590.
- Bronstein, S. B. (2007). Supplemental instruction: Supporting persistence in barrier courses. *The Learning Assistance Review, 13*(1), 31-45.
- Brown, G. (2004). *How students learn*. New York: RoutledgeFalmer.

- Castator, M. M., & Tollefson, N. (1996). Underprepared students and the college curriculum: Identifying high-risk courses. *Journal of Applied Research in Community College*, 3(2), 179-200.
- Cervone, D. (2000). Thinking about self-efficacy behavior modification. *Behavior Modification*, 24(1), 30-56.
- Chao, R. & Good, G. E. (2004). Nontraditional students' perspectives on college education: A qualitative study. *Journal of College Counseling*, 7(1), 5-12.
- Cloud, N. (1988). ESL in special education. ERIC Clearinghouse on Languages and Linguistics, Center for Applied Linguistics. Retrieved from <http://www.ericdigests.org/pre-9210/special.htm> on June 11, 2015.
- Cohen, A. M., & Kisker, C. B. (2010). *The shaping of American higher education* (2nd Ed.) San Francisco, CA: Jossey-Bass.
- Conrad, R. M., & Donaldson, J. A. (2004). *Engaging the online learner: Activities and resources for creative instruction*. San Francisco, CA: Jossey-Bass.
- Conroy, D. E., & Elliot, A. J. (2004). Fear of failure and achievement goals in sport: Addressing the issue of the chicken and the egg. *Anxiety, Stress & Coping*, 17(3), 271-285.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.
- Cushman, S., & West, R. (2006). Precursors to college student burnout: Developing a typology of understanding. *Qualitative research reports in communication*, 7(1), 23-31.
- Dachner, A. M., & Polin, B. (2016). A Systematic Approach to Educating the Emerging Adult Learner in Undergraduate Management Courses. *Journal of Management Education*, 40(2), 121-151.
- Day M., & James, J. (1984). Margin and the adult learner. *MPAEA Journal of Adult Education*, 13(1), 1-5.
- Debnath, S. C. (2005). College student motivation: An interdisciplinary approach to an integrated learning systems model. *Journal of Behavioral and Applied Management*, 6(3), 168-188.
- DeVolder, M. L., De Grave, W. S., & Gijsselaers, W. (1985). Peer teaching: Academic achievement of teacher-led versus student-led discussion groups. *Higher Education*, 14(6), 643-650.



- DiTommaso, K. (2012). Developmental students: The challenge of peer relationships. *Community College Journal of Research and Practice*, 36(12), 941-954.
- Donaldson, J. F., & Graham, S. (1999). A model of college outcomes for adults. *Adult Education Quarterly*, 50(1), 24-40.
- Doty, C. (2003). *Supplemental Instruction: National data summary, 1998-2003*. Unpublished manuscript, The University of Missouri-Kansas City, The International Center for Supplemental Instruction. Retrieved June, 22(2004), 98-103.
- D'Souza, K. A., & Maheshwari, S. K. (2010). Factors influencing student performance in the introductory management science course. *Academy of Educational Leadership Journal*, 14(3), 99-119.
- Etter, E. R., Burmeister, S. L., & Elder, R. J. (2000). Improving student performance and retention via supplemental instruction. *Journal of Accounting Education*, 18(4), 355-368.
- Endedijk, M. D., Brekelmans, M., Slegers, P., & Vermunt, J. D. (2016). Measuring students' self-regulated learning in professional education: Bridging the gap between event and aptitude measurements. *Quality & Quantity* 50(5), 2141-2164.
- Evans, N. J., Forney, D. S., Guido, F. M., Patton, L. D., & Renn, K. A. (2009). *Student Development in College: Theory, Research, and Practice* (2nd ed). San Francisco, CA: Jossey-Bass.
- Fidishun, D. (2000, April). Andragogy and technology: Integrating adult learning theory as we teach with technology. In *Proceedings of the 2000 Mid-South Instructional Technology Conference*, Murfreesboro, TN. Retrieved from <http://www.mtsu.edu/~itconf/proceed00/fidishun.htm> on October 23, 2014
- Forrest, S. P., & Peterson, T. O. (2006). It's called andragogy. *Academy of Management Learning & Education*, 5(1), 113-122.
- Fowler, P. R., & Boylan, H. R. (2010). Increasing Student Success and Retention: A Multidimensional Approach. *Journal of Developmental Education*, 34(2), 2-4.
- Gallard, A., Albritton, F., & Morgan, M. W. (2010). A comprehensive cost/benefit model: Developmental student success impact. *Journal of Developmental Education*, 34(1), 10-12.
- Gephart, R. (1997). Hazardous measures: An interpretive textual analysis of quantitative sensemaking during crises. *Journal of Organizational Behavior*, 18(1), 583-622.

- Glesne, C. (2006). *Becoming qualitative researchers*. Boston, MA: Pearson.
- Gosen, J., & Washbush, J. (2004). A review of scholarship on assessing experiential learning effectiveness. *Simulation & Gaming, 35*(2), 270-293.
- Grabowski, B. L., Beaudoin, M., & Koszalka, T. A. (2016). Competencies for designers, instructors, and online learners. In Nick Rushby & Dan Surry, eds., *Wiley Handbook of Learning Technology*, pp. 221-241. Malden, MA: John Wiley & Sons.
- Grow, G. O. (1991). Teaching learners to be self-directed. *Adult Education Quarterly, 41*(3), 125-149.
- Halpin, D. M., Scheer, S. B., & Lockee, B. B. (2003). Supporting distance learners: The IT studio model. *International Journal of Instructional Media, 30*(4), 343-347.
- Harding, M. (2012). Efficacy of supplemental instruction to enhance student success. *Teaching and Learning in Nursing, 7*(1), 27-31.
- Hiemstra, R., & Sisco, B. (1990). *Individualizing instruction*. San Francisco, CA: Jossey-Bass.
- Hudson, L. A., & Ozanne, J. L. (1998). Alternative ways of seeking knowledge in consumer research. *The Journal of Consumer Research, 14*(4), 508-521.
- Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research, 79*(1), 491-525.
- Jinkens, R. C. (2009). Nontraditional students: Who are they? *College Student Journal, 43*(4), 979-987.
- Johnson, M. L. & Nussbaum, E. M. (2012). Achievement goals and coping strategies: Identifying the traditional and nontraditional students who use them. *Journal of College Student Development, 53*(1), 41-54.
- Karabenick, S. A. & Knapp, J. R. (1988). Help seeking and the need for academic assistance. *Journal of Educational Psychology, 80*(3), 406-408.
- Kasworm, C. E., & Marienau, C. A. (2002). Principles for assessment of adult learning. *New Directions for Adult and Continuing Education, 75*, 5-16.

- Kelly, P. J. (2010). *Closing the College Attainment Gap between the U.S. and Most Educated Countries, and the Contributions to Be Made by the States*. National Center for Higher Education Management Systems. Retrieved from <http://files.eric.ed.gov/fulltext/ED512582.pdf> on September 30, 2015.
- Kemmis, S. (1980). The imagination of the case and the invention of the study. In H. Simons (Ed.), *Towards a science of the singular* (pp. 93-142). Norwich, UK: University of East Anglia, Centre for Applied Research in Education.
- Kenner, C., & Weinerman, J. (2011). Adult learning theory: Applications to non-traditional college students. *Journal of College Reading and Learning*, 41(2), 87-96.
- Kenney, P. A. (1989). Effects of supplemental instruction on student performance in a college-level mathematics course. *Dissertation Abstracts International*, 50(02), 378A.
- King, P. M., & Baxter Magolda, M. B. (2011). Student learning. In J. H. Schuh, S. R. Jones, S. R. Harper, & Associates (Eds.), *Student services: A handbook for the profession* (5th ed., pp. 207-225). San Francisco, CA: Jossey-Bass.
- Knorr, K. D. (1981). *The manufacture of knowledge: An essay on constructivist and contextual nature of science*. Oxford, NY: Pergamon Press.
- Knowles, M. (1985). *Andragogy in action*. San Francisco, CA: Jossey Bass.
- Larrivee, B. (2005). *Authentic classroom management: Creating a learning community and building reflective practice*. Boston: Pearson/Allyn and Bacon.
- Laskey, M. L., & Hetzel, C. J. (2011). Investigating Factors Related to Retention of At-Risk College Students. *Learning Assistance Review*, 16(1), 31-43.
- Lechuga, V. M. (2011). Faculty-graduate student mentoring relationships: Mentors' perceived roles and responsibilities. *Higher Education*, 62(6), 757-771.
- Lincoln, Y. S. (1995). Emerging criteria for quality in qualitative and interpretive research. *Qualitative Inquiry*, 1(3), 275-289.
- Long, M. H. (2014). *Second language acquisition and task-based language teaching*. Oxford, UK: John Wiley & Sons.
- Lumpkin, A., Achen, R. M., & Dodd, R. K. (2015). Student perceptions of active learning. *College Student Journal*, 49(1), 121-133.

- Lundberg, M. (1990). Supplemental instruction in chemistry. *Journal of Research in Science Teaching* 27(2), 145-155.
- Luzzo, D. A. (1999). Identifying the career decision-making needs of nontraditional college students. *Journal of Counseling and Development*, 77(2), 135-140.
- Malm, J., Morner, L. L., Bryngfors, L., Edman, G., & Gustafsson, L. (2012). Using supplemental instruction to bridge the transition from secondary to tertiary education. *International Journal of Education*, 4(3), 31-48.
- Manning, K., Kinzie, J., & Schuh, J. (2006). *One size does not fit all. Traditional and innovative models of student affairs practice*. New York, NY: Routledge.
- Martin, J. (2006). Multiple intelligence theory, knowledge identification and trust. *Knowledge Management Research & Practice*, 4(3), 207-215
- May, E. L., & Akin, R. (1998). *The nontraditional student: A neglected resource? Allied Academies International Conference. Academy of Educational Leadership Proceedings*, 3(1), 9-19.
- Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in adulthood: A comprehensive guide* (3rd ed.). San Francisco, CA: Jossey-Bass.
- Mertens, D. M. (2014). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods*. Thousand Oaks, CA: Sage.
- Mullin, C. M. (2011). *The road ahead: A look at trends in the educational attainment of community college students*. AACC Policy Brief 2011-04PBL. American Association of Community Colleges.
- Oblinger, D. (2003). Boomers, Gen-Xers, Millennials: Understanding the new students. *Educause Review*, 500(4), 37-47.
- Palmer, D. (2007). What is the best way to motivate students in science? *Teaching Science: The Journal of the Australian Science Teachers Association*, 53(1), 78-89.
- Parsons, J., & Taylor, L. (2011). Improving student engagement. *Current Issues in Education*, 14(1), 1-33.
- Phelps, J. M., Evans, R. (2006). Supplemental instruction in developmental mathematics. *Community College Enterprise*, 12(1), 21-37.

- Ross-Gordon, J. M. (2011). Research on adult learners: Supporting the needs of a student population that is no longer nontraditional. *Peer Review, 13*(1), 26-29.
- Rowley, J. (2002). Using case studies in research. *Management Research News, 25*(1), 16-27.
- Saldaña, J. (2009). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage.
- Seidman, I. (2006). *Interviewing and qualitative research: A guide for researchers in education and social sciences*. New York, NY: Teachers College Press.
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.
- Stoddart, D., Johnson, M. A., & Change, D. (2013). Navigating the margins: The journey of a cohort of non-traditional students on the path to college. *Adult Education Research Conference*, St. Louis, MO. Retrieved from <http://newprairiepress.org/aerc/2013/papers/47> on November 28, 2016.
- Super, D. E. (1984). Career and life development. In D. Brown, L. Brooks, & Associates (Eds.), *Career choice and development* (pp.192-234). San Fransico, CA: Jossey-Bass.
- United States Department of Education (2012) *Promoting college and career readiness: Bridge programs for low-skills adults*. Retrieved from <http://www2.ed.gov/about/offices/list/ovae/pi/cclo/brief-1-bridge-programs.pdf> on August 9, 2014.
- Van Lanen, R. J., & Lockie, N. M. (1997). Using supplemental instruction to assist nursing students in chemistry. *Journal of College Science Teaching, 26*(6), 419-23.
- Weaver, R. R., & Qi, J. (2005). Classroom organization and participation: College students' perceptions. *The Journal of Higher Education, 76*(5), 570-601.
- Willingham, D. T. (2006). The usefulness of brief instruction in reading comprehension strategies. *American Educator, 30*(4), 39-45.
- Zaritsky, J. S., & Toce, A. (2006). Supplemental instruction at a community college: The four pillars. In M. E. Stone & G. Jacobs (Eds.), *Supplemental instruction: New visions for empowering student learning* (106, pp. 23-31). San Francisco, CA: Jossey-Bass.
- Zerger, S., Clark-Unite, C., & Smith, L. (2006). How supplemental instruction benefits faculty, administration, and institutions. *New Directions for Teaching and Learning, 106*, 63-72.

## **Appendix A**

### **Consent to Take Part in a Research Study**

TITLE OF STUDY: Perceptions of Supplemental Instruction by Non-Traditional Developmental Students in a Community College Setting. Principal Investigator: Michelle Kowalsky, Ed. D., Michael S. Dillard, Doctoral Student

This consent form is part of an informed consent process for a research study and it will provide information that will help you to decide whether you wish to volunteer for this research study. It will help you to understand what the study is about and what will happen in the course of the study.

If you have questions at any time during the research study, you should feel free to ask them and should expect to be given answers that you completely understand. Participation in this study is entirely voluntary

After all of your questions have been answered, if you still wish to take part in the study, you will be asked to sign this informed consent form.

Michelle Kowalsky, Ed.D. or Michael S. Dillard as Principal Investigators will also be asked to sign this informed consent. You will be given a copy of the signed consent form to keep.

You are not giving up any of your legal rights by volunteering for this research study or by signing this consent form.

The purpose of this study is to examine the perceptions of nontraditional students on the fidelity of a SI program in a community college setting. This study is being written as a part of my dissertation requirements for Rowan University, College of Education.

You have been asked to participate in this study because you are a valuable member of the college community your experiences and ideas will help to evaluate what is currently working at Essex County Community College.

This study will take place on a date, time, and at a location that is feasible for you. Interviews will last up to one hour.

If you choose to take part in this research study you will be interviewed and asked to answer a series of questions about current supplemental instructional (SI) practices and to determine if those practices should be further studied to improve student persistence.

The benefits for taking part in this study will add to the body of knowledge currently available concerning SI program in a community college setting. More importantly, the

exchange of ideas and experiences that the participants will share will increase the depth and breadth of the study.

There is no direct personal benefit for taking part in this study. Your participation may help us understand which can benefit you directly, and may help other people to create a platform and have the conversation concerning SI program and student persistence more candidly.

There is no cost to participate in this study. You will not be paid for your participation in this research study.

All efforts will be made to keep your personal information in your research record confidential, but total confidentiality cannot be guaranteed. Your personal information may be given out, if required by law. Presentations and publications to the public and at scientific conferences and meetings will not use your name and other personal information. All signed consent forms, interview transcripts, field notes, analytic memos, tapes, and flash drives will be stored and retained under lock and key in a secured file cabinet and on a password protected computer. In addition, in the published document all participants will be referred to by pseudonyms. Paper records, such as interview transcripts, field notes, and analytic memos will be shredded and burned. Records stored on a computer hard drive, flash drives, and audio recordings will be erased using commercial software applications designed to remove all data from the storage device and physically destroyed. Records will be kept highlighting what records were destroyed, and when and how it was accomplished. All research records will be maintained and disposed of six years after the day of completing this study to uphold the integrity of the research process.

Participation in this study is voluntary. You may choose not to participate or you may change your mind at any time.

If you do not want to enter the study or decide to stop participating, your relationship with the study staff will not change, and you may do so without penalty and without loss of benefits to which you are otherwise entitled.

You may also withdraw your consent for the use of data already collected about you, but you must do this in writing to Michelle Kowalsky, Ed.D. Rowan University, College of Education, 201 Mullica Hill Road, Glassboro, New Jersey, 08028, within two weeks of your interview with research staff.

You have the right to ask questions about any part of the study at any time.

Please read this consent document carefully before you decide to participate in this study.

**AGREEMENT TO PARTICIPATE**

I have read this entire form, or it has been read to me, and I believe that I understand what has been discussed. All of my questions about this form or this study have been answered.

Subject Name: \_\_\_\_\_

Subject Signature: \_\_\_\_\_ Date: \_\_\_\_\_

To the best of my ability, I have explained and discussed the full contents of the study including all of the information contained in this consent form. All questions of the research subject and those of his/her parent or legal guardian have been accurately answered.

Name of Investigator/Person Obtaining Consent: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**FOR NON-ENGLISH SPEAKING SUBJECTS:**

Translation of the consent document (either verbal or written) must have prior approval by the IRB. Contact your local IRB office for assistance.

If you have any questions about this study, please the Principal Investigator, Dr. Michelle Kowalsky, 856-256-4972. If you have any questions about your rights as a research subject, you can call:

Office of Research Compliance  
(856) 256-4078– Glassboro/CMSRU

**YOU WILL BE GIVEN A COPY OF THIS FORM WHETHER OR NOT YOU AGREE TO PARTICIPATE.**

If you agree to participate in this study please sign on the next page. Thank you.

Social and Behavioral IRB Research Agreement

I have read the procedure described above. I voluntarily agree to participate in the procedure and I have received a copy of this description.

Name (Printed) \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Principal Investigator: \_\_\_\_\_

Date: \_\_\_\_\_



## Appendix B

### Informed Consent for Interviews

Please read this consent document carefully before you decide to participate in this study.

You are invited to participate in a research study about the perceptions of nontraditional students on the fidelity of a SI program in a community college setting. This study is being conducted by researchers in the Department of Education at Rowan University.

Participation in this study is voluntary. If you agree to participate in this study, you would be interviewed for about 1 hour.

There is little risk in participating in this study; after the interview, you may have questions about your responses which will be answered immediately by a member of the study team. Your identity will be kept confidential to the extent provided by law. Your information will be assigned a code number that is unique to this study. No one other than the researchers would know whether you participated in the study. Study findings will be presented only in summary form and your name will not be used in any report or publications.

Participating in this study may not benefit you directly, but it will help us learn how nontraditional students experience student learning and how those learning experiences influences social interaction in the classroom. Your participation in this study is completely voluntary. If you choose not to participate in this study, this will have no effect on the services or benefits you are currently receiving. You may skip any questions you don't want to answer and withdraw from the study at any time without consequences.

If you have any questions about this study, please the Principal Investigator, Michelle Kowalsky, 856-256-4500 x. If you have questions about your rights as a research participant, please contact the Rowan University SOM IRB Office at (856) 566-2712 or Rowan University, Chief Research Compliance Officer Glassboro/CMSRU IRB at 856-256-5150.

**YOU WILL BE GIVEN A COPY OF THIS FORM WHETHER OR NOT YOU AGREE TO PARTICIPATE.**

If you agree to participate in this study please sign on the next page. Thank you.

Social and Behavioral IRB Research Agreement

I have read the procedure described above. I voluntarily agree to participate in the procedure and I have received a copy of this description.

Name (Printed) \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Principal Investigator: \_\_\_\_\_ Date: \_\_\_\_\_

## Appendix C

### Audiotape Addendum to Consent Form

You have already agreed to participate in a research study conducted by Michael S. Dillard / Dr. Michelle Kowalsky. We are asking for your permission to allow us to audiotape the interviews as part of that research study. You do not have to agree to be recorded in order to participate in the main part of the study.

The recording(s) will be used for:

- analysis by the research team; and
- member checking (clarifying your responses)

The recording(s) may include information that you provide which can identify you. The recording(s) will be stored and retained under lock and key in a secured file cabinet and labeled with an identifier and on a password protected computer which will not link to your identity.

All recordings will be erased using commercial software applications designed to remove all data from the storage device and physically destroyed. Records will be kept highlighting what records were destroyed, and when and how this was accomplished. In addition, in the published document all participants will be referred to by pseudonyms. All research records will be maintained and disposed of six years after the day of completing this study to uphold the integrity of the research process.

Your signature on this form grants the investigators named above permission to record you as described above during participation in the above-referenced study. The investigators will not use the recording(s) for any other reason than that/those stated in the consent form without your written permission.

Signature \_\_\_\_\_ Date \_\_\_\_\_

## Appendix D

### Interview Protocols

#### Student Interview Protocol

1. Describe an interesting learning experience.

Probe: Tell me about a positive, memorable learning experience.

Probe: How did that experience make you feel?

2. Describe your perception of a bad learning experience.

Probe: Can other people influence your learning negatively?

Probe: How did that experience make you feel?

3. Are there any specific characteristics that enhance your learning?

Probe: Have you experienced any of these characteristics in your SI sessions?

Probe: How was your learning enhanced?

Probe: Is it the interaction with other classmates?

Probe: Is it the interaction with the SI leader?

Probe: Is it the extra practice?

4. Are there any specific characteristics that you feel detract from your learning?

Probe: Is there anything you feel takes away from your learning?

Probe: Have you experienced any of these characteristics in your SI sessions?

#### **The next set of questions relates specifically to SI.**

5. Why are you attending SI?

Probe: Describe a typical SI session.

6. Are there specific characteristics of the SI session that you feel enhances your learning?

Probe: How was your learning enhanced?

Probe: Is it the interaction with the other classmates?

Probe: Is it the interaction with the SI leader?

Probe: Is it the extra practice?

7. Are there any specific characteristics of your SI session that you feel detract from your learning?

Probe: Was there a session that you remember that you don't feel contributed to a good learning experience?

Probe: Were there any session that you thought was a waste of time?

8. What kind of study strategies are you learning in SI?

Probe: Are you using what you are doing outside of the session?

Probe: How do you feel about the things you have been doing in the SI session?

9. Describe the SI sessions in terms of the class and leader.

Probe: How would you describe the interaction with the leader? With the group?

Probe: How did the leader make you feel?

Probe: How did the group participants make you feel?

Probe: How did the sessions make you feel?

10. How satisfied are you with the course specifically the SI session?

Probe: Did you feel supported by the SI leader?

Probe: Were you comfortable asking questions? Why or Why not?

Probe: Do you prefer group or individual sessions? Why or Why not?

Probe: Would you recommend SI supported classes to others? Why or Why not?

Probe: What suggestions would you make for future SI sessions attendees?

Probe: What suggestions would you make for future SI leaders?

11. May I contact you in the future if I need clarification of some information during my analysis?

This concludes the interview. Do you have any questions you would like to ask? Do you have any further comments you would like to make regarding our discussion? Thank you very much for participating in this discussion.

### **SI Leader Interview Protocol**

1. Describe yourself, your background, and your path to becoming an SI leader for developmental English at ECC.

Probe: Have you had prior experience with helping students learn.

Probe: Describe the role of a SI leader.

2. Describe a typical SI session.

3. What are specific teaching and learning strategies that you will seek to implement in the SI sessions for the developmental session?

Probe: What types of activities do you do during the sessions?

4. What are some potential challenges that you anticipate regarding teaching and learning in the SI sessions that you lead?

Probe: Is there anything in the session that would make you feel challenged?

5. Are there specific circumstances that you feel have negatively impacted students' learning experience in the SI session? Please explain.

Probe: Is there anything you feel takes away from learning during the SI session?

6. Describe the most important learning experiences you facilitated in SI sessions. Please explain.

Probe: Is there anything that you need to provide for the students in order to encourage success?

7. Is there anything else about the SI program you would like to share with me?

This concludes the interview. Do you have any questions you would like to ask? Do you have any further comments you would like to make regarding our discussion? Thank you very much for participating in this discussion.

### **Program Director Interview Protocol**

1. Describe yourself, your background, and your path to becoming the SI Program Director at ECC.

Probe: Have you had prior experience with SI programs? If so, please explain

2. Describe the role of the SI leader.

3. How would you define the activities of an SI leader?

4. Tell me about your views of teaching and the role of the SI leader experience as the SI Program Director.

5. Did you ever discuss with the SI leader your classroom observations? If so, please explain.

6. Did you ever provide feedback regarding teaching practices?

7. Did the SI instructor solicit feedback from you regarding his/her teaching practices?

8. Think back to the time before you became a Program Director, has that role shaped, influenced, changed your views on teaching and effective teaching practices?

This concludes the interview. Do you have any questions you would like to ask? Do you have any further comments you would like to make regarding our discussion? Thank you very much for participating in this discussion.