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Online courses at a community college: a study of student characteristics

Nancy Kegelman

ONLINE COURSES AT A COMMUNITY COLLEGE:
A STUDY OF STUDENT CHARACTERISTICS

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Nancy Murray Kegelman

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Approved:		Date:
Robert B. Campbell, Ed.D. Chairperson	_____ Signature	_____
Kathleen Crabill, Ed.D. Committee Member	_____ Signature	_____
James Coaxum, III, Ph.D. Committee Member	_____ Signature	_____

DEDICATION

This work is dedicated to Harry, my husband and best friend, who always challenges me to grow, to question, and to expand my perspectives.

This work is dedicated to my children Nancy, Harry Joe, and Paul, who have taught me by their example that I can do anything I put my mind to and most important of all to have fun and to laugh at myself.

ABSTRACT

Nancy Murray Kegelman
ONLINE COURSES AT A COMMUNITY COLLEGE:
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Over five and a half million students in higher education were taking online classes in fall 2009. The annual growth rate (21%) in online enrollments from 2002 to 2009 far exceeded the enrollment growth (2%) in higher education for that seven year period (Allen & Seaman, 2010).

Continued rapid growth in online enrollments is predicted despite students' significantly lower success rate in online classes than in face-to-face classes. This action research study was conducted to correlate student characteristics with online success in one community college. The researcher also examined the researcher's leadership growth and style through the design, development, and implementation of the research project. This study utilized quantitative data obtained from online students' self-perceptions of their skills and behaviors via an electronic survey and self-reflection. Pearson correlation coefficients were calculated between student self perceptions of their: self regulation, computer skills, independent learning; need for asynchronous delivery; academic skills and the student's grade point average. None were statistically significant. There was, however, a moderate correlation between the number of online classes a student took during the semester, and her online performance. The study suggests students who are new to the online learning environment are unaware of their additional responsibilities and would be well served by an orientation to the additional expectations of online students.

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CHAPTER I

INTRODUCTION

Context

Online learning experienced rapid growth in the late twentieth century as technological improvements revolutionized virtually every aspect of society. Computers became smaller at significantly lower costs with vastly expanded capabilities.

Society embraced the virtual world as the Internet simultaneously emerged as a user-friendly tool for communication and information sharing (Collins & Haverson, 2009). Computers permeated every aspect of everyday life including education with the proliferation of online classes. The new elearning format attracted a new cohort of learners, and more recently, found favor with traditional students.

As more students seek post secondary education to obtain credentials for the 21st century job market, students are presenting in greater diversity both academically and personally. More students arrive at college underprepared for college level work and needing basic skills (Mellow & Heelan, 2008). Over half (53%) of the students attending community college are 22 or older (American Association of Community Colleges, 2009). Older students often juggle their studies with their work and family responsibilities. Online courses appear to be the ideal solution.

"For the past seven years online enrollments have been growing substantially faster than overall higher education enrollments. The expectation of academic leaders has been that online enrollments would continue their substantial growth for at least another year" (Allen & Seaman, 2010, p. 2). Over five and a half million, close to 30% of students in higher education, were taking online classes in fall 2009; the seven year

annual growth rate of 35% in online enrollments far exceeded the growth of the overall higher education student population from fall 2002 to fall 2009 (Allen & Seaman 2010).

Continued rapid growth in online enrollment is forecast, as the convenience of the online format attracts students who would otherwise not be able to take college level classes due to time and place barriers. Students with extensive family and/or work obligations are unable to adhere to a standard course meeting schedule, are able to find time to take an online course that does not fit traditional college hours, but does fit their busy schedule. An online student enjoys a great deal of flexibility with the unstructured meeting schedule and can study and communicate with her instructor any hour or day of the week. The online format provides access to a group of students who otherwise would not be able to enroll in college courses; Larreamendy-Joerns and Leinhardt (2006) refer to online education as *democracratization*. They explain that online programs either increase access to populations that would otherwise be excluded, or increase the range of people who might be served.

Some challenges accompany the flexibility benefits of online learning. The asynchronous format of most online classes increases student responsibility in the learning process. Students are responsible to schedule study time into their busy agenda, to seek help with academic and technology difficulties, and to communicate with the instructor and fellow students in writing as opposed to verbally. Moore and Kearsley (1996) acknowledged the difference in the asynchronous environment as transactional distance. They recognized that the time and geographical separation of teacher and learner is a dimension in the online learning environment not found in the face-to-face environment. Communication at a distance is different than in-person communication and

is more prone to misunderstandings. The distance-learning format places greater responsibility on the student. The online student must be disciplined to attend to her coursework and she needs more than just basic reading and writing skills; she also needs basic computer skills, and the ability to work independently to be a successful learner at a distance (McManus, 2000).

Dewey's concept of educational transaction was the basis of Moore and Kearsley's (1996) observation. Education transaction is the interplay among the teacher, learner, and the environment. Transactional distance does not prohibit the necessary interplay, it just makes it different. In Moore and Kearsley's seminal work on distance education, they stress a need for a new pedagogy addressing the asynchronous nature of the delivery system. Students and instructors must be ready to interact in an asynchronous environment that facilitates effective learning. The interplay between the learner and the instructor at a distance is a new paradigm for many students and instructors and first time online experiences necessitate adjustments in student and instructor communication style. The goal of learning is not changed online, but the environment is, so the participants need to adjust to the online structure. Gradually, with the growth in online classes, more students and faculty are becoming familiar with the online environment. However, many students new to the medium find it requires a different level of technological competence, communication skills, and motivation than they are familiar with.

The Problem

The rate at which online students successfully complete their online classes is significantly below the average completion rate in face-to-face classes. Lokken (2009) reports 65% of online students in 2008 (down from 72% in 2007) successfully complete

their online class compared to 72% (down from 78% in 2007) in face-to-face classes. For purposes of this study, a student is considered successful if the student completes a course with a grade of D or better. Sector-wide information on completion rates in online learning environments vary from institution to institution. Carr (2000) reports that institutions typically report a 10 to 20% lower completion rate in online courses than face-to face courses. There is no consistent reporting format, but there is consistency in reports that online students are generally less successful than their face-to-face counterparts.

Thompson Park's online students' success from fall 2005 through fall 2008 is consistent with the national data. During those four years, Thompson Park's online students successfully completed their classes only 63% of the time compared to the college-wide completion rate of 74%. Enrollment in online learning represented four percent of Thompson Park's college-wide enrollment in fall 2008 and grew to five percent of college wide enrollment in fall 2010. Additionally, Thompson Park online student grades have a different distribution pattern than the college grade distribution pattern. Online students' grades are more prevalent on either end of the grading scale. Online students earned grades of A 10% more of the time than students grades on average, and earned grades of B, C, and D only 74% as frequently. Of greatest concern, is the statistic that online students were 40% more likely to receive Fs and/or withdraw from their online class than students on average.

The lower online completion rates compared to face-to-face completion rates can be attributed to some first-time online student's misperceptions that online classes are *easier* than face-to-face classes. Contrary to student's perception, the flexibility in the

choice of study time does not translate into less time commitment on the part of the student. Rather, an online course is more demanding in that a successful online student needs to be self-disciplined and focused on their learning to complete the class requirements despite the absence of a scheduled class meeting time. The misperception is likely related to the asynchronous structure of most online classes in which a student is removed from their instructor's sight. The reality is an online instructor is better able to monitor student participation and engagement via the technology.

Online students need to be aware that they are expected to schedule independent work time with the course material to acquire the knowledge and skills outlined in the syllabus to achieve the same learning outcomes as their face-to-face counter parts. Dependent learners are likely to find the online learning environment more challenging than face-to-face environment, as online students assume responsibility for their participation in the class and need to seek help to solve problems that arise. Additionally, online course design is often nonlinear, in which the online faculty allows students freedom in the accessing of the course content. The more non-linear the design, the more responsibility is placed on the learner (McManus, 2000).

Study Impact

The study is designed to understand the relationship between students' self assessment of their level of independence, academic skills, and computer skills, and the students' success in the online environment at Thompson Park Community College. It is an effort to remove students' faulty perceptions that online learning classes require less effort, heighten awareness of learner responsibilities in the online environment, and improve student success rates in online classes. The study results were inconclusive

regarding student characteristics associated with student success or failure in an online environment, however the study raised the awareness of unacceptable online student success rates and resources are being made available to support online students to avoid failure or withdrawal from their online classes.

Scope

The literature features four broad factors impacting student success in online education: the student, the instructor, the pedagogy, and the technology. There are multiple facets of each of the four components. This study is limited to exploring the factors related to the online student at Thompson Park Community College, specifically, student attributes that lead to successful completion of an online course. This examination of online students builds on Kerr, Rynearson, and Kerr's (2006) research into student behaviors related to their online success.

This quantitative exploration of student self perceptions correlating personal characteristics and their success in online classes builds upon behaviors that previous researchers posit to be positively correlated to student success. Through the survey of Thompson Park's online students the data guides the resources the college makes available to online students.

The Research Questions

The study is aimed at improving student success in online classes at Thompson Park Community College by determining whether students' self perceptions of their computer skill, learning styles, and academic abilities are effective at predicting online student success, and whether the researcher's leadership skills can be strengthened through the process. To that end five questions are posed.

1. Are there student behaviors and characteristics that impede student success in online classes?
2. Is Kerr, Rynearson, and Kerr's (2006) questionnaire, titled Test of Online Learning Success (TOOLS), a reliable predictor of online student success in Thompson Park Community College?
3. What strategy can be employed to assist students to be successful online learners related to their behaviors and characteristics?
4. How will my leadership theory in use impact this research project?
5. How will this research project impact my leadership theory in use?

Significance of the Study

The study was born out of Thompson Park Community College's mission of access to affordable, quality education. With the proliferation of alternative delivery methods, whether virtual, accelerated, or web-enhanced, the college has a moral imperative to provide parity in all learning environments. Thompson Park fails its online students as measured by online student grades compared to the college grade distribution as a whole. Access cannot be compromised at the expense of success. The study seeks to obtain at the least, the same rate of student success in the online delivery mode as the face-to-face delivery mode.

The affordability pillar of the mission comes into play as the institution seeks to expand access through fiscally efficient means. The institution seeks to quadruple the enrollment in online offerings over the next 10 years, to offer 20% of its courses online, as do many community colleges across the country (Allen & Seaman, 2008). Online courses provide an excellent medium for enrollment expansion and student access.

Increasing the number of online sections offered can be achieved without large capital investments in resource intensive facilities, although there are other expenses related to online class delivery: technology, software, and support. Affordability can be achieved with efficient online offerings, but increasing online offerings must be matched with increased online student success. Expansion of online offerings would violate the spirit of the mission, if it was done without recognition of students' needs in the medium. The college has been measured and prudent in the expansion its online offerings for the preservation of quality and student outcomes; as a result the institution is significantly behind the nationwide average of online offering by community colleges. Thompson Park's enrollment in online courses is currently a small portion (5%) of overall enrollment; many community colleges across the country report offering 20% of their courses online.

Fiscal Responsibility

Resources in the community college higher education arena are scarce and are likely to remain in short supply for the years to come as the nation recovers from the economic recession that began in fall 2008. Economists suggest government funding patterns experienced a structural change and are likely to shrink as sources of revenue. Thompson Park allocates significant resources to support online instructors and students. The Teaching and Learning Center (TLC), an entire department, is dedicated to distance education. The TLC has three full-time administrative level employees and one staff employee. The Center occupies a 1,500 square foot physical space, houses over 20 state of the art computers, and offers a variety of support services to faculty such as web page

development and podcasting, but the primary service is training. Over 200 faculty are trained in the Center each academic year since 2007.

The Purpose

This action research study was conducted to identify student characteristics associated with online student success at Thompson Park Community College. The study results inform the development of a pilot project of students' awareness of their strengths and weaknesses as online learners. Resources were made available to assist students in the online environment in which they assume additional responsibilities for their learning: specifically, students' computer skills, academic skills, and dependent or independent learning styles. First time online students are invited to take a self-assessment that will alert the student and the college of the student's challenge with online learning. The goal of the study is to prepare and support students in their online pursuits. Since student success in the online medium is complicated by the interaction of multiple variables, the study can begin to unravel the complexity by direct student inquiry regarding the skills and behaviors related to their online success or failure.

Framework

The researcher's servant leadership theory in use drives this action research project to serve the 2,000 students at Thompson Park Community College who adventure into the online environment unaware of the additional skills, and unprepared for the responsibilities they assume as online students. The researcher has made a conscious choice to assist online students, many of whom online learning is their only access to higher education, to achieve their educational goals, and in so doing, augment their personal growth. The test of a servant leader is to enable those she serves to become

healthier, wiser, freer, more autonomous, more likely themselves to become servant leaders, especially the least privileged (Greenleaf, 2002).

The researcher applied the principles of change theory to implement procedures to improve online students' success. Senge et al. (1999) describe an effective leader as one who has the ability to recognize the flaw in the system and modify the system to effectuate profound change. They would describe profound change as the difference between single loop and double loop behavior. Single loop behavior is repeatedly doing the same thing despite its inefficiency. Double loop behavior employs questioning and assessing the process to see where the inefficiencies occur and modifying the system in order to achieve the desired outcome.

Additionally, Argyris' (1990) work on dysfunctional organizations related to inflexible behaviors played a role in this action research project. As do Senge et al. (1999), Argyris distinguishes superficial and enduring organizational change through a two tier organizational structure which he refers to as Model I and Model II organizational structures. In Model I, the organizational structure is immutable, resulting in a continual cycle of failure. In Model II, the entire structure, beginning with job descriptions and proceeding to relationships, are reviewed and revised for the elimination of what he labels organizational errors. Part of the project is related to combating organizational defenses to effectuate organizational change and part is personal awareness to effectuate personal change. Although the results of the research on student success were not available at the completion of the dissertation, the researcher's observation of her personal change were conclusive as documented in her reflective practice. The framework included the basic steps in change management: identifying the

problem; researching the facts; creating a process to support the change; choosing the metrics to measure the effect; engage critical stakeholders in designing the new structure; communicate the change; and supporting those affected by the change.

Terminology

For clarity, this study uses the following definitions in the discussion of distance education and online learning.

Distance Education

Distance education is a comprehensive term covering a variety of delivery structures. In Keegan's (1996) definition of distance education, often cited in the literature, the teacher and learner are separated, use technical media for communication, and the relationship is usually under the auspices of an educational organization. Waterhouse (2005) presents a similar definition and includes the term *distributed learning,* sometimes used inter changeably with distance education. Teaching and learning arrangements in which the instructor and student are not in the same location qualify as distance education. Therefore, interactive TV, correspondence courses, and radio courses would all qualify as distance learning courses (Bernard, Brauer, Abrami, & Surkes, 2004). Students and instructors interact substantively in the distance education environment as they do in a face-to-face class, but not necessarily in real time.

In August 2008, Congress passed the Higher Education Opportunity Act (HEOA, 2007). The law calls for increased accountability across higher education, and specifically targeted distance education (Lokken, 2009). The law updated the definition of distance education by replacing the term *telecommunications* with *distance education*. The revised definition recognizes the transactional distance to which Moore and Kearsley

referred in 1996. The HEOA's updated definition is described by the Instructional Technology Council (ITC, 2009) as using one or more technologies to deliver instruction to students who are separated from the instructor. Technology is used to support regular and substantive interaction between the students and the instructor. The interaction could be either synchronous or asynchronous.

E-Learning

E-learning is learning that is acquired through electronically mediated technology, usually through a network (Garrison & Anderson, 2004)**.** Zemsky and Massy (2004) write that the most successful forms of e-learning are courses delivered on the Internet that teach a specific subject often at the graduate or professional level and offer certification in a specific skill. They distinguish e-learning from electronically distributed correspondence courses by the amount of participant interaction and engagement in the learning process. E-learning is often used to supplement face-to-face instruction (Hartley & Bendixen, 2001) E-learning is prevalent outside of the formal education environment through postings of video clips on Internet sites such as *YouTube*, and reference sites such as Wikipedia,. Learners find instruction and reference material from these sites on a daily basis.

Online Learning

Online learning is any distance education structure which is delivered primarily via the web, whether it is an entire course or a small learning module (Waterhouse 2005). Therefore, online learning is a specific form of e-learning often occurring when a student uses a course management system such as Blackboard to access course information, participate in a class discussions, test, or submit coursework.

Online Classes

Online classes are courses that are delivered completely on the Internet (Tallent-Runnels et al. 2006). Allen and Seaman's (2008) definition of online courses as those in which at least 80% of the course content is delivered online is used by this study.

Hybrid

Hybrid or blended courses are a combination of online and face-to-face delivery methods. The number of face-to-face meetings is reduced in a hybrid course with part of the course material being delivered online. Allen and Seaman (2008) describe the hybrid course as having between 30 to 80 percent of the course content delivered via the Internet. Traditional courses are synonymous with face-to-face classes, but may be web-enhanced. In a web-enhanced class, student and faculty physically meet on a regular basis, but also use the Internet to supplement class sessions.

Synchronous versus Asynchronous

Distance learning can be synchronous or asynchronous. In a synchronous learning environment, the student and instructor communicate at the same time, often referred to as real time. But, the engagement need not be in the same physical location. An example of a remote but synchronous learning environment is the interactive videoconference. The faculty and student are in different locations, but they meet at the same time. Videoconferencing also allows for student and teacher to see and hear each other during the class session. The instructor and student are time and place independent of each other in an asynchronous learning environment. Both can engage in their portion of the teaching and learning activities on their own schedule at their desired location.

Limitations

Multiple variables impact student performance and completion in an online class in addition to the structure and student characteristics such as the instructor, technology, and pedagogy. The study examined only one factor of a complex multi-variable environment. Narrowing the study of student success solely to student self-assessed characteristics and behaviors cannot fully explain why some online students succeed and others do not. Furthermore, action research has its limitations in that the researcher's intimate familiarity with the situation may prompt individual biases resulting from her familiarity with the existing participants and operations. Therefore, it is critically important that the researcher scrutinize her biases and recognize how they impact her conclusions.

CHAPTER II

LEADERSHIP PLATFORM

Early Leadership Insights

The journey to earn my doctorial credential has been an expedition of self-awareness, personal development, renewed passion, and enlivened courage. The self-awareness process entailed an introspection and discovery of my authentic self, the courage to live my passion, and the development of tools to be effective in my pursuits. George (2007) relays the importance of self-awareness through a quote from Judy Vredenburg, CEO of Big Brothers Big Sisters, "You need to understand the cultures you thrive in, the roles you are best in, your natural strengths, and your natural interests. Then put yourself in a place where you can shine" (p. 70). I found myself in leadership positions as far back as high school, but not by my choosing. I was placed there because of my athletic abilities on the playing field, or the fencing mat, and I helped my team win. I soon found that achieving success as a captain required different skills than a left wing field hockey player or an "A-flight" fencer. I was captain of my high school field hockey, fencing, and calisthenics teams because of my tenacity and success in competition. My journey was that of a servant leader (Greenleaf, 2002), who became the titular leader. I did not seek those positions, nor did I fully comprehend my leadership responsibilities. As a captain, I was a sideline cheerleader and did my part to win, but did not comprehend my leadership responsibilities to inspire my teammates to function as a team; I left that job up to the coach.

Similarly, in my senior year in college I was elected president of the Nation Intercollegiate Woman's Fencing Association (NIWFA), another position I did not seek.

The coaches knew me because I had been in the National Tournament each of the proceeding three years, having made the finals during my freshman year. As president, I was charged with fielding inquiries to the organization and participating in the planning of the annual NIWFA Tournament. Not realizing the correspondence requirements, I relied heavily on the advisors. I had much to learn off the fencing mat.

My entrée into leadership positions in my teaching career was similar. The first leadership position I held was Economics Department Chair. Serving as department chair was viewed by the faculty as a duty each member would assume on a rotational basis. I simply followed the previous department chair's lead to schedule classes and monitor enrollment. Soon thereafter, the current Business Division Chair asked me to assume the position of Division Chair because she was stepping down. She told me I was perfect for the job because I did not have "an agenda," meaning I did not portray biases regarding issues in the division. She may have noticed I was involved with college activities, but not outspoken; I was happy to work on projects and avoided challenging positions. I was more inclined to compromise and offer alternate solutions. Several other respected colleagues talked to me about taking the position. Flattered, I discussed the prospect of assuming the leadership position with my husband and decided the additional pay accompanying the position would be good for the family finances as our three children were approaching college age.

I entered the position unaware of the time commitment, the personal conflicts I would be expected to resolve, and the politics surrounding the decisions I would need to make. Once again I found myself in a leadership position that I had not sought. My myopic observation led me to believe the job was managing the day-to-day operations of

the business division. I served two consecutive three-year terms working many long days to keep the division running smoothly with the least amount of conflict. At the conclusion of my six-year term as division chair, I was asked by the executive vice president to be interim dean of Academic Affairs for six months, one more time taken by surprise. I was hesitant, because I was looking forward to returning to the classroom and the rewards of teaching, and had no aspirations to assume another administrative leadership role.

I accepted the interim position because the request came at the conclusion of a five month sabbatical where I had been studying at Princeton University as part of a community college fellowship program; it came at a time that was a natural break in my career, plus I felt I owed the service to the college in thanks for the much appreciated opportunity for professional renewal in the Princeton Faculty Fellowship Program. The six-month assignment turned into five and a half years. The job was a challenge, but it also afforded me the opportunity to change some of the inefficiencies I struggled with as division chair, specifically in scheduling and planning. I continued in the position, feeling I was in a place where I could make a bigger difference in students' lives than in the classroom. Perhaps that is what Judy Vredenburg meant when she said to put yourself in a place where you can shine. I did not originally put myself in that place, but once I was there I recognized I had the ability to improve scheduling and integrate planning, so I found a way to stay. Obtaining my doctorate in educational leadership is one of those actions I have taken to stay there.

Self-awareness

Shakespeare wrote "To thine own self be true." George (2007) quotes FirstMark CEO Lynn Forester de Rothschild, "Be true to what you want... Know who you are, and

you can achieve anything in life. You can overcome almost any obstacles, unless you are the obstacle" (p. 68). The road to my degree entailed whittling away at the impediments that hindered my self-realization and true happiness as Shakespeare wrote. Thinking about the impediments as obstacles I created was empowering, because I could remove them since I had created them. Examining who I was and taking inventory of my strengths and weaknesses began the process of self-discovery and personal transformation; it helped me understand my reactions and habits and to recognize when they were impediments to my leadership.

I proceeded with caution and skepticism. I was not convinced I needed to change; it was my environment that needed to change. Needless to say, the change began slowly. I liken the initial movement to the slow acceleration Collins (2001) describes in his change model in which he uses the analogy of a hedgehog in a flywheel. He suggests that the initiation of change is like the hedgehog's arduous process of laboring against inertia to begin the flywheel's movement. The wheel's initial rotation is painfully slow, especially for the amount of effort needed for even minimal movement. As Collins (2001) explains, once the wheel is moving, it takes much less energy to keep it going.

As with organizational change, my personal growth gained momentum once in motion. In the first two Rowan classes, Educational Leadership Theory and Research Writing, I found myself frequently thinking about the readings, assignments, and class discussions. An early discovery was my need to develop a critical eye for information. The act of being critical was contrary to my nature; rather than point out someone's flaws, I would look for each persons' "good" or potential, build on the positive, and minimize the negative. As a child my mother taught me, "There is good in the best of us

and bad in the rest of us. Therefore, it hardly beholds the best of us to talk about the rest of us." I made every effort to live by those words each day. Critical analysis of others' work in research studies and scholarly readings was the precursor to my reflective practice. Focusing on others' flaws through multiple reading, writings, and discussions was palatable in that the individuals I was critiquing were faceless; I was comfortably removed from offending anyone personally. I began to question assumptions, understand motives, and scrutinize research methods in an impersonal environment. Understanding the distinction between scholarly critiquing and criticizing someone enabled my first personal mindset change. I overcame my aversion to critiquing by understanding the value of accurate information in good decision-making, and the cost of failed actions based on misinformation. Gradually, in work and in my personal life, I began questioning assertions and asking why decisions were being made and what other options were available as opposed to accepting a single proposed solution as I had done in the past. I noted the importance of providing consistent accurate information to build my credibility with my highly educated and astute colleagues and disseminating accurate information. I was slowly changing and developing my analytical questioning skills.

I needed those enhanced analytical skills when I became the subject of the critique; the self-reflection process was significantly more challenging. I had to put aside my pride and recognize my flaws. Writing my first leadership platform was laborious. I was uncomfortable bearing my soul and ineptitudes. I was overwhelmed with the theoretical giants' mastery of leadership in the reading. I admired transformational leaders for their tangible outcomes; but I was hard pressed to produce evidence that I was

one. My research and reading changed my perception of servant leadership, but affirmed my desire to develop all the characteristics of one.

Greenleaf's (2002) characterization of a servant leader as an enabler for others' growth through their development resonated with me. I have been an avid supporter of my staff's growth and advancement beginning back to when I was Business Division chair. Because I often took it upon myself to do someone else's work to avoiding anyone being angry with me for telling them what to do; I was sure I was a servant leader the first time I heard the term. I have come to know a servant leader is not a boss who does her staff's work, rather it is a leader who listens, has empathy, mends broken relationships, is aware, persuades, conceptualizes, has foresight, stewardship, commitment to the growth of others, and builds community (Spears, 2006). Based on my upbringing to respect and value every person, I was a good listener, had empathy for others, was a peace-maker and concluded I was well suited as a servant leader. But, I had much work to do to hone the other characteristics; writing, clearly not one of my strengths, became my vehicle.

As I progressed through the program, I became more comfortable with the reflective process. Reflection was a part of each class. A year and a half into the program, the exercise of writing my personal code of ethics in the Applied Ethics class and repeated revisions of my leadership platform, helped me crystallize the connections between my actions and feelings. The concentrated program accelerated my change process with the quick pace and volume of readings, research, writing assignments, and group projects, similar to boot camp, making the process more poignant and meaningful. I had to recognize my biases, as hard as it was. I had to step back to see myself through a

different lens and be my own critic. Being honest with myself, removing the blinders and assuming other perspectives, enabled me to be a more realistic and effective leader.

I have gained greater self-awareness of my personal biases as I employ my leadership style in the ethical decision making process. In my reflective process, I think about what my biases are and evaluate how they might influence my decision in difficult situations. Employing situational ethics as a basis for ethical decision-making follows my Kantian belief of each individual's worth. I ask myself whether it matters that a student is a single mother trying to improve her family's lot in life with a grade appeal, or whether I am unbiased in an academic integrity grade appeal of a student with multiple tattoos and body piercings. The self-honesty disarmed my guard; I strive to view each situation objectively on the facts putting aside factors that might sway my decisions. Also jarring, was the self-awareness of others' perceptions of me.

I became aware that I was dubbed an insensitive number cruncher as a result of my weekly enrollment reports and insistent requests for the addition of high enrolled sections. One academic dean relayed a story about a conversation between the New York Yankee's general manager, Brian Cashman, and the manager, Joe Torre. Brian Cashman, the financial operations of the ball club, wanted to cut certain players based on salaries and performance alone, Joe Torre reminded him, "They're not numbers, they're players with heartbeats" (personal correspondence, November 24, 2010). The point was there are other factors to consider, rather than just the numbers, the other variables need to be taken into consideration. The story helped me understand how the dean viewed me. After that email, I changed my delivery style. Rather than sending a blanket email to all six deans listing all courses needing more seats as I had in the past, I narrowed the list to two

or three courses per division and contacted the dean individually to discuss the availability of adjuncts and rooms to make more seats available. The deans were surprisingly accommodating; they were willing to arrange a few more sections as opposed to ignoring all requests in an unreasonably long list. In one case, I offered to arrange to advertise for more adjuncts and was informed several hours later that schedules had been arranged allowing for an additional section. My modified approach yielded a better outcome. As a student advocate, I asked for all sections needing more seats, but being realistic, sensitive, and helpful produced a better outcome and the approach appealed to my servant leadership style.

I learned how to analyze the situation to net the largest gain for the students. Building a stronger rapport and trust with the deans enhanced my ability to communicate with my academic leader peers. Simultaneously, I was developing the courage and skill to approach others directly with difficult issues. Servant leadership is relationship building, and having the awareness and flexibility to know when to over indulge and when to lighten up so that the followers grow.

Throughout the journey I kept a journal. My initial entries were sporadic. I wondered, what do I write? What does it matter? How do I structure it? All those questions went through my mind for months. Previously, my writing was limited to factual reporting as opposed to editorializing. I went through multiple iterations of a journal. The first attempt was handwritten; that proved to be inconvenient, because I did not have the journal notebook with me all the time, plus I sorely missed spell check and the easy editing available in word processing. One of the Rowan instructors provided an

electronic template that I found helpful, but felt uncomfortable writing anything personal such as feeling in a file that I suspected was not private.

Utilizing my research skills, I found the guidance I needed from Osterman and Kottkamp (2004) on journaling and reflective practice. Their literature research on journals and critical incidents lead me to prompts I used to create my own template with four columns: date, experience, results, and thoughts. In addition to the structure, I began setting goals and reporting on them. One goal was to make dissertation writing a priority. To do so, I needed to give something up. That was some sleep and my morning walk. The journal helped me monitor my achievement or lack thereof. I became my own monitor and task-master. It helped in the development of disciple and focus, two personal goals I set for myself.

Through reflection I observed my behaviors, analyzed my feeling of accomplishment or disappointment, and developed new strategies to put in my toolbox of skills to deal with similar situations in the future. It was under the illusion that people expected me to be an erudite academic scholar when I became dean of academic affairs. One of my friends started to introduce me as the smartest person she knew. I knew that was not true. I tried not to disappoint her and it was easy with casual conversation outside of the college. It was a totally different scenario at Thompson Park. When I first became the interim dean, I had referent power, but after a short honeymoon my every action and comment were questioned. Trying to maintain the image left me little time for self-exploration. Initially I was both uncomfortable and unfulfilled I was not concerned because I only had a temporary position. Three years later under a different executive vice president, I gained a whole new perspective. I had designed a model for monitoring

enrollment that the vice president embraced. The new executive vice president made enrollment a priority and referred to my model as the science of enrollment management that the division chairs and then the academic deans were to use with enrollment management. It was my challenge to blend the science of enrollment management with the art of being more sensitive to the exacerbating and mitigating circumstances.

When I reflected on my inner core as Osterman and Kottkamp (2004) suggests, I identified my insecurity about my academic skills. I trace that back to elementary school when I was in classes of 40 students in catholic schools through sixth grade. I struggled with reading and phonetics, but was able to get by because I was well-behaved. In seventh grade my family moved to Cooperstown, New York, a small rural county town where I was an anomaly. I was a town girl and many of my classmates came to school after milking the cows. I stuck out like a sore thumb without saying a word. For example, I quickly realized I did not have to stand when speaking in class after my classmates burst into laughter the first time I did. The classes were smaller and I could not hide. I worked hard and gravitated toward math, continuing to struggle with reading and writing.

In high school I was in another new setting in suburban New Jersey. I continued to spend a lot of time on homework and participated in athletics after school as an outlet. Nonetheless, throughout school I worked hard and was determined to be more than a gym teacher, which my high school French teacher encouraged me to pursue. I can see her point now; English was a challenge, French was near impossible for me. I persisted and graduated as a member of the national honor society. Years later when each of my three children were diagnosed with learning disabilities, I wondered if I might have had similar difficulties. I had great empathy and was a strong advocate for pedagogy that appealed to

their learning styles. My passion for student success regardless of background is grounded in my understanding of alternate learning styles.

My academic insecurity flared up from the start of the Rowan program. Once again I faced the reality that my reading and writing skills needed improvement. I was reminded several times. The first was in my first leadership platform. I just wanted to get the assignment done, and did not take the opportunity for deep introspection, not because of belligerence, but because I was insecure about my writing and analytic skills. I had not evolved to the point where I could confront my shortcomings. I took an incomplete and rewrote the platform over the holiday break. I had a similar experience with the feedback on my code of ethics. There is little introspection and primarily factual reporting of the right things to do. It was not until I began writing my dissertation that I turned a corner and decided I wanted to produce a product I would be proud of; it did not need to be a literary masterpiece, but clearly present a study based on accurate information and logical analysis.

My original hesitancy to review comments was replaced with a curiosity of what I needed to do to improve my product. The editing comments served as a source of feedback on my communication skills. The first time I got feedback, I was demoralized, glancing though the paper and seeing all the editing marks; it took me days to go through each page of comments. Once I got past the first few pages and saw some positive comments I was encouraged. I spent many concentrated hours correcting and rewriting, it was an excellent educational experience. I felt more confident. I also went back to one of the first books I read in the program. *Style: Ten Lessons in Clarity and Grace* by Williams (2005) and the *Concise Rules of APA Style* (American Psychological

Association, 2010), and challenged myself to write with clarity, precision, and economy of expression. My goal was to avoid any comments related to redundancy, lack of understanding, or clarity.

Personal Change

I came to the realization that no matter how hard I worked and how dogged I was, I had no control over fate or anyone other than myself. I could try to influence others to take actions and decisions, but I could not force them to take the actions I thought they should, nor take the tactical approach I favored. I relinquished my illusions of control, and acquired a realistic perspective on the scope and magnitude of my goals. This revelation changed the way I approach my responsibilities and developed my annual goals. I assumed the responsibility to achieve my goals and recognized I needed to be more realistic, flexible, a more adept leader with enhanced communication skills, and knowledgeable of all significant factors surrounding issues to be able to hold fast to my commitment to efficiency and student success. With my renewed approach, rather than give my direct reports specific instructions on how to complete a project, my new tact is to have a discussion of the goal and expectations; together we design the process. We both are learning; my staff is challenged to design a plan and utilize their job expertise, and I often learn new details about their jobs and insight to alternate approaches. Most situations have obscure mitigating factors complicating the process. I defer to my staff to chart a course of action. Empowered with my confidence, they are invested in arriving at a good project result, with increased morale and a feeling of personal achievement. Developing staff's skills is an example of servant leadership action to promote followers' personal growth. My change in approach and my actions to right-size my personal goals

reduced the amount of overtime I needed to spend at work and gave me more time to work on my dissertation.

I narrowed my annual goals from a long wish list of immeasurable goals to seven clearly stated goals I had the ability to achieve. The first goal was to support the new Educational Services Executive Vice President. I worked for Dr. Day, the executive vice president of Educational Services for the past five years. Throughout the Rowan program I recognized her as a textbook example of a transformational, charismatic leader. Her high expectations were tempered with her support, encouragement, and care. Daily, I was challenged to think and question. Even through clearly stated priorities and values, every day brought a new surprise. She was fair and principled, demanding and understanding. She was a model leader and had the courage to make the hard choices to support her convictions despite the difficult consequences. Dr. Day restructured the academic leadership structure, regularized the course schedule, restructured academic divisions, instilled a culture of assessment, and increased faculty presence on campus. She upgraded the physical plant, and technology in all classrooms. She ensured all faculty, including adjuncts, were properly qualified to teach their classes. She was a transformational leader, whose courageous actions, commitment, and forward thinking changed the culture of the institution by instilling a strong understanding of the mission and emphasized the college's values that support the mission.

Since her departure I have had the opportunity to work for her interim replacement, Dr. Knight, with a long background in student services and enrollment development; he is focused on serving students and constantly looks at the big picture. He has a quick wit and is perceived around campus as a fun loving guy. Because of his

witty persona, many are surprised by his strong managerial style; he expects his staff to know their job and do it. He has no problem having fun and cracking jokes at meetings, but he does his work and relies on others to do theirs. There is no doubt his priorities are student success and the best interests of the college; his actions and decisions are consistently driven by his two priorities. He recognizes when the system is not working and questions the need to change the policy. However, when the college has a policy he expects it to be followed and has little tolerance for exceptions.

When academic deans had not canceled low enrolled classes a few days before the start of his first semester, as executive vice president, he did. He met with the Director of Educational Services and me three days before classes started and went through hundreds of low enrolled sections to determine whether the classes should run. I had the history of enrollment by course from the previous fall and the available seats the current fall; the director had access to the students' records. Before he cancelled a class, he had us checked whether students in the class needed the course to graduate, and whether other seats were available in other sections; he only cancelled classes in which students had viable options. He is a strong student advocate, but made his decisions in the context of the fiscal health of the entire institution. He was fully aware faculty and students would be upset, but was comfortable with his actions knowing he had instructed the deans to take actions earlier and they had not.

Dr. Knight was blamed for what was referred to as the *Friday night massacre,* he fully anticipated that he would be blamed for the disruption in faculty and students' schedules, but accepted it and did not point out that the academic division deans had not done their job. I acquired firsthand knowledge of his enrollment philosophy and decision

making process to better support him in future terms. The exercise was also educational as I saw how Dr. Knight taught the academic deans to be decisive and focus on the larger enrollment and resource management picture via his example. In my weekly updates to the academic deans, I utilized Dr. Knight's enrollment management philosophy as I recommended adding and cancelling classes. I assumed the responsibility to be more proactive with greater confidence the next semester. Not surprisingly, the deans were much more conservative with their course offerings and quicker to cancel slow to enroll sections; I should have anticipated their fear of holding seats for late registrants and been more persistent with my requests to add sections of late enrolling high demand classes. The third time should be a charm; in the next enrollment period I am designing a visual dashboard as a mechanism to guide my enrollment management conversations with the deans.

Dr. Knight has taught me the importance of researching information, assessing its relevance to the decision at hand, thinking how each stakeholder would want the issue resolved by understanding their needs, and making a recommendation weighing all these factors. I have followed his lead in my interactions with the academic deans. For example, when a dean forwards a difficult issue to me from her faculty without her response or suggestion, I respond by asking questions relating to information I would need to make a decision and ask for recommendation. Dr. Knight looks for well supported recommendations; he readily admits he is easy and will agree with soundly reasoned arguments. He is likely to question why a problem arose, questions assumptions, drills down to the facts, ask who might be hurt, how other institutions handle the situation, and what the negative and positive consequences are. His thought

process exemplifies Paul and Elder's (2007) steps in critical thinking: state the purpose, frame the question, use relevant and accurate information, justify concepts, address problems in assumptions, use reason to support the conclusion, be sensitive to alternative points of view, and consider the consequences of the position taken.

An example of my enhanced reasoning skills is related to my second goal, and that is to implement a recommendation from the Educational Services Master Plan to convert from a print catalog to an online catalog. An online catalog would better serve our current and prospective students in that information in the catalog would be readily available, accurate, and save the institution printing costs. Frustrated with the printing delays and errors in the catalog, I proposed to convert our print catalog to an electronic catalog in fall of 2009. There are three stakeholders in the production of the catalog and many users. The Production and Design Department designed the cover and managed the production, the Dean of Enrollment and Student Services was responsible for the section on general information regarding policies and procedures and employee directory, and I was responsible for the programs of study, general education, and the course descriptions. The printing delays were the result of late and inaccurate submissions by one of the stakeholders and unauthorized changes made to the data file. The general belief around campus is Academic Affairs manages the catalog and is blamed for inaccurate and late information since Academic Affairs is responsible for two-thirds of the content. Conversion to an electronic catalog would rectify the problems associated with getting an accurate timely catalog to students. The catalog is the college's contract with the students regarding their program requirements, academic standing, and responsibilities. I was

unhappy with the college wide misperception of my office's failing to produce a useful catalog.

The initial request to convert to an electronic catalog was made to Dr. Day who agreed with the idea and simultaneously suggested to the executive director of Production and Design to place the ultimate responsibility of producing the catalog with me. The executive director was reluctant at first, but willing to talk with me. I explained how the electronic catalog would save his department time and money and that I would continue to rely on his staff for the design aspects, and a limited number of printed catalogs; he agreed. A similar discussion took place with the third stakeholder describing the time savings in indexing and obtaining input from other contributors to her section. Several hurdles needed to be cleared over the next 18 months: startup funding, software selection, information technology approval, user training, and the implementation of a culture shift from a hard copy catalog to an electronic one. I had my assistant arrange for several webinar demonstrations of electronic catalogs. All stakeholders were invited: the student services representative, the design and production representative, an information technology representative, and the Registrar. The participants asked questions relevant to their area of expertise and contacted colleagues at other institutions who used the products. One product emerged as an all around favorite. Its unique features were the ability to dynamically link to the course schedule in real time, was easy to navigate, allowed students to create a unique catalog profile, allowed for unlimited users, and provided email alerts to the file master when changes were made. A contract proposal was obtained.

I knew conversion to an electronic catalog would be a cultural change. Each year we publish over 20,000 catalogs that are primarily consumed by students and student services. It was incumbent upon me to present a plan reflecting the impact of the transition including the transition cost. Therefore, I sought input from the primary users on the number of catalogs they would need if the college were to convert to an electronic format. I emailed the dean of Enrollment and Student Affairs informing him of the plan to convert to an electronic catalog for 2011-2012. I explained the electronic catalog would: enhance services to students with up to date searchable accurate information; save costs; be green; and improve efficiency. I also identified the stakeholders from his area who had been part of the selection process.

In the email I proposed that the college forgo the printing of a formal catalog and instead print copies of a “Program Book” that would contain all the program pages currently in the catalog in-house at a low cost. The same type of book could be prepared for the course descriptions. Program brochures on each program could easily be produced for Recruitment by the production and design department. Students, faculty, staff, and the public would have access to the complete catalog online. Students would continue to receive the Student Handbook with much of the information that is in the first section of the catalog. I asked whether an electronic catalog was sufficient for his area’s needs, and if not, how many print catalogs would he need. Checking with representatives from other schools who converted, I was advised to ease into the production of an electronic catalog and not totally abandon the print catalog the first year the electronic catalog is used.

There was a significant file conversion cost as part of the initial startup cost as well as printing the 7,500 catalogs that users requested. The total additional cost for the

first year was approximately $60,000. I did not have the budgetary resources, so I sought assistance from the managers in the Information Technology Department and the student services department who endorsed the electronic catalog, and lead to their financial support. The project became a low priority with the executive vice president and was not implemented for the 2010-2011 catalog. A year after the idea was initially proposed, Dr. Knight, the interim executive vice president, who agreed with the idea, but denied the use of student services fees for the catalog. He said the student services fees were for current students and the catalog was for prospective students. In the meantime the Information Technology Department's committed funds dissipated. Dr. Knight reviewed the cost proposal, had me change the assumption regarding the cost of the print catalog during the transition year, and gave me the opportunity to present my proposal to the vice president of Finance. Knowing the vice president of Finance would be interested in the long term saving, I emphasized that the startup costs would be recovered in three years, plus noted the college had the option to spread the cost over two years. He was convinced converting to an electronic catalog would be in the college's best interest and approved the expenditure.

What appeared to be the resolution of the project financing, was not. The contract needed to be presented in a fair and open bidding process, since the cost of the purchase had to comply with the state's regulations. I was hoping to avoid the bidding process and acquire the software contract on a sole-source basis, which is allowed when a product being acquired is unique. I explained to the purchasing manager that a committee of stakeholders looked at several products, and strongly recommended Acalog; the other products did not have the features to satisfy the selection team's criteria. The letter I sent

described the features that make the software product unique, with a list of colleges who acquired the software on a sole-source basis, including two in-state institutions, did not help convince the purchasing manager. My goal was to receive approval for the contract in December, providing enough time for the vendor to convert the catalog into the software database and train the users to produce a catalog in March.

The purchasing manager said it would be tough to make the December Board of Trustee's meeting, because he would be on vacation for a few days and could not respond to vendor's questions during the required 10 day open bidding period prior to the semester break. He was adamant about "doing things the right way." I was able to fast track the request for proposals, providing all the necessary information with the goal of having a proposal approved by the board in January. Once again a delay occurred, because despite the unique feature requirements in the request for proposals, two bids were presented. One was the software desired and another vendor whose product had been reviewed. The second vendor's price was significantly lower than the desired product.

Realizing the purchasing manager came from a strong structural culture and I was not going to sway him, I pursued another tactic. I resolved to print the catalog for this year as had been done in the past and continue to work with the purchasing manager to present the case for the unique features of Acalog, the desired product, over the other product. I provided the purchasing manager with a demonstration of several electronic catalogs from each of the vendors showing the difference. Upon his request, I arranged for a conference call with Acalog, and several of the college stakeholders, the student services representative, the design and production representative, an information

technology representative, and the Registrar to assure the purchasing manager that all stakeholders were in favor of the product and features.

The print catalog will be a limited run in an inexpensive format. Realizing that there is more than one way to approach a project and I am unable to change others, such as the purchasing manager, I will make the solution work. There will be an electronic catalog for the next academic year, but it will become available after the generic print catalog is available. New students will have the catalog in time to select their classes in the spring and the file being used for the first electronic catalog will not need to be modified for the first electronic catalog. I demonstrated flexibility, persistence, and ingenuity throughout the 18-month process dealing with a strong structural culture, and modified my approach to achieve my goal to transition to an electronic catalog.

My third goal is to sustain enrollment growth and access through effective, student centered scheduling, enrollment monitoring, increased dual enrollment courses, and distance education offerings. As the number of high school graduates and governmental funding shrink, the pressure to control costs grows. I have been able to utilize the data analysis skills developed while working for Dr. Day to fulfill this goal. I designed an enrollment monitor scheme comparing individual course enrollment to college wide enrollment as a barometer to request more or fewer seats in a course. I monitor enrollment in over 2,000 sections each long semester. It is a simple scientific approach that is the basis for decision-making, taking into account changing enrollment patterns reflecting students' interest, the economy, and the mix of courses offered. Weekly, I send a report of the high enrolled courses to the academic dean by location, suggesting adding courses with enrollment 20 percentage points above the college

average. Later in the enrollment period I send a low enrolled report suggesting cancellation of sections of courses in which enrollment was significantly below the college average. Dr. Day recognized the effectiveness of the model and used it as the basis for the academic deans' weekly enrollment discussion. She pressed the deans for explanations and reinforced the importance of taking action.

I was the messenger and Dr. Day forced the implementation. At the point when Dr. Knight assumed the college's academic leadership responsibility, the external demographic and economic pressures came to bear on the institution. Dr. Knight stressed that running the greatest number of sections at capacity was essential for financial viability, so the institution would be able to provide quality education at affordable prices. He clearly articulated to the academic division deans his expectations for running classes and that he expected the deans to follow my recommendations. In effect he gave me more authority and responsibility. After the *Friday massacre*, I continued to email my weekly reports, but recognizing that my recommendations often were not implemented I employed a different tact. Previously, I compiled a long list of courses that were filling faster than the overall college average, hoping at least a few sections would be added. I narrowed the list of requests to those that were the most pressing and I called each dean before the email report was sent to discuss two to three key courses in their division. The response was much more favorable with an informal one-on-one conversation than the defensive discussions that took place in the weekly deans meetings. Students were getting more of the classes they needed and the college was being fiscally responsible with its resources. I was realistic with my requests and attempted to change my approach being

sensitive to the college culture in which deans were more responsive to a personal request of a manageable number of additions.

Sensitivity to the institutional culture was necessary to manage my forth goal of expanding assessment of student learning from course and program assessment to institutional levels of student learning outcomes; no systematic assessment of student learning had been conducted in either the core competencies or general education as a program. In 2003, the college community endorsed nine competencies representing 11 skills and abilities established by a special presidential task force of 20 faculty. The catalog implies each graduate of the institution is expected to acquire the competencies, but the competencies were not mapped to program requirements, as were the general education requirements. From experience introducing new college wide initiatives, especially those relating to assessment, I anticipated faculty resistance to additional responsibility. The plan had to be reasonable and relevant for faculty buy-in and ultimate success. The design, roll out, and effective implementation of the plan was an exercise in understanding the faculty culture and utilizing Bolman and Deal's (2003) political and human resource frames.

I engaged the assistance of my administrator of assessment, Sally, to analyze the commonality between the college's core competencies, general education categories, and the regional accrediting agency's general education requirements. Eight of the 11 core competencies were congruent with the college general education requirements. If the core competencies could be folded into the general education requirement, there would be a mechanism to require and track student acquisition of the competencies through the general education graduation requirements. I designed a chart listing the core

competencies in the first column, the general education categories in the second column, and a third column for the analysis. Modifications had to be made to uncouple double or triple requirements within one competency or general education requirement. The general education requirements followed the state general education model and allowed students to choose between math, science, and technology in the associate of applied science and applied science degrees, yet the regional accrediting association required all three. I had each program mapped to identify core competency and general education requirements in both the general education and the career course requirements; the complete array of competencies could be satisfied through each program.

The preparation of the plan was a nine-month long process that began during Dr. Day's tenure. I brainstormed several scenarios with her over a period of months. I suggested offering several possible scenarios to the community for their selection, anticipating greater buy-in with a process faculty chose. I felt it was important to appeal to the faculty constituency to avoid conflict and offer a starting point for negotiating a workable compromise (Fisher & Ury, 1991). Dr. Day asked me a poignant question, "Which scenario is the best for the institution?" Analyzing the pros and cons of each, I answered her question and she said to only present the single option anticipating the community would embrace the best model with modifications. Other sensitivities to the political frame were the mechanism used to present the plan to the college community, and to receive endorsement for the plan from the 2003 Core Competency Committee Chair.

Being sensitive to faculty's time, I utilized Bolman and Deal's (2003) human resource frame, I had Sally review each of the 146 general education courses to

determine the student learning outcomes in each syllabus reflected the general education learning outcomes, as well as map general education requirements in each program. Faculty were provided support in the effort, and the process respected the faculty's resource of time. Sally worked with the academic division deans in the 25 courses that did not articulate a related learning outcome to comply. The plan was reviewed by the General Education Committee, who played devil's advocate to stress the importance of clearly outlining how the plan would affect faculty. Wording in the plan was changed and when the co-chairs of General Education present it to the college community, I have my guiding team (Kotter, 1996) and anticipate fewer bumps in the road to the final implementation than would have occurred without a streamlined process and well justified and simplified plan for the faculty to consider.

My fifth goal is to ensure the quality of online classes meet the college's standards of quality by providing academic division deans with professional development focusing on the review of distance education offerings. I arranged for my director of the Teaching and Learning Center to conduct two training sessions for the academic division deans focusing on a nationally recognized method of evaluating an online course, Quality Matters. All six deans attended the first session, and five of the six deans had taught online and had completed an online training and were familiar with Quality Matters. As a result, the agenda was abandoned to discuss policies regarding online offerings. One dean was frustrated that one of her faculty would not allow her into her course to review it. The other deans discussed the issue and came up with the solution of not allowing the faculty to teach online classes in the future. The goal of the training was not met because the deans did not need it, what they needed was assistance getting into online class. My

flexibility with the agenda is an example of relinquished control, resulting in the favorable outcome of the development of a policy, albeit informal, enabling deans to evaluate online courses. The second meeting was cancelled; instead I am meeting with each dean to discuss their online course review findings.

My sixth goal is to increase the number of articulation agreements and dual enrollment section offerings. Articulation agreements are agreements between the college and a baccalaureate institution in which the baccalaureate institution agrees to accept credits from students who complete a prescribed program plan. Dual enrollment refers to high school students who take a college course that fulfills both a high school requirement and leads to earning college credits. Arlene, the director of Transfer and Articulation Resources, is one of my easiest direct reports to manage; therefore this goal appears to be relatively easy for me to achieve because I can leave the task to Arlene. However, I recognize the difficulty of increasing dual enrollment; families are not able to pay the tuition. However there is another model in which a qualified high school teacher is approved by the college as an adjunct and is paid by the high school. Students pay a deeply discounted tuition rate, because the high school bears the cost of the instructor and facilities.

There are multiple challenges with establishing the dual enrollment program; one is finding a masters prepared teacher to be approved as an adjunct. It was the college's policy to maintain the same standards for dual enrollment instructors as the on campus courses. Additionally, the college's dual enrollment program was in competition with several prestigious universities who offer dual enrollment courses at deeply discounted prices. A particular magnet high school principal refused to sign a dual agreement with

Thompson Park; because he felt his students should be exempt from the placement test. He argued, his students were superior and possessed college readiness skill. I took it upon myself to speak with the principal. I knew the difficulty Arlene and her staff had in the past with the school and felt it was my responsibility to help. I met with the principal several times and realized his greater concern was the college's requirement for the high school dual enrollment teacher to hold a master's degree in the college course she taught. We worked well together and three of his teachers were approved to teach a dual enrollment course.

But, after several months of negotiations and review he declined Thompson Park's offer to deliver dual enrollment classes at his high school, instead opting for dual enrollment with a university. I was disappointed but understood firsthand the difficulty Arlene and her staff were having becoming more knowledgeable about my staff's job. As much as I would have liked to increase the enrollment, I am comfortable with my decision not to succumb to the pressure to lower the college's standards. Holding the line on college standards ensures the integrity of Thompson Park courses and benefits all Thompson Park students. Subsequently, another magnet, selective high school requested special treatment for their students to take dual enrollment classes without taking the basic skills test. Perhaps there is a way to allow these select high school students to take a college course without demonstrating college readiness, but before I consider a policy exception I need research whether these students are likely to be successful in a college level course.

My seventh and final goal is to complete my dissertation, focusing on being a more effective leader, which is related to all my goals. To achieve this goal I needed to

acquire the habits of disciplined analysis, focus, clear writing skills, and development of reasoned arguments that serve both this and every other goal. One action I took, mentioned earlier, was the relinquishment of control over staff's projects to the staff member, freeing up meeting time to accomplish my other responsibilities.

The program has nudged me to try new techniques, and view situations through multiple lenses. Working with two different executive vice presidents during that time afforded a variety of effective management styles, and has augmented my educational experience enabling me to question and think differently. I thank Dr. Day for modeling intellectual curiosity about people and process that gave me the confidence and courage to tackle the difficult issues such as general education/core competency assessment. She was truly a transformational leader, strengthening the college by implementing existing structures and redesigning structures that were not effective, such as the academic leadership structure, by replacing faculty leadership positions with administrative academic dean positions. Dr. Knight was instrumental in empowering my actions, forcing me to acquire a habit of disciplined analysis and the skill to development reasoned arguments.

Throughout the process I became more independent and explored new approaches to routine responsibilities. I was more decisive in my actions, did not look for others' approval, but instead attended to the product. I reevaluated my aspirations, narrowing them from an unrealistically long wish-list, to a few essential goals. I channeled my energy to achieving the limited goals with a renewed sense of commitment. My strategy was to identify what goals were essential, and anticipate possible scenarios in addition to the desired outcome, and readjust my expectations to be more realistic and then proceed.

The process was humbling in that I was giving up some goals and at the same time was gratified with the feeling of inner peace I gained. I maintained my faith and determination and often recited the serenity prayer: “God grant me the serenity to accept things I cannot change, the courage to change things I can and the wisdom to know the difference.” The serenity prayer is a guideline for letting go of false reality and relinquishing control of those things not within my power. Letting go of illusions is not giving up or giving in, but acceptance. Accepting circumstances beyond my control not only gave me peace, but opened the door to my personal growth by adding new perspectives to my view of circumstances.

Growth

The four column journal structure I adopted for self-reflection was a valuable tool in my growth process. My writings were factual descriptions of my relationships and activities. I eventually found a structure that suited my factual inclination and encouraged commentary, serving as the basis for my critical thinking exercises, and personal reflection. The review of my entries reinforced my inquisitive non-emotional reaction to situations and observation of others noting their strengths and flaws. I wrote about leaders I encountered on a daily basis and their strategies and communication skills. I favored servant leaders.

My administrative assistant is the epitome of a servant leader. Unofficially she holds several titles: curriculum administrator, curator of annual department plans and reports; program review expert; schedule development analyst; catalog editor; and Perkins funds gatekeeper, among other responsibilities. She is known around college as the person to go to in the academic circle to get an answer or help. Despite her many

responsibilities, she always has time to answer any phone call, or sit with a faculty member seeking help with curriculum forms. She ushers a large volume of paperwork in and out of the office. She puts others' interests and concerns before hers, and is able to do so by knowing what to do and by taking action without delay. She is a quick study and retains every detail of every program in her head. I find her advice invaluable, especially when I am requesting schedule development changes or compiling reports. I have learned to seek her sage advice to temper my exuberant expectations and modify my approach to a variety of issues.

Communication

I used the journal to observe successful communicators' timing and quantity of information they relayed. The best leaders connect with their audiences because they know what is important to them, how to structure their message, how to delivery it, and the quantity of the information to be conveyed (Maxwell, 2010).

I strive to incorporate those leaders' sense of audience and wisdom in my communications. Dr. Day often used alliterations to make her point, catch her audience's attention, and most importantly have her idea "stick," meaning her message would be retained by those who heard it. During the journey I adopted one of her three-word alliterations describing broad behavioral characteristics that have guided my thoughts and actions over the past year: anticipate, agile, and adoptive. I strove to employ these characteristics in my seven goals previously described. I anticipated faculty responses to combining core competencies and general education requirements respecting the culture. I was agile with the academic deans' training session, allowing the agenda to be modified

to achieve a more relevant goal; and I adopted my style to supporting two different executive vice presidents.

Albert Einstein recommends “Everything should be made as simple as possible but no simpler.” Simplifying the complicated takes away stress; writing this dissertation is a perfect example. I struggled with the organization and presentation of all the material, once I was able to articulate appropriate research questions, I was able to organize the information. In my job, information needs to be managed, dissected, and disseminated at appropriate times and quantities to connect with those who will need it to achieve a goal (Maxwell, 2010). Maxwell recommends understanding the listener and providing added value. Reflecting on past my practices, I realize that I am a better one-on-one communicator than a group orator. I am working on improving my meeting presentations, by narrowing my message to the essential components before the meeting, focusing on the message, and anticipating reactions. I have been using my journal to articulate my essential message ahead of time.

One such example is with my director of Adult Basic Education, Chris. In the past, Chris operated independently. He held a leadership position in the administrators’ union and conveyed a strong sense of entitlement. He is one of my two direct reports, whose office is at a higher education center 12 miles away from mine. I used his evaluation discussion as an opportunity to communicate my expectations of his performance. Previously my expectations fell on deaf ears, but I captured Chris’ attention when he was unhappy with my annual evaluation of his performance. I indicated he “met expectations;” he anticipated he would “exceed expectations.” Anticipating his reaction, I referred to his goals carefully crafted with him the year before. He had been provided

ample resources, but failed to perform beyond a minimal level. He met the Adult Basic Skills grant submission deadlines and quotas, which were part of his job responsibilities, but could not demonstrate the depth of student learning which we established as a goal.

Chris understood the evaluation process, as he was a member of the committee that designed the evaluation forms and process. The evaluation process served as a tool to set goals against which to measure performance. I anticipated Chris' reaction to his evaluation and had predetermined expectations he could not dispute. This year Chris is more attentive to his goals and we discuss his progress toward them regularly. Additional grant money Chris' program received this year afforded an opportunity to work closely with Chris, in which a part-time position was established to work directly with instructors and students to set learning goals and monitor progress toward them, supporting the achievement of Chris' goals. Proceeding with confidence, I was able to move out of my comfort zone and connect with Chris to move toward the evaluation of student learning in his grant program. I can be true to my values with my effective communication skills as well as develop my staff's skills as a servant leader would.

Courage

Stronger communication, anticipation, critical thinking, and organizational skills have made me more courageous. After four years of personal and intellectual challenges, I feel that I am in a different place than I was in September 2007. As Dorothy in the Wizard of Oz said, "I'm not in Kansas anymore." It has been a relatively fast paced intensive expedition with high standards and expectations; one that stretched my aptitudes and growth similar to Senge et al.'s (1999) core premise to profound change. They postulate that significant change can only occur when we change our way of

thinking. Otherwise, the same actions are doomed to produce the same old effect. I have the courage to question the status quo and upset the peace to search for a new process.

As mentioned earlier, I take advantage of external situations to help make my case as I did with Chris, employing Kotter's (1996) sense of urgency to effectuate change in the Adult Basic Skills program. I did muster the courage to discuss changing how he ran his department for the past 10 years. His focus has always been on meeting the number of students who attended at least 12 hours of instruction, as the grant requires. My goal has been on students' success in the program measured by their progression to a higher grade level and ultimately passing the GED test. It took courage to confront the director, who is several years my senior and who holds political power as the union president**.** When he first started to report to me, he was my source of information regarding the program. He assured me that the only thing that mattered was that the number of students being served complied with the grant requirements. "Besides," he would tell me, "the students don't pay and they are not required to attend. How can the instructors be responsible for the students' success?" As I became more familiar with the program through research, and discussion with other programs in the state, I questioned Chris regarding his hiring and supervision practices and had him modify his instructors' schedules based on student attendance.

The Workforce Investment Board granted additional funds to expand the program to 200 additional students. With the help of the additional grant money I was able to convince Chris to direct his attention to student success, which was as important to me as was the numbers of students who were served. He has made student success a priority. Together Chris and I designed a contract the students sign articulating their goals and

responsibilities to achieve them. The student contracts are the basis for an early-warning system to identify students who are not attending and may need additional assistance.

Servant Leadership

Unlike my initial impression, the term, servant leader is much more than a boss that does her staff's work. The servant leader is one who enables others to grow through their development. My personal values and beliefs fit nicely into Whetstone's (2002) description of Robert Greenleaf's servant leader. The servant leader is one who focuses on helping others, valuing all persons with dignity, helping others to exercise their personal subjectivity in a morally responsible manner, and to build a community with full participation, and solidarity (Greenleaf, 2002). Previously, I thought I had some components of transformational leadership in my platform. Transformational leadership is the ability to make a positive difference. My attraction to transformational leadership was primarily motivated by aspirations of fulfilling the community college mission more than my actual influence.

The servant leader, on the other hand, makes service to others her first concern with a strong belief that everyone is equal, including the leader with the rest of the team. Servant and transformational leadership do share many of the same dimensions. Both seek to change followers into servant leaders who other individuals may follow (Couto, 1993). Servant leaders value the dignity of each individual and transformational leaders raise the level of human conduct and ethical aspirations based on moral principles (Burns, 1978). Transformational leaders and followers are engaged to raise one another to higher levels of motivation and morality. Both models of leadership embrace my value of respect for every person.

My servant leadership style naturally evolves from the satisfaction that I derive from supporting others. As St. Francis's prayer indicates, "it is in giving that we receive." Each day I strive to be an instrument of God's peace. Helping others is a selfish act for me, because it is so personally rewarding. Balancing my propensity to help others with my individual responsibilities is a constant challenge. The balancing act has become easier to achieve by understanding how my internal tug-of-war between service to others and job responsibilities influences my behavior.

Respect and responsibility to those I serve, beckon me to be a teacher. Greenleaf's (2002) definition of a servant leader is one who enables others to grow through their development. One example of my misdirected servant leadership style is from one of my earliest leadership roles as Business Division Chair. At budget preparation time, I would prepare each department's budget even though the budget preparation was the department chair's responsibility. I succumbed to the culture at the time avoiding meetings in which one or two department chairs would claim that the budget forms were ridiculous and completing the forms took them away from their important work with students and adjuncts. They would contend that they never got what they asked for, and did not have the time for budget development. I could not dispute their contentions and often took care of the budgets on my own. I was a servant not a leader, because I never earned the respect and followership of my department chairs.

I have modified the execution of my leadership style regarding budget by reviewing my expectations and the required forms with my reports; together we set the department's budget priorities based on an understanding of individual unit's needs. As a unit, we strategize ways to satisfy those needs within the context of internal and external

influences. The open dialog leads to greater understanding of operations in areas outside of theirs and on occasion creative solutions in which one department can help another. The most significant result has been the paring down of budget requests to essential needs, saving preparation and review time and reducing disappointment. For example, one director relinquished his travel money so another could attend a conference closely connected to one of her goals. The staff's engagement minimizes budget frustration and disappointment from not being funded for many items in an unrealistically long wish list.

The budget process discussions embody the collaboration pillars of Greenleaf's (2002) servant leadership characteristics. The cost of spending additional time upfront garners positive feeling, trust, and ethical behavior. Collaboration and listening are the bases for the development of trust and sets the tone of ethical and civil behavior through mutual respect and understanding. Lasting solutions are more likely to occur when staff work collaboratively to chart directions for fulfilling their responsibilities. Trust is built when all stakeholders have input into the decision-making process. A servant leader inspires her followers' trust through consistent actions based on a set of core principles.

Trust

Another more challenging area where I need to develop and maintain a relationship of trust is with the faculty whose assistance I need to fulfill my responsibilities related to curriculum, assessment, and schedule development. Faculty report of the academic division deans, who report to the executive vice president; I have no formal authority over faculty or deans, but serve as a resource to both. Without their trust, they are likely to turn off any of my requests in which they have no input or control. Therefore, my consistent message of making decisions for the benefits of students is not

always popular with faculty when the decision does not comport with the faculty's wishes. Trust is not easy to earn, and in the case of schedule development, takes months before the results are seen, but well worth the effort as faculty hold a great deal of power to make or break an initiative. Faculty who have a high level of trust are more likely to partner in the development of good structural design and procedures. When faculty need to embark on a new venture such as assessing student learning, they are more willing and likely to learn having trust in the administration's request to develop a new skill and employ a new process. Most importantly, the faculty are more likely to contribute in a positive way to the fulfillment of the strategy, because they own it, understand it, and believe in it.

I am wise enough to know that I will not be liked by everyone, and some will dislike me. I am able to live with that. I am also wise enough to realize that not everyone will respect me. I can also live with that, but not as readily as I can live without the popularity factor. I strive to develop trust with all those with whom I interact. I want them to trust that I will do what is in the best interest of students and the college and not maliciously hurt any student, faculty, staff, or administrator. The trust factor I regard most highly is confidentiality; I respect an individual's privacy. I avoid gossip and set the record straight whenever the situation arises. I pride myself on my sensitivity and trustworthiness. On occasion my commitment to confidentiality has lead to chastisement from others for withholding information. The reprimand is palatable because of my promise. I am cognizant of my responsibility to guard a confidant's trust and discomfort if the information leaked, and my greatest fear is the confidant's disappointment in me if I were to betray my word.

Trust is born of integrity; it means that I will do what I say I will do. Faculty have to believe that I will be true to my word. Likewise, I will engender the same commitment in them. Therefore, I must be certain that I can deliver on my promises and honor my agreements. Experience has taught me that I must think about the possible permutations of outcomes when making promises and commitments. Achievement of trust will be my continual goal.

Encouragement

As is characteristic of a servant leader, when given the opportunity I acknowledge the work of my staff as a sign of my appreciation and as a form of encouragement to continue to engage in innovative and productive practices. The recognition underscores the value of someone's work and the benefits to the college and students. Added satisfaction comes from thanks sent through recognition in public acknowledgement. Bi-weekly, I send a summary report of significant activities to the Cabinet and acknowledge my staff for the work that they do creating the schedule, working with faculty, coordinating new partnerships, and handling difficult situations. The roundtable reports are posted for the college community to see and on occasion will be included in the president's report to the board. My staff expresses their appreciation to me when they see their name in print.

The Community College Culture

Bergquist and Pawlak (2008) write, "One must understand and appreciate one's own institution to be an effective academic leader" (p.70). Community colleges grew out of the elementary and secondary school systems and due to fiscal pressures and increasing numbers of part-time faculty a managerial culture evolved (Bergquist &

Pawlak). Many of the early community college instructors were trained as teachers and as such, were skilled educators as opposed to researchers found in four-year institutions and universities. The faculty were also accustomed to the elementary and secondary schools managerial culture. Managerial cultural is characterized by a well-defined hierarchy with clearly defined roles, outcomes, and delegation of responsibilities and clarity of communication (Bergquist & Pawlak). Within the community college area the managerial structure manifests with clear curricular guidelines, defined student competencies, and criteria for identifying performance.

Over time community colleges have become major components of the American higher education system and are recognized as viable institutions of higher education. The founding faculty retired and newer faculty joined the institutions with experience in the traditional collegial culture as students in traditional four year institutions, in which autonomy and academic freedom were highly valued, and faculty had a strong voice in governance. As the community college matured and new faculty with backgrounds different than the origin faculty from elementary and secondary ranks populated the community college faculty ranks, there was a cultural mismatch.

Birnbaum, as cited in Bergquist and Pawlak (2008), was concerned that intransigent faculty blocked efforts to reform higher education by protecting their own interests, and academic managers lack courage to stand against them. Hence Birnbaum lamented the managerial culture that is efficient and effective for business and industry, is stifled from doing the same for higher education. Today's community college leader has to be a skilled manager and leader. She needs to be able to manage enrollment, budgets, and be accountable for all aspects of her responsibilities while she influences people

based on control of valid information to guide the institution in the achievement of its mission (Bergquist & Pawlak, 2008). Tight budgets favor the highly structured managerial culture as institutions are forced to reduce costs and hire more adjunct faculty to educate our students.

Bergquist and Pawlak (2008) suggest students in community college need to be efficient and competent learners in the environment to achieve the specific skills, knowledge, and attitudes they need to get a job and improve their economic status. The community college leader will succeed in helping students with data and not charisma in a predominately managerial culture. Institutional research has become increasingly more important for reliable information on student attrition and employment projects. Leaders would be well served fostering a developmental culture that shares common characteristics with servant leadership, such as faculty development and faculty and administration's collective awareness and problem solving of the institution's problems. As a community college leader I have the potential to have a lasting impact on students and faculty; one such example is the goal of this action research to improve student success in online classes.

Institutional Change

Through my action research project, I have the potential to improve student success through the Teaching and Learning Center (TLC). In a small but significant way, I have the opportunity to influence the way faculty approach their craft of education and student's educational experience. The Director of the TLC, Nicole, is one of my direct reports. I leveraged the college-wide undertaking of developing a 10-year Educational Services Master Plan (ESMP) to advance my vision to refocus the Center's operations.

The ESMP was a college wide endeavor to restructure the TLC's operations and its influence on online and web enhanced classes. I envision the TLC as a resource for faculty to enhance their instructional skills to engage students in effective learning activities. The Center would contain a repository of effective teaching practices and provide an environment for innovation. Over 200 faculty and staff worked on the ESMP over an academic year. There were four major chapters with multiple subchapters, each with a set of recommendations to achieve the sections' goals. The first chapter is Teaching and Learning and the first section is "Curriculum and Program Development." The first recommendation in the first chapter of the plan calls for the examination of the mission of the Teaching and Learning Center directing the Center's attention to embrace emerging pedagogies. It was the perfect catalyst to move the discussion I have been having with Nicole for the past year. The ESMP maps a course for the achievement of my vision for the Center over the next decade.

Nicole has an excellent rapport with faculty who teach online courses. She delivers the online training certification course each online instructor must complete and she or one of her staff spent hundreds of hours assisting and faculty in the design and development of their online courses. The director ensured that online faculty's needs are met through the backend administration of the course learning management system. The administration includes populating the class with the students' names and supplying online students with their passwords and identification codes to access their courses. She ensures all content is loaded into the course shells and is backed-up and archived at the end of a term. She guards against unauthorized access to a course, ensuring only registered students are in the class. Her protection of the faculty control created a

problem when a dean was restricted access to an online course to evaluate an online instructor. The online instructor did not want the dean in her course and Nicole valued faculty trust so strongly it lead her to react in a way that was not congruent with the college's best interest. Similarly, Nicole's allegiance to the faculty has restricted the number of faculty that the Center can serve and stifled the quality control.

The faculty who wrote the ESMP recognized the Center's potential, noted at the time student demand for online classes was expanding, faculty's technological skills were also expanding. There was less need for designing courses and more need for pedagogical training and skills to engage and retain online students. The faculty and staff who researched teaching and learning wrote about emerging technologies and the need for faculty support to learn about and develop effective teaching practices. The Teaching and Learning section of the ESMP was the impetus for the director to entertain expanding the Center's service to the teaching community of the college. She regularly requested additional resources to expand the Center's services, but did not consider restructuring the Center's operations.

During the time the ESMP was being written, a new position at the college was established, Executive Director of Technology. The position was created to assist the college in the management of all technology needs and reported to the Administration and Operations executive vice president not Educational Services. The new executive director was from a culture in which faculty were responsible for the majority of their online course administration and provided much less support. The executive director suggested several changes to the TLC including the management of the learning management system. A bold recommendation was for the executive director to take

responsibility of the administration of the course management system and establish a course shell for every course at the beginning of the semester. The TLC director chose the opposite approach and only established shells for courses faculty requested, otherwise students would be in course shells without faculty. Only faculty who went through course management training were given course shells and many faculty had not gone through course leaning management training. They also differed in the amount of support to be provided to the faculty. The faculty written document was the catalyst I needed to persuade Nicole to review the Center's mission. For months I hinted that the Center's mission be the topic of one of the well-attended monthly roundtables, but Nicole felt the topic outside the purpose of the roundtables. After two requests, I anticipated that Nicole would not accommodate my request and asked her for an alternate suggestion. She readily suggested the TLC Advisory Committee, comprised of 20 faculty and support service staff. By being agile and not forcing the issue with an independent, strong-willed staff member, I was able to achieve the objective and an outcome that surpassed my expectations by having a third party group Nicole felt responsible for serving tell her what their wider needs were.

All along the way the leader needs to be thinking of the larger consequences, especially when individuals do not get their way. I have found it effective to acknowledge what is lost when only one option is possible. A celebration of the benefits should immediately follow the recognition of the loss attempting to get even the opponents to recognize the value of the decision.

How My Research Has Impacted My Leadership

I chose the Rowan journey because I wanted to be a better dean; I wanted to exude the characteristics I admire most in leaders: fortitude, passion, fairness, vision, care, and clear direction. I wanted to be able to streamline schedule development, curriculum development, departmental and institutional planning and assessment so the institution could fulfill its mission of providing access to affordable quality education. The coursework was a challenge; its intensity instigated my personal metamorphosis. I proceeded cautiously, venturing into new territory, and was not convinced that I needed to change. It took time to internalize the material and objectively assess my identity; the initial step in reconciling my self-image with the persona I strived to be. It was uncomfortable being a self-critic, or even being a critic.

The college was a fertile learning environment to study leadership characteristics; I observed situations where one colleague was more effective than another depending on the circumstance, whether political, structural, personal, or symbolic (Bolman & Deal, 2003). I was challenged to look through a different lens, and drill down beyond the surface of a situation to find the root cause of a problem. Argyris' (1990) coined the term the "undiscussable" as part of the ingrained culture of ignoring perpetuating chronic problems. Lasting or profound change is only possible when the "undiscussable" underlying cause is addressed and a shift to systems thinking is achieved. That is the same premise in Keagan and Lahey (2001) in which an individual is guided through her self-analysis arriving at the core reason for her resistance to change.

Systems thinking, coined by Senge et al. (1999), takes into consideration the synergistic relationship between the individual and the organization and the impact on the

situation. Being able to recognize the inner connectivity between a modification of one component on others within a system prepares me for the potential consequences. I experienced the greatest cultural resistance to change with faculty and staff over issues that were important to them. One example of faculty resistance was changing the class meeting schedule. Faculty resisted, because they did not want to lose their ability to design their preferred schedule as I recommended looking at the schedule from students' perspective. With staff I found skepticism of recommendations based on an "us – them" mentality results in an adversarial ineffective relationships. Similarly, staff were resistant to new uses of technology; they were set in their ways of doing their jobs. Once I began to process the lessons by opening my mind and shedding my façade, the metamorphosis began.

The leadership program and this research project have catapulted the achievement of my aspirations to be the best dean of Academic Affairs that I can be. It addresses my forth research question: How will this research project impact my leadership theory in use? I will respond effectively to external challenges, think imaginatively about the future, and strengthen my relationships so that those I interact with put their trust and confidence in me to help them achieve their goals. I look forward to the road ahead. Armed with my enhanced analytical skills, I have set my sights on improving my focus and discipline. I have studied those traits in my instructors, classmates, and effective leaders in my own institution. I have observed that they are masters of staying on point and simplifying the complex; they are disciplined and as a result are able to achieve their goals. I will be served well by further developing those traits as I continue to grow and expand my horizons.

I will continually strive to balance multiple roles to achieve my goal to be a good leader and ethical professional. I understand the need to run the scheduling responsibilities of my job like a business so that students have affordable access, and the need to act like a leader to motivate my direct reports and faculty to achieve strategic goals. As a leader, I am often confronted with weighing individual rights against the organizational impact of my actions. Armed with increased self knowledge as an explanation of my past actions and guide to future behaviors, I will work every day to become a courageous, effective, ethical decision maker. This journey has been instrumental in the examination of my values that will guide me in my development of technical competence in ethical decision-making.

New opportunities will test my ethical decision-making skills, as I continue my leadership journey. Decision-making will become more efficient and comfortable with practice and courage, helping me to move beyond my comfort zone and engage in dialogue to understand others' perspectives and communicate the reason for my position. For example, I need to embrace my work with Chris to dissect the grant system to better serve adult basic education teachers to add the vibrancy that needs to be inserted into the program. The leadership program has taught me to look at structures, power, rhetoric, and sift through all the discussions to reflect on the importance of what is said and unsaid. Confidence in my choices will increase, and less time will be spent wondering whether I made the correct decision. I will be more comfortable in conflict and continue to expand my use of different philosophical constructs as I build credibility, respect, and trust in my leadership. The most important challenge will be putting my biases aside and mustering the courage to approach each decision ethically.

I will continue to face new challenges. Sometimes the challenge will be to arrest an unacceptable practice and replace it with an appropriate alternative. Others will be to encourage faculty to revitalize their curriculum to reflect technological changes. Yet another may be to convince a department chair to limit budget requests to necessities and not wishes. Communication and understanding the impact on those involved is a prerequisite to engaging the faculty, staff, or chair in the new process. Integrity and courage will serve me well as I persist for what is right, despite the fear of opposition.

CHAPTER III

LITERATURE REVIEW

Introduction

The power and pervasiveness of technological advances have transformed the economy and the workplace. Menial repetitive jobs have been replaced by computers. Transportation and communication advances have opened world markets, and manufacturing is no longer the staple of the United States economy. The 21st century workplace is knowledge-based, as opposed to physical-skills based; employees communicate electronically via email, make calculations with spreadsheets, analyze problems with data visualization tools, and make presentations with PowerPoint (Collins & Halverson, 2009). Technology dominates the work of most professionals; job seekers have greater need to go to college to improve their skill sets to gain or maintain the skills needed in the 21st century workplace (Office of Educational Technology, 2010). Good paying jobs are knowledge and technology based, making lifelong learning an imperative (Garrison & Anderson, 2004).

Indirectly and potentially directly, employers' needs for technologically savvy 21st century skilled workers have and will continue to impact education. Employers have a vested interest in technology-based education to produce their future employees, who they expect to be facile learners in the knowledge economy. Employers are influential stakeholders in the educational system to produce their future workers. They are developing their own educational programs, such as Wal-Mart has done, unable to satiate its demand for workers with 21st century skills from the education system. They will grant 25,000 associate degrees in the next five years through a partnership with American

Public University, a regionally and nationally accredited online university (Clifford & Rosenbloom, 2010).

Kolowich (2010) points out that technology has impacted education with the growth in online enrollment, electronic textbooks, and digital libraries. The power and pervasiveness of technology is responsible for the proliferation of online courses, additional content, and the need for more postsecondary education in the 21st century than in the 20th century. The U.S. Department of Education elaborates on technology's impact on education, suggesting 21st century competencies such as critical thinking, complex problem solving, collaboration, and multimedia communication be woven into all content areas. These competencies are considered necessary for lifelong learning, a basic skill of the new workforce, so that workers are able to adapt to the rapidly changing world (Kolowich).

New technologies have changed educational delivery throughout history. Online learning is the current day form of distance education, but distance education has been around for centuries. Distance education had its beginnings in the fourth century BC, when Plato committed his thoughts and ideas to writing (Bonk, 2009). In Plato's time, the written word was the "new" technology. Previously, education was delivered by a student and teacher in the same location, where the teacher imparted information and knowledge to the student. Anyone who was able to read, and had access to Plato's writings, had the ability to study the master's lessons even if the two never met. The student would be self-taught, and many educators would contend that the reader might be knowledgeable, but not educated. The student might be able to recognize and describe content, but not necessarily be able to think critically because the student was not challenged to develop

her thoughts or modify her perspectives as would be the case in a traditional classroom setting (Bonk). Each technological innovation that shifted the education paradigm was met with similar skepticism.

Higher education responded to the popularity of the latest technological innovations with an increase in the number of online offerings. During the fall 2008 semester, 4.6 million college students were taking at least one online course; that is one out of every four college students were registered in one online course (Allen & Seaman, 2009). Allen and Seaman point out that the growth in online course enrollment outpaced the growth in face-to-face enrollment from 2002 to 2008 tenfold. During that period, the number of students taking at least one online course grew 19% annually, compared to a significantly smaller 1.5% annual increase in overall higher education enrollment (Allen & Seaman, 2010). Tallent-Runnels et al. (2006) believe that enrollment in online classes will continue to increase at a rate of 33% per year. Allen and Seaman predict a positive, but more modest growth for statistical reasons. Maintaining a double-digit growth rate on a larger base requires a larger absolute number that is more difficult to achieve.

Colleges are challenged to offer enough online classes to satisfy the demand from the new generation of students who grew up with computers, cell phones, and the Internet. The Instructional Technology Council reports that 67% of their community college survey respondents were not able to meet their students' demand for distance education offerings in 2009 (Lokken, 2010). There is widespread agreement among the 2,500 institutions included in the Sloan survey in 2007, that higher fuel costs and the educational pursuits of working adults will result in the continuing proliferation in online enrollments (Allen & Seaman, 2008). The anticipated continued growth in online

learning underscores the importance of investigating why online students are less likely to successfully complete an online class compared to a face-to-face class, and how to increase the successful completion rate. For the first time the decennial higher education reauthorization act is heading down that path, setting forth the rules and guidelines that educational institutions must follow to be eligible for federal financial aid for their students taking online courses at their institutions. One can surmise the federal government's interest is an indication that online courses are more than a trend and that the number of offerings will continue to grow.

Student Success

Online student success rates are under scrutiny with higher attrition and failure rates in online courses than traditional face-to-face courses. For purposes of this literature review, success is synonymous with completion of a course for academic credit. Therefore, a student who completes a course with a grade of D or better is considered successful. Administrators at 139 institutions who responded to the Instructional Technology Council 2008 survey report that 65 percent of online students successfully completed their online class in comparison to 72 percent of students in face-to-face classes. The online student success rate trails the overall college success rate by 10 to 20 percentage points (Allen & Seaman, 2008; Carr, 2000). Frydenberg (2007) examined the difference in persistence rates between face-to-face and online classes. He found that online students dropped their class before or at the start of the term at a greater rate than face-to-face students. Based on his observation, there was no significant difference between online and face-to-face drop rates after the start of instruction. He concluded that the difference in instruction between online and face-to-face courses was unlikely to be a

major influencing factor in the student's decision to drop, implying that other factors are responsible for the high rate of withdrawals and failures in online courses.

Students' completion rates in online classes have lagged behind their traditional counterparts for years. Online completion rates are improving, but the disparity in completion rates remains; in 2002 the online completion rates were only at 50 percent (Lokken, 2009). Completion rates cannot be attributed to a single factor; rather the interplay between design, delivery, and student characteristics is likely to paint a clear picture of why some students succeed and others do not.

Student Engagement

The literature on online student engagement echoes proven pedagogical principles of effective face-to-face instruction (Waterhouse, 2005). An engaged student is more likely to learn and be successful because of the amount of time she spends with the material (Means, Toyama, Murphy, Bakia, & Jones, 2009). Student engagement is influenced by the student, the instructor, and the course design. The asynchronous nature of the online learning environment exacerbates the challenge of engaging students in an online instructional setting (Moore, 1994). Ikpeze (2007) observed that collaboration in electronic discourse was effective in engaging students in the e-learning environment. Students value the quality and quantity of interactions and exchange of ideas.

Sims (2003) studied student expectations of engagement in online learning. He found increased student interactivity when the instructor actively communicated with, and engaged the student in learning activities. He suggests that interactive learning environments are enhanced when the learner takes an active role. Larreamendy-Joerns and Leinhardt (2006) view learning as an epistemic engagement in which the student

simultaneously acquires facts and concepts while learning the syntax of a domain through online communities. The online environment is conducive to group work, nurturing student engagement, but assigning students to workgroups does not guarantee student engagement and learning. Reflective learning and co-construction of knowledge are not inevitable consequences of student-to-student interaction, highlighting the importance of student readiness to learn in an online environment and the instructor's ability to engage the student in the learning process (Larreamendy-Joerns & Leinhardt, 2006).

Effective online learning requires student-teacher interdependence. Instructors can design more effective online courses when they first identify student needs. Wonderwell and Zachariah (2005) define technology interface as learner-learner interaction, learner-instructor interaction, and learner-content interaction. Yet social interaction with faculty and among students is important. Wonderwell and Zachariah found the structure of student and instructors' roles and tasks foster or impair student success. Additional research on how groups and learning communities develop has the potential of improving online student success, as will research on student characteristics and behaviors.

Motivation

Students' motivation, including incentives to learn and earn credit, influence student engagement. Lim (2002) defined motivation as the organized pattern of goals, beliefs, and emotions that drive an individual's actions and behaviors. Lim described six factors of motivation that influence online performance: reinforcement, relevance, interest, self-efficacy, affect, and learner control. Allen and Seaman (2010) hypothesize that the lower completion rate is due to complications arising from a student's motivation for taking online courses. Many online students enroll in online classes for the flexibility

they have in selecting the time and place they study. Because a student sets her coursework schedule in an asynchronous online class, the online class may be her only access to a college degree because of her work and family obligations. The work and family pressures that drive a student to take an online course may be the same pressures that force her to withdraw from online courses at a higher rate than the overall student population (Allen & Seaman, 2008).

Three research studies cited in the Tallent-Runnels et al. (2006) meta-analysis found that an online student's ability to set her own pace was a strong incentive for students to select online classes. In self-paced classes, online student satisfaction and engagement were improved because these students valued the ability to select the order of the material studied, the time-on-task they spent, as well as when and where they studied and learned (Tallent-Runnels et al., 2006). Lim's 2002 study of American and Korean online learners found American students identified course relevancy and learner control as the two top motivators of course completion resulting in student success.

State of Research in Online Learning

This literature review examined writings in several broad categories about distance education: descriptions of distance education, the growing popularity of distance education, the online environment, the online student, and the future of online education. Focus was placed on research studies regarding online students' behaviors and characteristics to frame the research question whether student behavior and characteristics impede student success in online courses. Course design, the technology, and the instructor directly impact the student's online experience, but the literature search focuses on student characteristics with the intention of informing the research goal of

developing strategies to apprise students of the behaviors and characteristics successful online students exhibit.

Despite the lower completion rates, studies on student success in online classes are sparse. As the investigation unfolded, it became apparent that the proliferation of online offerings has outpaced research on characteristics of online students and their success. Often, data collection in published studies was anecdotal and methodologies employed did not adhere to rigorous research protocols limiting the usefulness of the literature (Means et al., 2009). Many unanswered questions remain. Why do lower proportions of students complete online courses than face-to-face courses? Who is best suited for online learning? Is there a correlation between students who are successful in face-to-face courses and their online performance? Does the online course structure make a difference in student success? What student characteristics and abilities are required for online success? Are there variables that will predict online learner success? Does the literature shed light on student behaviors that influence online completion? Can these behaviors be learned? This study will focus on the literature that informs online student performance related to student characteristics including readiness for online classes.

Results from meta-analyses of empirical studies on distance learning were helpful in scouring the pool of research pertaining to online students. A meta-analysis is a study of different research projects on the same topic in search of commonalities and conclusive evidence to support theories of practice. Bernard et al. (2004) conducted a meta-analysis of the comparative distance education literature between 1985 and 2002. Retention was one of the three variables analyzed in 232 studies examined. There was a small but significant effect in favor of classroom instruction over distance education

classes. The overall difference between distance education and classroom instruction was statistically insignificant, but inconclusive because of the wide variability in results. Many applications of distance education outperformed and many underperformed their face-to-face counterparts (Bernard et al.).

In another meta-analysis, Tallent-Runnels et al. (2006) examined close to 70 published research reports on online course environments, learners' outcomes, learners' characteristics, and institutional and administrative characteristics. They found the research supports the importance of learner-focused course design; asynchronous communication seemed to be equally as effective as face-to-face communication, and students liked the self-paced structure available in the online medium. In general, these researchers were unable to differentiate student learning outcomes between face-to-face and distance learning modes. Although the research studies reviewed were conducted in the recent past, between 1994 and 2004, the results may not be effective in predicting future performance, because so many factors related to online learning have changed in the past 10 years. Students are more technologically savvy; the technology is more sophisticated and user-friendly, and online instructors are more experienced in the online medium (Collins & Haverson, 2009). Tallent-Runnels et al. recognize that they reviewed research studies that were descriptive and exploratory. Regardless, the studies are valuable for highlighting the issues that the educational community needs to examine in future rigorous research studies.

Some of the recent studies on online learning establish control groups against which to compare the "treated" group of students taking an online course; but still no standard set of research guidelines have been established (Jaggars & Bailey, 2010). The

U.S. Department of Education Office of Planning, Evaluation, and Policy Development conducted a meta-analysis of empirical studies on the effectiveness of online learning in 2009. The Department of Education specifically looked for studies with a control group and a treatment group for comparative analysis (Means et al., 2009). As opposed to the Tallent-Runnels et al. (2006) study, this meta-analysis established a set of criteria to determine whether a study would be included in the analysis. The U.S. Department of Education only included studies of web-based instruction, with random-assignment or controlled quasi-experimental designs, and examined objective as opposed to subjective measures of student learning outcomes.

The U.S. Department of Education meta-analysis combined the results of multiple experiments or quasi-experiments to obtain a composite estimate of the size of the effect, a statistical calculation that differentiates the results from the control group versus the treatment group. In these studies the control group would be the face-to-face instruction and the treated group would be the group that engaged in online learning. They identified 176 online learning research studies published between 1996 and 2008 that used an experimental or quasi-experimental design and objectively measured student learning outcomes. Of that group, 99 had at least one contrast between an online or hybrid learning condition and face-to-face instruction; 44 experiments were based on college level learners or adults receiving professional training that had significant contrasts between face-to-face and online learning. The Department of Education researchers were unable to find studies that met their research criteria that were published before 2004. The later studies utilized more rigorous methodologies, leading one to hypnotize distance education is an important delivery method worthy of researchers' time and interest.

Contrary to Tallent-Runnels et al.'s (2006) findings, Means et al. (2009), the U.S. Department of Education researchers, found "on average, students in online learning conditions performed better than those receiving face-to-face instruction" (Means et al., 2009, p. ix). They attributed the superior online student performance to the finding that online students spent more time in the learning process than their face-to-face counterparts. Means et al. report a combination of both face-to-face and online instruction enhanced student learning as compared to only online delivery. Jaggars and Bailey (2010) question the U.S. Department of Education's meta-analysis results, because Jaggars and Bailey differ with Means et al.'s (2009) assessment of the research quality of the studies selected and the validity of the results.

Jaggars and Bailey (2010) contend only seven studies from the U.S. Department of Education's meta-analysis met the U.S. Department of Education selection criteria. They found that over half of the studies in the meta-analysis did not qualify, because they were short educational interventions rather than full-length courses. They argue one study did not randomly assign students into the control and treatment groups, and that the participants took the pre-test measurement well into the study. Similarly, another study allowed students to self-select between the face-to-face and online classes. Other research flaws noted the omission of reference to attrition, and a 100% completion rate in the seventh study. Overall, the research results are mixed due to differences in populations and methodologies. There is promise for clearer insight on the characteristics and behaviors students related to their online performance based on future research.

Online Student Profiles

The profile of the online learner is becoming more diverse as larger numbers of traditional age students take online classes (Allen & Seaman, 2010). Technology has the power to satisfy diverse learners' needs in multiple delivery formats and activities that engage and empower students (Bonk, 2009). An institution is able to advise and support its students when it knows its students' goals and learning needs. This dissertation is focused on correlating the demographic and personal characteristics online learners exhibit with online student success to develop a strategy to assist new online learners to be successful in a learning medium in which learner success has trailed in-class success.

Researchers have studied student motivation, technology skills, grade point averages, age, gender, culture, prior academic preparation, learning styles, personality characteristics, and other demographic variables (Tallent-Runnels et al., 2006). As discussed earlier, research in this area has no standard reporting requirement, therefore the results and findings are not conclusive; they are based on inconsistent information. The question at hand is "what are the individual factors that distinguish online success from traditional delivery success?" As institutions continue their proliferation of online courses and programs, the academy has a obligation to better understand who its online students are, and whether they are succeeding and benefiting from their online experience (Hartley & Bendixen, 2001).

Each learner presents with her unique set of characteristics. McManus (2000) coined the term "learner profile" when he studied the correlation between learner characteristics and the learning environment. He used the term to represent the catalogue of unique learner characteristics that make one learner different from another. McManus'

list of characteristics includes: prior knowledge of the learning domain, experience and facility with the learning medium, learning style, age, and gender. The American Center for the 1999 Study of Distance Education (ACSDE) at Pennsylvania State University lists skills and dispositions necessary for a learner to succeed in the online environment: basic computer literacy; reading and writing skills; skills in searching for, navigating, and organizing found information; netiquette; self-motivation; independent learning skills; and time management skills (Silver-Pacuilla, 2008). Frydenburg (2007) suggests that the additional skills and behaviors online students need beyond the face-to-face learning skills account for the large online attrition rate. The literature notes that an online student's awareness of how her individual skills and behaviors suit her for the demands will help improve online student success.

Rovai (2003) analyzed several theoretical models of adult learners' persistence in higher education to identify an online student's needs, and to harmonize learning and teaching styles for distance education students. Rovai recognized the typical online student differs from the traditional 18 to 24 year old student, and developed a model to explain persistence and attrition among the nontraditional student population enrolled in online courses during the 1990s. Rovai describes persistence as "behavior of continuing action despite the presence of obstacles" (p. 1) in regard to program completion as opposed to this study's focus on student success being the completion of a single course with a passing grade. Persistence in a program is the culmination of success in multiple courses in a program.

Rovai's (2003) composite persistence model combined characteristics of students regarding their persistence from Tinto's (1993), and Metzner and Bean's (1987) models.

Tinto's theory of retention is based on a two-pronged model that distinguishes factors regarding students before entering college and the while the students are at a traditional face-to-face college. Students' goals for degree completion and job attainment requiring a college education are predictors of student degree completion. Institutional commitment, a student's desire to earn a degree from a specific institution, also predicts a student's likelihood of graduating from that institution (Tinto, 1993). Once a student enters an institution, the student's ability to adjust socially and academically contribute to her persistence in college (Tinto). Metzner and Bean (1987) built their model on a psychological theory based on "student-institution fit," once again in a traditional face-to-face environment related to students over age 24. They suggest academic performance is a function of many variables with academic preparation and motivation being most strongly associated with grades and degree completion.

Rovai's (2003) model of learner persistence in the online learning environment examines student characteristics and skills prior to admission as well as external and internal factors affecting students after admission. This discussion follows Rovai's structure, addressing online students' characteristics and skills related to their persistence and success in online classes. He distinguishes demographic characteristics of age, gender, ethnicity, and prior academic experience from the skills online students need: computer, information literacy, time management, reading, writing, and computer based interaction skills.

Student Characteristics Prior to Admission

Age. The research in the 1990s found that the majority of online students were older than the traditional 18 to 24 year old student (Tallent-Runnels et al., 2006). The nontraditional adult learner, 25 years and older, often struggles to balance work and family commitments limiting her selection of courses that fit her full schedule (Pusser et al., 2007). As a result, the adult learner is highly motivated and focused on achieving specific learning outcomes (Tallent-Runnels et al., 2006). The adult student is interested in improving her skills or securing a job quickly, and cannot afford to enroll in classes for long periods of time, preferring accelerated programs (Pusser et al.). Adults are well suited for asynchronous online learning, because they are generally self-directed and good participatory learners (Huang, 2002). The same factors motivating an adult learner to register for an asynchronous course also interfere with her successful attainment of her educational goals (Rovai, 2003). When family, work, and related financial obligations consume large amount of a student's time, the student might be forced to withdraw or fail the course.

Project Improving Distance Education for Adult Learners (IDEAL) was launched as a research project to examine whether distance teaching strategies increase access to education for adult learners in the informal learning environment measured by student satisfaction in finding information, answering a question, or advancing targeted skills (Silver-Pacuilla, 2008). IDEAL sought to find threshold levels of adult learners' literacy and language proficiency as a prerequisite for independent learning in an informal learning environment on the Internet. Silver-Pacuilla posits self-directedness and active

learning are the hallmarks of successful online learning, regardless of a student's level of literacy and language proficiency.

The age demographic of online learners is shifting. Early in 2000 there were more traditional age community college students (52%) taking online courses than older adult learners; only 47 percent of the community college students taking distance education courses were over the age of 25 (Lokken, 2010). Many of the 226 community college representatives responding to the 2009 Institutional Technology Council survey expect the millennial generation to populate online classes given the Milliennial's reputation for being tech-savvy and technology-obsessed (Lokken, 2010).

The increased number of younger distance education students raises a concern, based on findings that younger students are less confident about their study skills and ability to learn online (Armatas, Holt, & Rice, 2003). While the younger student has grown up with computers as a tool, many have used computers for limited activities such as playing games or instant messaging (Armatas et al., 2003). They conjectured in 2003, traditional age students have not been exposed to computers as a work tool and are significantly more anxious about using computers for educational delivery than are their older counterparts. Furthermore, Frydenberg (2007) found younger students are less likely than adult students to persist in finding help; and students who are not able to find technology help at the start of the course are likely to drop the course in frustration. Kerr et al. (2006) postulate that the younger student is quicker to abort her search for help because she is less motivated to take an online course than her adult counterpart. Seven years after Armatas et al. published research, results may be different, as many traditional age students use computer mediated learning in elementary and high school and course

management systems, and navigation tools have become more user-friendly (Bonk, 2009).

Constructivism. Constructivism is a philosophy of learning in which the learner actively constructs new knowledge based on what she already knows; the teacher does not supply the knowledge. Huang (2002) suggested the constructivist framework suits the adult online student's learning style, as she is likely to have accumulated a sizable knowledge base over the course of her life on which to build new knowledge. Even though, a younger student has fewer experiences and a smaller knowledge base, she may also favor a constructivist framework for learning, as she is familiar with the constructivist based pedagogical approaches widely use in elementary and high schools during the past decade (Hargis, 2001).

Objectivism. Objectivism is a behaviorist-based philosophy of learning supplying direct instruction in the traditional education format where knowledge is stable, and the teacher is the knowledge expert (Hargis, 2001). Hargis suggests some older online participants might favor an objectivist framework, because their prior learning experiences most likely were based on this approach. Students who believe that knowledge is the sum of simple facts may be less likely to take advantage of the hypermedia tools of the online environment and be less successful online learners (Hartley & Bendixen, 2001). Hypermedia tools link a word or phrase in an electronic document or other electronic medium to other related information on the highlighted material. If students favor an objectivist frame, they may see the hypermedia as extra work and not related to the facts contained within the text.

Studies of students taking online classes in 2010 and into the future will inform the hypothesis that younger students are comfortable with learning online. In 2010, the traditional 18 to 24 year old student is comfortable with the electronic learning environment. This generation of learners has been referred to as “digital natives,” because they have spent their entire lives surrounded by and using computers, video games, digital music players, video cams, and cell phones (Gee, 2007). The average college graduate in 2000 is a digital native by virtue of the fact that she spent on average fewer than 5,000 hours of her life reading, but over 10,000 hours playing video games (Prensky, 2001). Navigating new technology is second nature to them as opposed to the previous generations’ “digital immigrants,” who learned to use the technology as adults.

Gender. The percentage of women taking courses online is greater than the percentage of women taking face-to-face classes. The ITC 2009 survey results report that 63% of online learners were female, and predict the female constituent of the total online student population will continue to increase (Lokken, 2010). Many women taking online classes do so to conserve travel time and costs so they can tend to their family and work responsibilities (McSporran & Young, 2001). Females tend to be more successful in online courses than males (Ross & Powell, 1990, as cited in Rovai, 2003). Women and men exhibit differences in communication patterns and sense of community that influence their online performance (Rovai, 2003). The majority of men (and some women) exhibit an independent voice, and the majority of women (and some men) use a connected voice in their online communications. Rovai suggests that learners communicating in an independent voice have feelings of disconnectedness and isolation

adversely affecting their persistence in online courses, explaining why online female learners are more successful than online male learners.

Culture. A student's learned behaviors are attributed to her large and small group experiences defining her culture, and influencing the way she learns (Smith & Ayers, 2006). One can anticipate with forecasts of greater diversity in the total student population, students in online classes will be diverse and present with different cultural learning styles (Kirsch, Brawn, Yamamoto, & Sum, 2007). No single pedagogical style can be expected to satisfy all students' needs. For example, many cultures approach learning from a heuristic context based on a group perspective and others from an individual learning perspective. Online learning may exacerbate inequity and exclusion for students of a different culture if their learning style needs are not built into an online course design (Smith & Ayers, 2006). At the same time, the Internet can minimize instructional bias and create a more equitable environment for learning; skin color and accents are masked online (Hargis, 2001). Student-centered, pedagogically-varied course designs integrate multiple perspectives into the course structure. Educators have the responsibility to develop technology mediated learning experiences that are not intimidating and respectful of members of marginalized cultures. With the diverse pool of online learners, Tallent-Runnels et al. (2006) recommend that course developers pay close attention to the issues of diversity and access.

Prior educational experience. There is one factor that consistently predicts online success and that is previous grades, but it is also the best predictor of success in face-to-face classes (Bernard et al., 2004). Prior educational success is an indication that the online student has the academic skills such as reading, writing, and information

literacy that are needed for academic success, especially as students work independently in the online learning environment (Cole, 2000, as cited in Rovai, 2003). Schlosser and Anderson (1994, as cited in Rovai, 2003) theorized that students who previously completed formal education or received higher grades had more fully developed research and study skills. These students are likely to have realistic expectations of the requirements and effort needed in their online courses.

Student Skills

Computer skills. To participate in online courses, students need to be confident and competent computer users. An online student uses a computer to: navigate through a software package, effectively use email, search for information using the Internet, participate in discussion boards, store information on her computer, upload and download information, and manipulate information retrieved. Students who do not have sufficient computer skills to access and navigate course material can quickly acquire the skills that they need with assistance (Kerr et al., 2006).

Self-directed Skills. Silver-Pacuilla (2008) uses Brookfield's 1984 description of self-directedness as the learner's disposition and capability to accept responsibility for planning, seeking out learning resources, and implementing and evaluating their learning. Self-directed learning recognizes the significant role of both motivation and volition in initiating and maintaining learners' efforts (Rovai, 2003). A self-directed learner is one who takes the initiative to diagnose their learning needs, formulate learning goals, identify resources for learning, select and implement learning strategies, and evaluate learning outcomes (Knowles, 1975 as cited in Rovai, 2003). Self-direction and initiative were significantly correlated with a student's grade point average (Bernard et al., 2004).

Bernard et al. found that a student's prior opinion regarding her self-management, self-direction, and initiative as a learner are the best set of items for predicting academic success in an online course. Four characteristics of a self-directed learner are:

- identify and set personally meaningful goals for her learning;
- develop a wide range of leaning strategies appropriate to her learning tasks;
- work both independently and with others to achieve her learning goals; and
- persist to overcome obstacles in order to achieve her learning goals (Radloff & de la Harpe, 1999, as cited in Rovai, 2003).

Self-regulation Skills. Hartley and Bendixen (2001) describe self-regulatory skills as a learner's ability to monitor her understanding while reading a text passage and her ability and willingness to set goals. A prototypical self-regulated student is aware of her strengths and weaknesses, adapts to different learning situations by using appropriate learning strategies, and efficiently uses her study time. McManus (2000) tested the anecdotal research correlating the successful online learner with self-regulation. His study compared the performance of 159 self-regulated and less self-regulated undergraduate education majors in a structured and a flexible learning environment. The self-regulated learner required little in the way of formal lesson design (McManus). Means et al. (2009) found online students who controlled their interactions with the media enhanced their online learning. Not all students are self-regulating; low-regulated learners are motivationally and metacognitively passive in their reception of instruction. The linearity of the course structure may affect online student learning depending upon the learner's level of self-regulation. Low self-regulated learners performed better in

linear learning environments, and high self-regulated learners performed better in nonlinear environments (McManus).

Epistemological Beliefs

Researchers have begun to study how epistemological beliefs affect a student's cognitive process such as text comprehension, text processing, academic performance, self-regulation, and motivation. Epistemological beliefs are beliefs about the nature of knowledge and knowing (Hartley & Bendixen, 2001). Hartley and Bendixen question whether epistemological beliefs and self-regulation skills are major factors in student achievement in computer-based learning environments. A student's ability and willingness to effectively use and monitor cognitive strategies and her beliefs about the nature of knowledge and knowing will influence how she learns in an online environment (Hartley & Bendixen).

Cognitive Styles

Cognitive style is an individual's mode of thinking, remembering, or problem solving. Graff (2003) studied the relationship between a learner's ability to process information presented in different size units on the web and her cognitive style. Holistic learners, those who view ideas as a complete whole, were indifferent to the amount of segmentation. Analytical learners, who comprehend ideas in parts, have difficulty in understanding the complete picture and were more successful with less segmentation of information. Two other cognitive styles, verbalizers and imagers, were also studied. Verbalizers, those who favor textual information, generally favored heavily contextualized web-based information. Imagers favor spatially presented information and outperformed verbalizers on recall with concentrated information. Graff's general finding

was that individuals possessing different cognitive styles learned more effectively when the appropriate level of segmentation of information was provided. Differences in cognitive styles evolve from a student's philosophy of learning.

Online Environment

Pedagogy

Moore and Kearsley (1996) wrote one of the first books on distance education and chronicled the evolution of distance learning. They note that the educational environment does not alter the principles of good education practice; the delivery mode should have no impact on the learning process. Thirteen years later Bonk (2009) agreed that good educational principles have not been abandoned because of online learning, but new approaches have been added to the smorgasbord of technologies and pedagogical approaches. Since good educational principles have not changed in online learning, why do completion rates in online classes consistently fall short of their face-to-face counterparts? Educators' challenge is the practice of the principles in the new medium. When utilized appropriately, the technology has the potential to be an effective learning environment by accommodating individual learning differences with a menu of delivery frameworks suiting individual learning styles (Hargis, 2001).

Instructors

Educators have been threatened by each new technology that enabled students to acquire knowledge on their own, fearing that the instructor would become obsolete. Emerging technologies over the years such as books, the telegraph, the postal service, the telephone, the radio, the television, and computer-assisted learning threatened the education profession. These technologies had the potential of removing the learning

process from the traditional face-to-face educational paradigm, making the instructor the essential component in the learning process; instead the technologies became teaching tools. Over the past 100 years, technology has done little to change the traditional face-to-face delivery of education; teacher-facilitated classroom learning still dominates educational delivery (Collins & Halverson, 2009). However, intuitive technology providing students with immediate feedback and direction has the potential to restructure the educational paradigm in which the instructor's role of conveyor-of-information is transitioned to learning-coach (Collins & Halverson).

Gradually, a transition is taking place; instructors as well as students are navigating new waters. In the new learning environment not only does the online student need additional skills, but so does the online instructor who finds herself as a student in the new medium in which she is teaching. She is learning to design courses to engage students in the course content as well as develop connections between students and faculty to facilitate (Prensky, 2001).

Some educators have recognized students' expectations to use technology in the learning process, but few have re-wired their approach to engage the new iGeneration learner. The instructors are more likely to be digital immigrants who have learned to adapt to the new environment and are uncomfortable and tentative with the new tools because they have been socialized differently with the technology. In order to connect with the students, a non-native digital instructor must first be able to speak the same language as the students she is teaching (Bonk, 2009). Faculty may take comfort in Herbert's (2006) research, indicating faculty's responsiveness to student needs is the variable students identified as most important to their retention.

Course Design

Effective online course design recognizes the breadth of learner attributes. Utilizing multimedia resources, faculty in these learning environments present information in more than one format, catering to individual learner differences and preferences (Armatas et al., 2003). Armatas et al. suggest linking the use of electronic and print resources with learning objectives and assessment requirements, integrating all elements of the learning environment, providing a formal introduction to the learning environment, and carefully constructing communication online roles and tasks. One method in which the course design enhances the learning experience is when students are engaged in teaching as well as learning (Prensky, 2001).

Need for Further Research

Research on online students has been more likely to be an informal inquiry than a rigorous research project. The literature suggests that tools, methods, and instructor and student preparation have evolved to a point where previous research has limitations because the variables have changed. Students have wider exposure to the use of computers, the technology is more sophisticated and easier to use, more instructors are experienced as students, and trained as instructors in the online medium (Bonk, 2009). Underdeveloped research in online learning does provide a starting point for new research to be used in the development of policies and procedures related to the various components of online teaching and learning (Bernard et al., 2004; Means et al., 2009; Tallent-Runnels et al., 2006). Hartley and Bendixen (2001) suggest the need for more research between individual differences and performance in new learning environments. Community colleges will be particularly interested in the research since they deliver half

of the online courses offered (Allen & Seaman, 2008). More sophisticated and adaptive technology for individualized instruction begs future studies on its effectiveness (Gee, 2007). Means et al. (2009) suggest that the past research studies were conducted with less sophisticated technology, less technologically savvy students, and less experienced instructors, cautioning that past findings may not apply to the future outcomes.

Conclusion

The literature suggests that online learning will continue to grow and represent a significant share of the total higher education enrollment. Students with a wide variety of characteristics will continue to enroll in online courses. More and more students will acclimate to the relatively new e-learning environment, because of their comfort with mobile devices, social media, and gaming technology. Employers will continue to seek employees with a wealth of knowledge, critical thinking skills, and the ability to communicate well. Technological innovations will continue to revolutionize the way students learn, especially with adaptive learning. With the latest wave of new technology, the question no longer is “will the educational academy respond to the request with a paradigm shift?” but “when?”

Student completion rates in online courses at Thompson Park Community College are the primary concern of this action research project. Research that leads educators to assist students in the achievement of learning outcomes and successful completion of online classes advance educators’ mission of facilitating learning for the growing number of online students in the e-learning environment. Research on online learning is inconclusive, because the medium is relatively new and parameters for uniform studies have not been solidified. Most of the earlier research has been limited to descriptive

studies, often with mixed results. Despite the lack of clear research findings, previous research provides a foundation for further research.

Thompson Park's mission is founded on the three pillars of access, affordability, and quality. The online learning environment offers access to groups of students who otherwise could not physically attend classes due to scheduling conflicts due to their personal and professional lives or for medical reasons; the flexibility online classes provide gives these students access to a college degree. The U.S. Department of Education will hold institutions accountable for the quality through rigorous assessment of student learning in online classes. This research study seeks to address success in online classes, an essential component of access, focusing on the question of why a larger percentage of online students at Thompson Community College either fail or withdraw from online classes than their face-to-face counterparts.

CHAPTER IV

CONTEXT OF THE STUDY

External Pressures

Contemporary education is experiencing a variety of conflicting economic and social pressures. Demand for higher education is increasing as 21st century jobs require employees to possess the critical thinking, reading, and writing skills students acquire in post secondary education (Brooks, 2009). Intricate computerized processes have replaced assembly lines and manufacturers are looking for employees with skills that will prepare them to operate sophisticated computerized machinery, follow complex blueprints, and demonstrate higher math proficiency than was previously required of the typical assembly line worker (Zemsky, 2009). Higher education is the gateway to the new economy entry level jobs. Future jobs are service-based, such as health care and financial services. The 21st century employers seek employees who recognize, analyze, and solve problems, limiting their employee training to their operations and company's policies and procedures (Collins & Halverson, 2009).

Education's days of being the "Teflon-coated enterprise" are coming to an end (Zemsky, 2009). Because of the economic and political climate, higher education has become a topic of national interest. Today, the American public is questioning what is occurring behind higher education's hallowed walls. The public wants to know whether colleges are effective, and why a college education costs so much (Zemsky). The societal emphasis on transparency and accountability has placed institutions of higher education under the national microscope. The federal, state, and local funding agencies are experiencing shrinking tax revenues and are being pressured to reduce taxes further.

Education accounts for the largest portion of local government expenditures and is a sizable component of the state and federal budgets. The public wants to know their education tax dollars are being spent wisely; at the same time the benefits of a post secondary degree are being questioned when so many college graduates are unemployed or underemployed (Mellow & Heelan, 2008).

Higher education faces the dilemma of servicing increasing numbers of students while simultaneously experiencing financial cuts. Fall 2008 marked the beginning of the "Great Recession;" a credit dilemma ballooned into Wall Street's most serious crisis since the Great Depression. Hundreds of billions of mortgage investments went bad, investment banks crumbled, the nation's largest insurance company was taken over by the government, and subsequently unemployment climbed to double digits. Tax revenues declined and over budget governmental units ran up large deficits. Taxpayers voted-in a new administration that heeded their outcries of lower taxation, which as a corollary, resulted in large cuts to educational programs (Desrochers, Lenihan, & Wellman, 2010).

Desrochers et al. (2010) observe that budget cuts have been the most significant in the public sector and predict that the government cuts represent a structural trend resulting in a permanent 10% reduction in institutions' revenues. They postulate that the revenue loss cannot be made up with tuition increases. Shrinking funding comes at the same time that President Obama has set a goal for 60% of the population to attain a college degree in comparison to the current rate of 40%, a significant increase. The president articulated his goal in the American Graduation Initiative calling for five million more two-year college graduates by 2020 (Lederman, 2009). George (2009) would advocate that the economic crisis is an opportunity for institutional leaders to own

the expansion/funding dilemma and reexamine the education paradigm against the backdrop of the power of new technology to improve teaching and learning.

During the fall 2009 semester, 5.6 million college students were taking at least one online course; that translates to one out of every four college students (Allen & Seaman, 2010). Allen and Seaman point out that the growth in online course enrollment outpaced the growth in face-to-face enrollment from 2002 to 2008 (Allen & Seaman, 2008). Tallent-Runnels et al. (2006) believe that enrollment in online classes will continue to increase at a rate of 33% per year. Allen and Seaman predict a positive but more modest growth. With the rapid growth in distance education, one might view online classes as a release valve for the financial and expansion pressures that higher education is facing. Is distance education community colleges' solution to the budget-tightening dilemma as institutions attempt to fulfill their mission of access to quality education?

Research Site

The study conducted at Thompson Park Community college addresses student access because access is a misnomer with student success. Thompson Park is a large (enrollment 13,500 students in spring 2009 and 16,000 students in fall 2009) 43-year-old comprehensive public institution in the mid-Atlantic Region. The county, through the Board of Chosen Freeholders, is a source of one quarter of the institution's revenue. Slightly over a tenth of the college's revenue is provided by the state and the students absorb the largest cost by contributing over 50% of the institution's revenue (Thompson Park Community College, 2009a). Students are eligible for various forms of financial aid administered through federal and state grants and loans, private scholarships, and the college scholarship foundation.

Thompson Park offers over 70 associate degree and certificate programs for both transfer and vocational entry positions. Students have access to post associate degrees at two of its seven locations through partnerships with four-year institutions in the state. Non degree students have access to a number of lifelong learning programs. Thompson Park is an open admission college available to anyone 18 years of age or older who is a high school graduate. Incoming students in the matriculated programs take a basic skills test for initial placement. Students requiring remediation begin their studies with basic skills classes. The college provides academic support systems in the majority of the academic programs.

Thompson Park has one main campus, a branch campus, and five extension centers. In addition to students' choice of locations, they have the choice to take online, hybrid, and traditional once or twice a week face-to-face classes. Courses are offered year round: there are two traditional 15 week terms in the fall and spring, three summer terms, and a two week term in the beginning of January. Through Thompson Park's active student life board, students participate in a variety of campus events, clubs, guest lectures, and athletic programs. Students enjoy a wide range of services including experiential learning, service learning, career and job development, study abroad, and services for persons with disabilities.

The college prides itself on its mission to deliver educational excellence and student success to the county community. The college is the number one associate degree-granting institution in the state and publicizes the statistic on its website and numerous additional media outlets. Over the past five years, the college revised each of its 700 syllabi to articulate student learning outcomes, course requirements, grading

standards, and course content. The college accommodates students with disabilities by offering additional support. Learning assistants are available to tutor, review tests, and assist with assignments for all students. Lab assistants perform similar functions for students needing assistance in performing projects or experiments. Teaching and counseling faculty schedule regular office hours to answer questions and advise students.

An appointed Board of Trustees sets policy, fixes tuition and fees, and monitors educational programs. Thompson Park is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, the accrediting agency for all colleges in the mid-Atlantic region.

Student Body

There is no typical Thompson Park student. Students attend full-time and part-time, are matriculated and non-matriculated, young and old, Black, White, and Hispanic. The college has experienced a shift in the broad composition of the student body over the past ten years; the average age of the students has been declining and more than half of the students are full-time. Previously, the majority of the students were several years older and predominantly part-time (taking less than 12 credits in a semester). The increase in the number of students matriculated in transfer programs as opposed to career programs is another trend; over 65% of the students have declared a transfer major.

Full-time students represent 54% and 59% of the enrolled students respectively in the spring 2009 and fall 2009 semesters. Full-time students accounted for 72% in spring 2009 and 76% in fall 2009 of all registered students. Almost 60% of the students on campus were under 22 years of age in spring 2009 and account for the largest growth in the student population. In fall 2009 students at least 22 years old comprised slightly over

60% of the student population. Three quarters of the age 22 and younger students were full-time matriculated students in both the spring and fall 2009. Eighty-nine percent of the students were matriculated in a degree program in spring 2009 and 87% were matriculated in fall 2009.

Part-time matriculated students age 22 to 64 accounted for half (50% in spring 2009 and 52% in fall 2009) of the total part-time students. Students in this age group are likely to have work and family responsibilities and find the flexibility of online classes appealing. White students comprised 74% of the spring 2009 population. Black students comprise the largest minority ethnic group, approximately 10%, followed closely by Hispanics. One out of three students took a course at the branch campus or one of the four higher education centers scattered throughout the county, accounting for almost 20% of the student credit hours offered. Transfer-oriented majors accounted for 66% in spring 2009 and 68% in fall 2009 of all degree-seeking students and well over half (almost 60%) of all enrolled students.

Enrollment in distance education increased 20% from spring 2008 to spring 2009 and 32% from fall 2008 to fall 2009. Nine percent (1,200 students in spring 2009 and 1,400 students in fall 2009) of students enrolled in at least one distance education course. Compared to the total population, distance learning students are more likely to be female, 70% compared to 55% of all students. The average age of a distance education student in spring 2009 was 26, compared to the average age of 25 for all students. In fall 2009 the age gap widened with the average age of a distance education student 27 compared to an average age of 24 for all students. (Thompson Park Community College, 2009b, 2009c)

Conclusion

The current economic environment is providing an ideal opportunity for institutions to offer more online courses to skirt the bricks and mortar cost and to afford the opportunity to non-traditional and working students to earn an education, despite work and family obligations. The students and course offering are typical of those in an affluent suburban county. The majority of students plan to transfer to a four-year institution and earn at least a bachelor's degree. Online enrollments at the institution are growing significantly faster than the overall enrollment growth and attract an older cohort than the average aged student at the institution. The researcher is heavily invested in online student success because of her responsibilities of ensuring the academic integrity of all the institution's degree and learning outcomes of students regardless of delivery method.

CHAPTER V

METHODOLOGY

Action Research

Participatory action research is aimed at solving problems within an organization. Action research explicitly and purposefully becomes part of the change process by engaging individuals in the organization in the study of their problems to solve them (Hinchey, 2008). Hinchey describes action research as a process where an inside group engages in organizational improvement in areas the group identifies as important. The group takes responsibility for its situation, makes recommendations, implements those recommendations, and assesses the process (Hart 2006). This action research study is designed to improve student success in online classes at the researcher's home institution through identification of factors found to impact online students' persistence and learning in the nontraditional online learning environment.

Action research is well suited for this project in that the researcher recognizes a troubling situation where online students are significantly less successful than the college average. Unlike traditional research methodologies, action research has the advantage of being conducted by those within the community who know the institution well as opposed to those outside the institution (Hinchey, 2008). Action research has another advantage over traditional research in that the process individualizes the study to a specific institution. It overcomes the limits of traditional research where generalized conclusions of one student population may not accurately depict the outcome of another group of students in a different situation (Hinchey). Situational differences may be related to the type of institution, student demographics, different selection and admissions

criteria, campus culture, and other variables that distinguish one student cohort from another and have the potential for a different research result. Action research affords the researcher the flexibility to tailor her research to explore improvement in areas that she feels are important for her institution (Hinchey). Paulo Freire promotes action research with his explanation that “those who live a situation must be the ones who analyze it and identify possibilities for action and change” (as cited in Hinchey, 2008, p. 15).

Action research has its limitations as well. The primary limitation is the researcher’s biases. The action researcher’s advantage of being intimately familiar with the situation may also prompt individual biases based on her familiarity with the existing participants and operations. Therefore, it is critically important that the researcher scrutinizes her biases and recognizes how they impact her conclusions. Hinchey (2008) cautions action researchers to approach the research with an open mind and be aware of any preconceived notions and solutions. She suggests action researchers put interpersonal dynamics aside and assume a fresh perspective to pose relevant questions that address the problem being explored.

Approach to Data Collection

The researcher approached the study primarily from a quantitative approach. This inquiry-based approach to research describes trends and explains the relationships among variables (Creswell, 2009). This study utilizes quantitative data obtained from online students’ self-perceptions of their skills and behaviors via an electronic survey. The study compares students’ self-assessments to their final course grade, the measure used to categorize students as successful or not. The online students are considered successful when they complete the course and earn a grade of D or better. The independent variables

of students' self-perceptions regarding their skills and behaviors are compared to the dependent variable of the students' grade. According to Creswell, the quantitative research approach is suitable for the study of individuals who share the same experience. Therefore a quantitative study is a fitting approach to collect information regarding online students' characteristics. The quantitative approach was augmented with a student focus group to support the survey findings and explore whether Thompson Park students identify other variables impacting their online performance.

Students who take online courses share the experience of being learners separated from their instructor and fellow students by time and place. The experience of an asynchronous class structure is different than the experience in a traditional face-to-face class structure. The online environment is void of visual clues that come from body language or voice inflection. There is no meeting regiment. Online student interactions with the faculty and other students are not typically instantaneous, but are likely to be more frequent. Additionally, online students have the shared challenge of scheduling time dedicated to their class work. The online structure provides students greater convenience than the traditional educational situation. At the same time, it also places students in an unfamiliar setting where the course content is delivered via technology as opposed to the synchronous physical in-class environment (Carr, 2000). This study examines students' perceptions of their skills at managing the task of navigating the course materials and completing course requirements without direct contact with the instructor. Their management perceptions are compared to their performance in online classes.

The study's premise is students' self-perceptions of their academic and technical skills along with their independence as learners are correlated to their online success.

Creswell (2009) writes the quantitative approach is suited to test a theory. During the literature review Kerr et al.'s (2006) Test of Online Learning Success (TOOLS) was found to be a reliable and valid predictor of online student success at a four-year public institution; the instrument was used to determine whether Thompson Park students' self-assessments are valid predictors of their success in online courses.

Several key questions arise regarding student perceptions. What student attributes enable one student to understand and assume these added responsibilities? How can the college assist students in developing the attributes and habits that lead to successfully completing an online course? The study examines Thompson Park students' self-perceptions of their skills and behaviors in relation to their performance. The data gathered are used to answer one of the research questions:

> Is Kerr, Rynearson, and Kerr's (2006) questionnaire, titled Test of Online Learning Success (TOOLS), a reliable predictor of online student success in Thompson Community College?

Rather than create and test a new instrument, Kerr et al.'s instrument was chosen to identify whether students' self-identified aptitudes are related to their shared experience of their performance in online courses in the community college setting. The TOOLS self-assessment was administered to two groups of online students in two different semesters at Thompson Community College and compared to the students' final course grades to address this question.

Kerr et al. (2006) postulate that a relationship exists between students' self-perceptions and their success in online classes. The results serve as the basis for the development and implementation of policies and procedures at Thompson Park to aid

students who are new to the distance education environment with the skills they are well advised to possess to be successful online students. Additionally, students' responses inform the development of missing support services and review of existing services for current and future online students, ultimately increasing online student success.

Research Design

A quantitative research design was selected to determine whether student behaviors and abilities impact a student's success in an online learning environment, augmented with a student focus group. The qualitative feature was added recognizing student performance is a personal activity with multiple variables that may not have been reflected in the survey results. The qualitative results supported the student characteristics and behaviors included in the survey.

The research design reflects the intersection of three factors: a philosophy of knowledge, a strategy of inquiry, and a specific method of research (Creswell, 2009). The philosophy of inquiry or knowledge, in this study is based on postpositivist philosophical beliefs. Postpositivism evolved from positivism. Creswell explains positivists believe in absolute knowledge and researchers who abide by that philosophy seek to develop relevant, true statements of causal relationships based on evidence. Postpositive philosophers challenge the positivism belief of absolute truth of knowledge. Postpositivists contend that we cannot be certain about knowledge when studying the behavior and action of humans (Creswell). The environment has the potential of altering the results; therefore the online student characteristics related to performance at Thompson Park Community College may differ from those of counterparts at a four-year institution.

Hinchey (2008) concurs with the postpositivist philosophy, but uses different terminology. She employs the terms *interpretivists* or *constructivist* to describe philosophers who ascribe to the premise that knowledge is dependent upon human perception. Because perceptions vary based upon the circumstances of multiple realities, action research is best suited to surface realities that pertain to a specific group (Hinchey). Phillips and Burbules (2000) outline the key assumptions and support for the postpositivist philosophy. Their assumptions are that research is imperfect, subject to biases, and leads to more questions than answers. Phillips and Burbules sum up their philosophy by recognizing that there are many kinds of sources of our knowledge, but none has authority.

Phillips and Burbules (2000) encourage researchers to pursue disciplined, competent inquiry to establish beliefs that are warranted to avoid misunderstandings. Postpositivism philosophy serves that end by questioning knowledge and what is understood. The postpositivist seeks to comprehend the factors influencing a circumstance and use the interpretation to improve the situation being studied. Postpositivists often reduce their ideas to a set of tests (Creswell, 2009). The goal of this study is to understand the extent of the relationship between students' self-identified behaviors and their success in online classes in a single community college.

The second component of the research design is the strategy of inquiry. The three basic strategies of inquiry are quantitative, qualitative, and mixed methods (Creswell, 2009). The quantitative strategy of inquiry using a survey is appropriate for this study because the study is designed to learn about the behaviors and self identified aptitudes of a population of online students. Researchers suggest that student variables are correlated

to the degree a student will complete their online course (Herbert, 2006). Can specific student perceptions of their behaviors and skills be measured to predict student success in online classes at Thompson Park Community College? The survey is the instrument used to acquire data and draw general conclusions. General conclusions are stressed, recognizing each student presents with her unique set of skills and perceptions. If her perceptions impact her success in online courses when identified through the survey inquiry, then generalizations regarding individualized interventions for future online learners may improve success.

The third component in the research design is the specific method of research that involves the forms of data collection, analysis, and interpretation that the researcher proposes for her study (Creswell, 2009). A survey is a quantitative instrument that can be used to test the casual relationship of a particular outcome. Survey research provides numerical descriptions of attitudes of a population (Creswell, 2009). Creswell indicates postpositivists accept the use of surveys for data collection in the examination of the relationship between and among variables. Using a validated survey instrument with a randomly selected group of online students is suited to collect data with the intent of generalizing about the population of Thompson Park Community College online students.

The Survey Instrument

Researchers from Texas Wesleyan University, Kerr et al. (2006), conducted a study about online student characteristics in order to develop methods for increasing student success. Kerr et al. performed three empirical investigations on student characteristics and online student success from 2002 to 2005. Through the three studies,

they constructed and validated a reliable tool to measure online student success. The survey authors refer to the instrument as TOOLS, the Test of Online Learning Success, and provided administration guidelines, scoring procedures, outcome interpretations, and permission to use the instrument in the public domain. Kerr et al. (2006) proved their hypothesis is that TOOLS is effective at predicting student success in online classes.

As noted earlier, a student survey is an appropriate research instrument to collect data regarding shared experiences. Rather than develop and test a new instrument, the reliable, and validated TOOLS self-assessment was selected for this study. The literature search supported the five categories of characteristics Kerr et al. selected for the student self-assessment. However, some of the statements appear to have been misplaced in the groupings. For example it could be argued, question number 21, “I am capable of critical thinking,” is more appropriately placed in the academic skills category than self-regulation. The six questions in the dependent learning grouping could easily be distributed to self-regulation and academic skills. Leaving tasks unfinished, waiting for the last minute to work on assignments, need for reminders to complete assignments, and the need for incentives to motivate students, could all easily be considered self-regulation. Two questions about understanding written instructions and comprehend what a student reads fit in the academic skills group. Several of the statements in the academic skills grouping could easily be considered self-regulation, such as working independently, and self-directing a student’s learning.

All 45 short statements are relevant to student success regardless of their categorization. In addition, the instrument was proven to be reliable and valid. With the goal of this action research project to develop a strategy to assist students to be successful

online learners, the overall TOOLS score may be more indicative of student success and limited in its ability to target specific student weakness. Questions relevant to two groupings may impact the interventions designed and service students in more than one category. The interventions will be informed by correlations between demographic information and student success.

Therefore, demographic questions were added in each of the two administrations to investigate whether Thompson Park online student demographic characteristics are correlated to their online success. Marcel Kerr, one of the authors of TOOLS, granted permission to use the instrument. Rowan's and Thompson Park's institutional research boards granted permission to administer the online survey to Thompson Park students in the 2009 spring and fall semesters.

The 45 TOOLS statements fall into five categories related to personal skills or behaviors: computer skills, independent learning, dependent learning, need for online delivery, and academic skills. The number of questions in each subscale varied from five to 11. Composite scores were measured for each of the TOOLS five subscales for both Cycle II and Cycle III to collect data on students' self-identified skills and need for the flexibility of online learning. Five demographic questions were added to the 45 short statements in the spring 2009 administration of the survey (Appendix A.1). The questions were related to the student's age, credit load, credits previously earned, previous success with an online course, and simultaneous enrollment in face-to-face courses.

Five more demographic questions were added to the fall 2009 administration of the survey (Appendix A.2) to capture additional demographic data regarding Thompson Park's online students' personal characteristics. The additional demographic questions

are related to the students' motivation for taking the online course, source of information regarding the skills crucial for online students, number of hours worked, home institution, and grade point average. The list of possible responses to the age and simultaneous enrollment questions were expanded in the second offering to collect more data.

The responses to the TOOLS short statement items are based on a five point Likert scale with (1) indicating "strongly disagree" and (5) indicating "strongly agree." Students had the option to choose a "not applicable" response (0) and "neither disagree nor agree" (3). Students also had a variety of choices when responding to the demographic questions. For example in the case of age on the first administration, students had the choice of two age categories; in the second administration students had three choices. Two of the questions added to the second administration had seven and nine options. These questions were related to sources of information regarding the skills necessary for online success and students' motivation for taking online course respectively.

Survey Validity and Reliability

The TOOLS survey was selected for the data collection because the instrument questioned online student behaviors and characteristics that are the focus of this study. Additionally, the authors established the instrument's validity and reliability (Kerr et. al., 2006). Kerr et al. calculated TOOLS' Cronbach alpha coefficients to determine the instrument's validity. This establishes the ability of the instrument to measure the construct or theory. In this case, Kerr et al. demonstrated that the instrument accurately measured students' self-perceptions of their computer skills, independent learning, dependent learning, need for online delivery, and academic skills.

To determine the measure's criterion validity, Kerr et al. (2006) computed correlations between total online learning success and the five subscales with a battery of tests of students' skills. The alpha of .84, for the entire measure, indicated high internal validity. Both subscales of independent learning and computer skills demonstrated high internal validity with alpha coefficients greater than .80. The remaining three sub scales of: need for online learning, dependent learning, and academic skills showed moderate internal validity with Cronbach alpha coefficients between .63 and .70 (Kerr et al., 2006). The researchers also established the predictive validity of TOOLS through independent *t*-tests and step wise regression analysis. The predictive validity is the reliability of the instrument to determine the instrument's ability to yield consistent results. The researchers performed a *t*-test comparing end-of-course grades to TOOLS subscale status. Students with high scores in academic skills and independent learning had significantly higher grades (Kerr et al.).

Methodology Overview

This study was conducted in four cycles; the literature review, the first administration of the survey, a second administration of the survey and focus group, and the analysis of the results. The first survey was administered in spring 2009 to students in 10 online classes; the second was in fall 2009 to 13 online classes. Both surveys were administered in the eighth week of the semester, before students were able to withdraw from the class without impacting the student's grade point average. In two separate administrations of the survey, faculty teaching randomly selected sections of online courses were sent an email requesting they email their students and invite them to take the self-assessment. The scripted email to the students had a hyperlink to the TOOLS

self-assessment in SurveyMonkey. The email request to the faculty with the student invitation is reproduced in Appendix B.

Cycle I

Cycle I was an examination of the literature regarding distance education from its origins to its evolution into online learning. The literature addressed four major components influencing student success in online classes, the learner, the instructor, the course design, and technology. The researcher focused on literature pertaining to online student success to inform the action research goal of improving online student completion rates. Several meta-analyses of online learning from 1990 through 2008 (Cavanaugh, 2001; Hartley & Bendixen, 2001; Means et al., 2009; Tallent-Runnels et al., 2006) provided an overview of online research through its evolution. A meta-analysis studies research projects on a topic analyzing the results for commonalities and conclusive evidence to support theories of practice. As distance education has evolved so has the environment, technology, online learners, and course design. The older research informed online student needs and learning styles, but more recent research was conducted in a significantly different environment where more students and faculty are comfortable with a technology that is adaptive to individual learners and easier to use.

Originally, literature pertaining to both student success and satisfaction were researched. The published research was limited and the researcher realized that studying both factors was too broad for an in-depth action research study in a limited timeframe. By focusing on student success, the research questions were streamlined with the ultimate goal of improving online student performance. Therefore, the results do not reflect other

variables impacting student performance, such as student satisfaction, course design, technology, institutional support, and the instructor.

The literature indicates that the best predictor of a student's success is her past academic record measured by her grade point average (Dupin-Bryant, 2004; Morris, Wu, & Finnegan, 2005), which is also the most reliable predictor of student success in face-to-face classes (Frydenberg, 2007). Given that a student's grade point average is the best predictor of student success in face-to-face classes, this researcher sought to find student characteristics that were independent of the factors influencing student success in the traditional face-to-face environment.

The research lead to the discovery of Kerr et al.'s (2006) TOOLS online readiness survey that served as the data gathering instrument based on its reliability at predicting online student success at a four-year institution. Kerr et al.'s study concentrated on student self-identified characteristics to test whether their behaviors and skills were predictors of online student success. They felt that those students with the highest regard for their technological, analytical, reading and writing skills, and learning habits were most likely to succeed. Permission to use the TOOLS instrument was granted by the author. Additionally, during the first cycle Rowan University and Thompson Park institutional review board (IRB) approval was approved in January 2009.

Cycle II (Spring 2009)

In March 2009, 193 students enrolled in the 10 online sections received requests to complete the survey in Appendix A. 1. The researcher scripted the email to the students with a link to the online survey (Appendix B). The 10 online classes selected represented 10% of the 103 online classes offered during the spring 2009 semester at

Thompson Park. Class selection was based on the systematic random sampling procedure outlined by Fowler (2009). Each of the 103 offerings was sequentially numbered. Beginning with the random selection of the number five, the fifth section and every tenth class on the list of offerings were selected to be surveyed. The courses selected were: Art Appreciation, Chemistry in Life, Police Role in the Community, English Composition, Business Writing, Nutrition and Health, American Civilization I, Intermediate Algebra, American National Government, and Educational Psychology. Educational Psychology was the only 200 level course in which students were surveyed; all other courses were 100 level. There were between 15 and 27 students enrolled in each of the 10 classes. Ten different faculty taught the sections; eight of the faculty were full-time instructors, two instructors were adjuncts.

The survey contained the researcher and the Rowan faculty names and contact information. The research design, use and confidentiality of the data gathered were described. Students were informed their participation was voluntary and that their decision not to participate would have no impact on their grade. Students were asked to provide the researcher with permission to match their final course grade with their responses by providing their Thompson Park identification number. Assurances were made that survey responses would be destroyed after the data were compiled. Demographic questions as described in the “Survey Instrument” section were asked.

Cycle III (Fall 2009)

The TOOLS self assessment instrument was administered to a second group of students who were taking online courses in fall 2009. The same 45 short statement questions regarding the five skills and behaviors from TOOLS were exactly the same as

the first administration. Five new and two modified demographic questions were included to expand and enhance the data collection. The questions added asked students the number of hours they worked, their self reported GPA, their best source of information about taking online classes, and their motivation for taking the online course. The additional demographic information allowed the researcher to better understand the personal characteristics of students who take online courses. Rowan's Institutional Research Board approved the modification to the original request limited to a single administration of the survey.

Sixteen sections of online classes were randomly selected from the 125 sections offered during the fall 2009 term. The classes were taught by 15 different faculty, 14 full-time faculty and one adjunct. Two of the sections selected were nursing courses that did not begin until the second half of the semester and therefore had no students when the survey was administered. The courses selected were: Cultural Anthropology, Business Law I, Information Technology, Macro Economics, English Composition, Business Writing, American Literature, World Civilization I, Recent American History, Introduction to Marketing, Managing and Coordinating Nursing Care (2 sections), Introduction to Political Science, Human Growth and Development, Introduction to Quantitative Methods in Social Science, and Public Speaking. Four of the courses were 200 level, and two of those courses were the nursing courses with no students. The remaining courses were 100 level. The survey is in Appendix A.1.

Cycle III also included an interview of two online students who were currently enrolled in online classes and who had previously taken online courses. In the fourth week of the fall 2009 semester, the researcher contacted seven faculty who were teaching

online courses to invite students in their classes to attend one of two focus group on online students. Two requests were sent with two different focus group meeting times on two different days at different times of the day. Only two students accepted the invitation. The researcher met with both students at the same time. The two students consented to the use of their comments in the research findings. The researcher asked a series of predetermined questions to investigate whether these students offered explanations in addition to those asked in the demographic questions regarding why they took online courses, what skills they needed as online learners, and their advice to first-time online students.

Cycle IV

Cycle IV was the compilation of student survey results, the collection of online class grades for those students who granted permission, the analysis of the data from the two surveys, and the transcription and coding of the two student interviews. The analysis of the data served as the basis for action to improve student success in online classes. The institutional culture and researcher's leadership style shaped the change strategy. The opportunity to use the institutional visioning project to amass a critical core group and the leverage obtained from the Higher Education Opportunity Act (HEOA) resulted in the strategic future action to improve online student success.

During Cycle IV, the college was engaged in the development of a forward looking academic master plan. The comprehensive plan envisions teaching and learning at the college over the next 10 years. Within the alternate delivery section, the plan supports the establishment of a process to advise students who are new to the online environment. Students would be made aware of their likelihood of success in online

classes prior to their enrollment. Furthermore, the plan recommends enabling students to find and access the support they need to develop personal characteristics that increase their likelihood of being successful online learners. The specific recommendation is "Implement assessment testing for new online students to determine a student's ability to be successful in an online learning environment. Orient students to ethical considerations of online learning, including cheating, plagiarism, time-management and netiquette" (Thompson Park, 2010, p. 26).

The researcher capitalized on the catalyst the plan provided and employed Kotter's (1996) eight stage process to implement a change to improve students' success in online classes at Thompson Park Community College. Kotter calls for the creation of a climate for change by setting the stage in the first two steps. Establishing a sense of urgency is the first critical step needed in organizational change. The researcher obtained data comparing the online course completion rate with the overall college completion rate. For the purpose of this study, a student successfully completes a course with a grade of D or better. The Institutional Research Department compiled a report showing that online course completion rates averaged 10 percentage points lower than the average college wide completion rate. The researcher presented the data to the executive vice president for Educational Services and the academic division deans along with the Higher Education Opportunity Act requirement to demonstrate a course taught at a distance achieves the stated objective as the course or programs offered face-to-face (Higher Education Opportunity Act, 2007).

The executive vice president for Educational Services and the academic division deans formed the guiding team, which is Kotter's (1996) second step. Four of the six

deans were certified online instructors, but none of them had been trained in evaluating online classes. The researcher arranged a training session in online course evaluation in spring 2010. Also during the spring of 2010, the researcher co-chaired a committee that was charged with the alternate delivery section of the academic master plan. The online class results and the Higher Education Opportunity Act requirement were shared with the group, resulting in a recommendation to advise first-time online students of the added skills and responsibilities and provide support. It was through this group that a change vision was articulated in a document guiding the future actions of the institution. Kotter's third step to develop the change vision and strategy was complete.

The group's recommendation was communicated to the college as a whole through the document. The Teaching and Learning Center staff who support online students and faculty and conduct the online student orientations took ownership of the goal. Kotter's (1996) fourth step was accomplished as the recommendation became one of the priorities of the academic master plan and the individual department plans. In Kotter's fifth step to empower others to act, the director of the Teaching and Learning Center embraced the vision of student preparation as a reality. The remaining three steps to produce short-term wins, consolidating gains and producing more change, and finally anchoring new approaches in the culture will take place in the future.

Conclusion

The quantitative approach was explicitly selected for this action research study by engaging the researcher in the improvement of student success in online courses at her institution. The simple quantitative research design provided the data to determine the correlation of specific student behaviors and abilities to online student success at

Thompson Park Community College. Two administrations of a validated and reliable self-assessment instrument were conducted to collect data regarding online students' shared experiences. The study was conducted in four cycles: the literature review, the first administration of the survey, a second administration of the survey and focus group, and the analysis of the results and implementation of a process to improve student success in the online environment.

CHAPTER VI

RESULTS

This study of student success in online classes as related to students' self-assessed behaviors and skills at Thompson Park Community College was conducted in four cycles: (I) the literature search, formation of research questions, and the selection of the data collection instrument; (II & III) two cycles of data collection with the administration of a student self-assessment survey; and (IV) data analysis.

Cycle I

Beginning in the fall of 2008 the literature on distance education and online learning was reviewed. Several meta-analyses provided the history of distance education research and practices from the earliest form of distance education, correspondence courses, to online courses. During the literature review, a 45-question student self-assessment instrument designed by Marcel Kerr, Kimberly Rynearson, and Marcus Kerr, three researchers from Texas Wesleyan University, was found and was selected for this research project as it was presented as an effective tool to predict student success in online classes. The authors, Kerr et al. (2006) designed a survey based on three empirical investigations related to student self-assessment of their characteristics and behaviors at Texas Wesleyan University from 2002 to 2005. Through the three studies the authors constructed and validated the tool to predict online student success. The survey authors refer to the instrument as TOOLS, Test of Online Learning Success. It was their intention that the instrument be widely used, and provided administration guidelines, scoring procedures, outcome interpretations, and permission to use the instrument in the public domain. As part of this study, the survey was administered twice at Thompson Park

Community College, once during the spring 2009 semester and again during the fall 2009 semester.

Cycle II

In the spring of 2009 the 45-question instrument was administered to 193 Thompson Park Community College students enrolled in 10 online courses between the eight and twelfth week of the spring 2009 semester at Thompson Park Community College. Twenty percent (n = 40) of the students surveyed completed the instrument. The researcher emailed the faculty twice after the initial request to encourage the faculty to remind their students to complete the survey. In response to the second reminder, one faculty offered to invite students in her other online class to take the survey to bolster the low response rate. The offer was declined to maintain the integrity of the random selection process. The final response rate of 20 percent may be understated if compared to the number of active students in the class at the time the survey was administered. The total number of students in the classes used in the response rate calculation was based on the number of students registered in the classes on the first day of the semester and does not account for withdrawals or inactive students eight weeks later when the instrument was administered.

Demographic Data

More than half (59%), were traditional age students, 18 to 24 years old. The same percentage (59%) of the respondents were full-time students, those taking 12 or more credits. The vast majority of the respondents (87%) had previously earned 31 or more college credits and more than two-thirds (68%) were experienced online students having previously completed an online course with a D or better. Over half (55%) were

simultaneously taking either a face-to-face or hybrid class. Thirty-three of the respondents gave permission to match their responses to their final grades. Five of the respondents were in two or three of the online classes surveyed.

Computer Skills

Students responded to 11 statements regarding their perception of their technological skills. Almost all of the students (97%) reported they were capable of sending and receiving email, and using discussion boards, an asynchronous online communication tool in which students answer questions and post responses. The overwhelming majority of the students (95%) reported they were capable of using standard word processing software and were able to copy and paste text using a computer. Just over 90% agreed they were capable of learning new technologies, and were competent Internet browsers. Over 85% were capable of managing files on a computer, could install new software when necessary, and were able to use chat rooms. Chat rooms are similar to discussion boards except that the communication is in real time as opposed to being asynchronous. Unlike the fall 2009 administration of the survey, a smaller percentage of students rated their technological competency highly; only 10% indicated they could not download or install new software.

Self-regulation

The next 10 questions pertained to a student's ability to manage her time, and set and achieve realistic goals. Responses reflect student confidence in the ability to balance multiple tasks and make time for studies. Ninety-five percent of the students agreed they were self-motivated, the largest number of responses in this category for the fall respondents. Over 90% (92%) were capable of prioritizing their responsibilities, were

goal oriented, took responsibility for their learning, and were capable of critical thinking. Eighty-two percent indicated they were capable of making time for their coursework, or were able to balance many tasks at the same time. Only five percent disagreed they were self-disciplined with their studies while 18% neither agreed nor disagreed. Only 67% agreed they were good time managers, in contrast to 84% of the fall 2009 respondents. Forty-two percent were procrastinators, and 35% responded they were not.

Dependent Learning

Students' responses supported the literature's description of successful online students as independent learners. The respondents disagreed 80% of the time that they required help to understand written instructions, had trouble comprehending what they read, or needed faculty to remind them of assignment due dates. Only eight percent leave tasks unfinished and 13% needed incentives or rewards to motive them. Lastly, in this grouping of questions, only 50% disagreed they wait until the last minute to work on assignments, 32% appeared ambivalent by neither agreeing nor disagreeing, and the remaining 18% admitted to working on their assignments at the last minute.

Need for Asynchronous Scheduling

Eighty-nine percent of students in this cohort reported they needed the freedom to chose the time and place to complete their coursework. Eighty-five percent or more agreed family and work schedule necessitated they take an asynchronous online course. Over one-third (38%) needed an online course because of geographical distance from the college, and more than half (55%) found it difficult to go to campus to complete course requirements.

Academic Skills

The students were confident about their academic and problem solving skills. One hundred percent of the students agreed they were capable of asking for help when they had a problem, and almost all (95%) agreed they could learn by working independently. Over 90% were comfortable learning new skills, and 90% agreed they were capable of conveying their ideas in writing. Between 80 and 85% of the students responded they were self-directed learners, capable of solving problems on their own, and were good readers. Seventy-nine percent agreed they read carefully, and 75% reported they were good writers. Students in this group agreed they needed faculty feedback on their assignments 79% of the time. More than half (57%) disagreed they needed face-to-face interaction; and 51% responded they did not need classroom discussions to learn.

Cycle III

Cycle III was conducted during the eighth to twelfth weeks of the fall 2009 semester. Surveys were administered to 237 students enrolled in the 16 online sections taught by 15 faculty. The request process where faculty emailed invitations to students to complete the survey used in Cycle II was used in Cycle III. Nine faculty responded within three days that they would send the survey. One faculty who taught two sections responded she could not survey the students in her classes because the start date for her two sections was after the administration of the survey and there were no students in the class when the survey would be administered. The student email invitation was scripted and included in the email to the faculty (see Appendix B).

Eight days after the initial email to the faculty, there were 25 student responses. A second request sent to the 14 faculty generated 19 more responses. After a third

request, the final response rate was 18.6% slightly below the response rate in the first administration. As with the first administration of the instrument, the total number of students included in the response rate calculation was the number of students enrolled in the class on the first day of the semester. Once again, the number of active students in the eighth to twelfth week of the semester may have been lower because students may have withdrawn or stopped attending, reducing the number of students who received the invitation from the number of students registered in the class on the first day.

Demographic Data

The fall cohort profile was similar to the spring cohort demographic collected. The demographic information collected from the fall respondents was more extensive than from the spring respondents with the addition and revision of the demographic questions. Twenty-six (26) percent of the students were under 21 years old; 23% were 21 to 24, 40% were 25 to 40, and 10% were 42 or older. The vast majority (81%) were Thompson Park students. Two-thirds (66%) were taking 12 or fewer credits. The majority of the respondents (74%) had previously earned 31 or more college credits and more than two-thirds (70%) were experienced online students having previously completed an online course with a D or better. Over half (62%) were simultaneously taking either a face-to-face or hybrid class. Almost all of the students (93%) worked; over half (52%) worked over 30 hours a week. Three-quarters (79%) reported a 3.0 or higher grade point average. When asked to identify their motivation to take an online class, the vast majority (64%) identified the ability to control their study time. Over half selected online courses to save travel time, 43% selected online courses to be able to set their own learning pace. One third (36%) favored online to suit their learning style and one quarter (26%) were

more comfortable participating online than in-person classes. Ten percent of the students were in the online class because there were no on-campus seats available. One-third (33%) of the students indicated that they had no source of information regarding the skills they needed to be an online student. Thirty-one percent conducted personal research and the same percentage took an online orientation to acquire information regarding the skills needed to be an online student. Thirty-two of the respondents gave permission to match their responses to their final grades. Two of the respondents were in three of the classes surveyed, two more were in four of the classes, and two students were in five of the online classes.

Computer Skills

Students responded to 11 statements regarding their perception of their technological skills. The vast majority of the students felt competent using computers for communication, learning new programs, and installing hardware. All respondents agreed or strongly agreed they were capable of learning new technologies. Almost all respondents (98%) reported they can copy and paste text using a computer, and were capable of using discussion boards online. The vast majority (95%) responded they were capable of sending and receiving e-mail. A slightly smaller percentage (93%) indicated they could attach files to an e-mail message, were capable of using standard word processing software, and could download and install new software. Only seven percent were not competent Internet browsers compared to 91% who were. Ninety-one percent were capable of managing files on a computer. Seventy-seven percent of the respondents acknowledged they were able to use chat rooms online, while nine percent neither agreed nor disagreed, and 12% indicted they were not applicable. The high degree of confidence

students had in the computer skills used in an online class was not surprising, since more than two-thirds of the respondents were successful students.

Self-regulation

The next 10 questions pertained to a student's ability to manage her time, set realistic goals, and achieve them. Responses represent student confidence in the ability to balance multiple tasks and make time for studies. One-hundred percent of the respondents take responsibility for their learning. Almost all (98%) indicated they were capable for making time for their coursework, and were goal oriented. Ninety-five percent of the students characterized themselves as self-motivated and capable of critical thinking. Just over 90%, were capable of prioritizing their responsibilities and were self-disciplined when it came to their studies. Of the 10 self-regulation statements responses, 86% were able to balance many tasks at the same time, and 84% were good time managers. A surprisingly large percentage (37%) of students admitted to being procrastinators; only 42% of the students disagreed. This question appears to be an outlier, since all the other responses in the section contradict the response to this question. It is possible students were quickly answering the question in the same format as the others and followed the same response pattern not realizing the implication of the response was the reverse of the other statements.

Dependent Learning

Students' responses supported the literature's description of independent learners. The overwhelming majority of the students (93%) disagreed they leave tasks unfinished. Over 70% disagreed they required help to understand written instructions, had trouble comprehending what they read, and needed faculty to remind them of assignment due

dates. Almost 70% disagreed they needed incentives to motivate them to complete a task. Only 58% disagreed they wait until the last minute to complete assignment, with 28% neither disagreeing nor agreeing.

Need for Asynchronous Scheduling

Eighty-six percent of the time students agreed family and work schedule necessitated they take an asynchronous online course. Only 25% needed an online course because of geographical distance from the college. Just less than half (49%) found it difficult to go to campus to complete course requirements. Almost three-quarters of the respondents indicated they needed the freedom of completing coursework at the time and place of their choosing.

Academic Skills

The students were confident about their academic and problem solving skills. One hundred percent of the students agreed they were capable of asking for help when they had a problem, and following written instructions. Ninety- eight percent were comfortable learning new skills. Over 90% rated themselves as good readers, and were good at conveying their ideas in writing. The vast majority can learn by working independently. Over 80% were capable of solving problems on their own, read carefully, and considered themselves good writers. Fifty-eight percent disagreed that they needed face-to-face interaction to learn. More than half (54%) did not need classroom instruction to learn. Two-thirds (64%) need faculty feedback on completed assignments.

Focus Group

In addition to the second administration of the TOOLS self-assessment two online students were interviewed. The researcher arranged for two focus group sessions by

contacting seven Thompson Park full-time faculty who were teaching online classes during the fall semester. The researcher asked the faculty to invite their online students to attend one of two face-to-face focus groups regarding their online experiences (Appendix C). Both focus groups were scheduled on campus on two different days of the week at two different times of the day. Five students responded to the researcher indicating that they would be interested in the focus groups. Three indicated they would attend the Monday group and two would attend the Thursday group. Only two students attended the groups, both during the Monday session. The third student who agreed to attend the Monday session emailed apologizing for not attending, explaining that she was unable to arrange childcare.

The Monday focus group was conducted on October 19, 2009 with two female students: Shirley, a business major, and Diane, an early childhood education major. The focus group was conducted in a 20 foot by nine-foot conference room with one glass wall common to the hallway. The researcher sat at the head of a large table and the two students sat on opposite sides of the table near the researcher. Shirley was soft-spoken with a British accent and was approximately 30 years old. She was dressed in tailored black pants, a white shirt, and an argyle vest. Shirley sat back in her chair with a confident but attentive air. She was poised and eager to share her experience as an online student and instructor. Diane appeared to be closer to the researcher as she leaned forward with her elbows on the table. She was dressed in blue jeans and a college sweat shirt. Diane was in her mid to late forties. She spoke with a slight inner city accent and was thoughtful in her clearly articulated responses.

The invitation to the focus group informed the students that their participation was totally voluntary and their choice to participate would not have any impact on their grade. At the start of the focus group session, the researcher reiterated the voluntary nature of participation and the purpose of the focus group. Each student signed an informed consent. In the prepared discussion group protocol (Appendix D), the two students were asked why they were taking an online class, to describe their optimal online learning experience, and to articulate the skills needed as an online student, the challenges they faced, and the advice they would give to a first-time online student.

The focus group would be better described as a two student interview because only two students attended. Neither student had met each other before the session. Each student was respectful of the other as she spoke, and often agreed with the other's comments. Neither student appeared to be intimidated by the other or reluctant to answer a question because of the other student's presence. At first, both students were reserved, but were free speaking about their online experiences after five minutes. The two students supported the others' responses and in one instance Shirley provided Diane with advice on documentation of her electronic submissions.

Both students' motivation for taking online courses was a factor often cited in the literature. Diane took the online class to be able to work more hours and Shirley wanted the flexibility to allocate large blocks of time for both employment and school work. Both were enrolled in other courses during the semester. Diane was taking a hybrid education class and a totally online psychology course. At several points, she said the online class was harder than the face-to-face class. She felt she had more work to do in the online class than in the face-to-face class. She indicated she was "writing, writing,

writing" in her online psychology class. She also commented she was required to interpret readings and do an extensive amount of writing on her own with little guidance from her instructor. There was a sense of frustration in her voice when she relayed she received criticism, but no help with her work. Her comment was a "large portion of the class was independent learning." Diane did not like the online class as much as a face-to-face class because she missed the in-person contact with the instructor. Diane preferred hybrid classes for two reasons: the limited number of meetings, and the personal interaction. She did recognize the experience depends on the instructor as well as the format.

Shirley prefers the online class because of the flexibility, she also noted her online history teacher made the class "so interesting." She commented on the amount of thought he put into the discussion questions and his contribution to the online discussion. She compared it to being in the classroom. Diane agreed the professor's participation makes a big difference in the experience. Shirley did admit she could see the advantage of an occasional face-to-face meeting to get questions answered. Shirley commented that students in her history class, with the engaging faculty, did not seem to drop out. She credited the high retention rate to the instructor's outreach to the students.

The two students commented on the difference between communication with the instructor and fellow students in the two different mediums. Diane felt there was a "better discussion flow in face-to-face" environment as opposed to the online environment. She specifically cited she disliked waiting for a response to her question or comment, which occurs in the asynchronous structure. Diane spoke about the communication lag time between the students and the teacher or another student's response and said, "the face-to-

face discussion was helpful to understand complicated questions." Diane described her difficulty deciphering her psychology instructor's questions. Both students expressed a feeling of being alone in their online education because of the inability to get an answer to their questions at the time they are working on an assignment. Shirley prefers the online medium and added, she would rather the loss of immediate feedback than the loss of flexibility with synchronous online classes that she experienced in England, where all students needed to be online at the same time.

Diane did not feel comfortable contacting another student to find out when they were planning to post her assignment. She did not have social engagement with other students in the asynchronous structure of traditional online classes. She spoke extensively about her frustration with the requirement to post a comment to another student's posting by a specific date. Diane said it was not fair for one student to have to rely on another student to complete her work, because one student had no control over another. Her sense of frustration was obvious by the fact she brought the point up three times in the conversation. She asked the researcher if she thought the requirement was fair and implied that the researcher take steps to have the practice discontinued. Diane did not appear to be timid about seeking assistance, but she never mentioned she contacted another student in her online class to post her work so she could reply.

Diane's frustration was likely related to her motivation to do her online work. Both Diane and Shirley were motivated to do their class work to earn a grade of A in their classes. Diane's lack of control over the timing of her posting created a barrier to her attainment of her goal of a good grade. Shirley was not fazed with the reliance on other student's input to do her work. Shirley acknowledged she was aware of assignments

where one student was responsible to respond to another, but she did not comment whether she currently had a response-posting requirement in her class. She indicated she was comfortable asking the two students she met at the face-to-face orientation in her chemistry class. She indicated the specific class orientation was helpful in getting to know the teacher and other students in the class. Diane's online class instructor did not conduct a face-to-face orientation so she only knew the other students in the class from their online postings. Diane said a synchronous online orientation would be better than no orientation. Shirley preferred the online class, but did say she missed the social interaction that typically takes place before class in the online environment. She said it was "difficult but not impossible to bond with another student." Diane lamented she did not get to know the students well in the online class and preferred the hybrid class to see the students and put names and faces together.

Both Shirley and Diane describe themselves as self- disciplined. Shirley said, "I think you need to want to do it or otherwise I think that becomes a barrier." Diane specifically carved out time in her schedule to do her work; she said she may spend up to 15 hours a week on her three credit psychology class. She acknowledged she worked hard in the class but was complaining; she recognized the trade-off between the flexibility of the online environment and the need for more independent work. In line with the literature in online student success, Shirley said online students need to have good time management and computer skills. Diane agreed and related an occasion when her instructor had not received the work Diane submitted through the course learning management software.

Diane added writing skills to the list of skills online students need. Diane indicated she was constantly writing in her psychology class. Diane told the story of how her psychology instructor had not received one of her writing assignments. She contacted her instructor to confirm the instructor received the work when Diane had not heard from the instructor for two weeks after it was submitted. The instructor had not received her paper. She sent her paper several different ways and hand delivered the paper to the instructor's campus mailbox on her way to the focus group. Diane asked Shirley if she lost an assignment. Shirley had not, but knew of students who had.

When giving advice to first time online students, Shirley talked about the sequence of courses taken. Shirley suggests students take computer courses before they take online classes if they do not have computer skills. A student needs to be able to easily learn new software, and be familiar with technology terminology to follow instructions. One such software is the course learning management system, another would be specialized software used in a class. Shirley had to learn the software for her account work to complete her accounting assignments. When asked what was challenging, Shirley responded with the multiple steps needed to get "all the information together." She said,

> First you select your class, then you select your unit, then you select the week, then you select this assignment and then you go back up and you select the content, and you download in pdf and then you go through it or document or worksheet and then you have to copy and paste into word and then complete the worksheet and then put it into a dropbox. (Shirley, Focus Group, October, 2009)

Each student devised a method to have the study materials available to do their work. Shirley prints a hard copy of the instructions. Diane copies and pastes the questions into a word processor where she writes her answers and copies and pastes the finished work into the discussion forum. Diane described the instructions her chemistry instructor gave her to save documents in an “rtp” format that could be read as sent on any computer regardless of the sending and receiving word processing software being used, but she “didn’t know what she (the instructor) was talking about.” Neither student spoke about seeking help desk assistance, although it is available to all online students.

Despite Diane’s frustration of relying on others to post and the amount of time she spends doing the work, she recognized the learning value of the discussion groups. She could “get ideas from other people and see their perspective.” When asked whether the posting forces the student to understand the information any more or less than a face-to-face class, Diane responded, “Yes, that is why I think the work is more, and the other problem I have in this class is that sometimes I am not understanding the question.” Discussion groups widened Shirley’s perspective on the way she saw a situation.

The students’ recommendations for new students was to go to the orientation and learn the how to use the course learning management system. Inform the students that the online course may require more hours than the face-to-face class. Shirley suggested the differences in a syllabus for an online class from the face-to-face class be made available to the student before she registers for the class. She was concerned about the timing of students’ access to the course requirement; often they do not know what the requirements are until after the class starts at the beginning of the semester when the class begins. She used the example of her online speech class in which she had to find her own audience.

She got together with some of the other students in the online class to fulfill the requirement. In their recommendation to online instructors, Shirley pointed out the need for clarity in tests questions. She stressed the importance of unambiguous questions and statements. Students are not likely to get an immediate answer to their questions of clarification. Diane voiced frustration with her psychology professor who lost one of her papers and responded to her questions "late or not at all." Both students agreed all the assignments for the course should be provided to the students at the beginning of the semester. Their logic was based on their ability to manage their time. Diane indicated she likes to get her work done as soon as she gets it in case a problem arises that prevents her from getting her assignment in on time. Both students liked the online delivery format. Diane liked the hybrid format over the totally face-to-face delivery structure. She was looking to take a hybrid for one of her required major courses in the spring. Shirley prefers online because of the flexibility and control over the pace she goes through the content. After the formal interview ended, the students continued to ask questions about the research. They were interested in the online success rates versus the face-to-face success rates. They gave additional tips about the difference between the syllabi in online and face-to-face classes. They both indicated they would take additional online classes, but Diane preferred hybrids.

Cycle IV

Data Collection and Analysis

During Cycle IV the data from the TOOLS survey for the spring and fall administrations was analyzed. SurveyMonkey, an electronic survey service, was used to collect responses to the questions and demographic information. The student invitation

previously described in Cycles II and III contained a hyperlink that brought the student directly to the survey on SurveyMonkey. A sample of the email request is attached in Appendix B. All 45 short statements were typed into a SurveyMonkey questionnaire. The spring survey also contained seven demographic and background items (e.g., I am taking a face-to-face or hybrid course this semester). The fall survey contained 12 background items, including demographic questions (e.g., age category) and motivations for taking online courses (e.g., "online suits my learning style"). Both surveys contained an item requesting the students' Thompson Park ID number. This item was used to identify the number of online courses the student was currently enrolled in, as well as online GPA and online success.

Demographic and background data. Forty students completed the survey in spring and 43 completed the fall survey. Where possible, results from both administrations of the survey were combined. Several demographic questions were added to the fall survey, and the choices available for some of the initial demographic questions were modified. For example, in the spring, students were only given two choices for their age (18-24 and 25 or older). The fall students were given four choices (under 21, 21-24, 25-40, and 41 or older). Because the categories from the fall administration can be collapsed into the same categories used in the spring, the data can be combined. In other cases, direct comparisons are not possible so the spring and fall data are reported separately.

Respondent age. The majority (59%) of the spring group was under 25 years of age; slightly over half of the fall group was under 25. The single largest group in the fall

was comprised of students aged 25-40 (40.5%). When the spring and fall groups are combined, the majority of the students (54%) were 24 years old or younger.

College level and credits earned. The vast majority of the spring respondents (87.2%) had earned 31 or more college credits. Nearly three quarters (73.8%) of the fall cohort had earned 31 or more college credits, suggesting that online courses appeal to sophomore level students. The fall 2009 survey asked whether students were Thompson Park students or visiting students taking an online course at Thompson Park. The vast majority (80%) of the students were native Thompson Park students.

Credit load and courses enrolled. Fifty nine percent of the spring students were taking 12 or more credits during the semester and 41.0% of the students were taking less than 12 credits. The most common response in fall was 7-12 credits (38.1%). Sixty-three students provided their Thompson Park student ID, allowing the researcher to have access to their academic records. Forty percent of these students were taking a single online course, while 32% were taking two online classes. Sixteen percent were taking three online courses and 12 % were taking four or five courses. Fifty-four percent were taking at least one face-to-face or hybrid class during the semester.

Employment status. The fall survey contained an item asking how many hours per week the respondents worked. Over 90% of the students reported that they worked, with more than 80% of the students working 21 or more hours per week. Over half of all the respondents reported working more than 30 hours per week.

Student success. The students who provided access to their grades were more successful than the average online success rate of 63%. Nearly half (48%) of the students taking more than one online class passed all their online courses, and 35% of the students

taking one online class earned a grade of D or better in their online class. Only eight percent of the students earned a grade of F or withdrew. Nearly 80% of the students self reported a 3.0 or higher grade point average.

Student motivation and subscale analyses.

Motivation for taking online class. The fall survey asked students to indicate what motivated them to take an online course. Nine response options were provided (including "Other") and respondents were asked to check any that applied to them. The nine motives are presented in Table 1, along with the percent of respondents who selected each statement.

Table 1.

Motivation for Taking Online Classes

Motive	Percent of respondents
Control time when they study	64.3
Save travel time	52.3
Set their learning pace	40.9
Other	36.4
Online suits their learning style	34.1
More comfortable participating online	25.0
No face-to-face seats available	9.1
Faculty/student interaction	4.5
Maintain anonymity	2.3

The student's ability to control the time when they study was the single most frequently identified motive for taking an online class as shown in Table 1. Saving travel time and setting their own learning pace were also popular motivations. Over a third (36.4%) of the students had reasons other than the eight given possible responses on the survey.

Kerr, Ryneason, and Kerr survey items and subscales. Students used a 5-point response scale to indicate how much they agreed or disagreed with each of the 45 survey statements developed by Kerr et al. (2006). A response of "Strongly Agree" was assigned a point value of "5," an "Agree" was scored a "4," "Neither Disagree nor Agree" was given a point value of "3," a "Disagree" was coded as "2," and a "1" was assigned for "Strongly Disagree" responses. "Not Applicable" responses were assigned a value of zero, but were not included in the calculation of the mean subscale scores for each student. Nine of the questions were reversed scored. For each student, five subscale scores were calculated: Computer skills (mean of items 1-11), Independent Learning (mean of items 12-21), Dependent Learning (mean of items 22- 27), Need for Online Delivery (mean of items 28-32), and Academic Skills (mean of items 33-45). The subscale scores were calculated following the guidelines provided on the Texas Wesleyan University website (http://faculty.txwes.edu/mskerr/files/Tools_AGSP.htm). Higher mean scores indicate higher abilities, needs, skills, etc. Table 2 provides the spring and fall group means on each of the five subscales.

Table 2.

Subscale Means

Subscale	Mean	
	Spring 2009 (n=40)	Fall 2009 (n=43)
Computer Skills	4.51	4.52
Independent Learning	4.06	4.22
Dependent Learning	3.86	3.90
Academic Skills	3.83	3.90
Need for Online Mode	3.82	3.63

The results show that both the spring and fall groups of online students had a high degree of confidence (high degree of confidence defined as greater than 4.0) in their computer skills as well as in their independent learning abilities. The fall respondents, however, scored higher on Independent Learning (4.22) compared to the spring group (4.06). Mean responses on the other three subscales were below 4.0, with "Need for Online" receiving the lowest mean (3.63) in the fall group. Thus, fall students reported less of a need for taking online courses (3.63) compared to the spring group (3.82).

Relationship between subscales. The Pearson *r* was calculated to determine the relationship between students' responses on one subscale compared to another subscale using a two-tailed test. Statistically significant correlations were found between Academic Skills and three other subscales: Independent Learning, Dependent Learning, and Computer Skills as seen in Table 3. The strongest correlation was found between the Independent and Dependent Learning subscales $r(81) = .62$, $p < .01$. There were no

significant correlations between the Need for Online learning and any of the other four subscales.

Table 3.

Correlations Between Subscale Means

Subscales	*r* value	*p*
Academic Skills and Computer Skills	.434	.00
Academic Skills and Independent Learning	.502	.00
Academic Skills and Dependent Learning	.435	.00
Academic Skills and Need for Online	.005	.97
Computer Skills and Independent Learning	.340	.00
Computer Skills and Dependent Learning	.324	.00
Computer Skills and Need for Online	-.199	.07
Independent Learning and Dependent Learning	.622	.00
Independent Learning and Need for Online	-.131	.24
Dependent Learning and Need for Online	-.173	.12

Relationship between individual items and their subscales. Students' responses to questions comprising each of the subscales were correlated with their respective subscale mean scores. For example, survey items 1-11 were correlated with the Computer Skills average score. In addition, each item was also correlated with the four subscales to which it did not belong. One would expect items that comprise a particular subscale to be more highly correlated with it than with any of the other four subscales. This assumption was investigated using two-tailed Pearson correlation coefficients. The 11-items on the

Computer Skills subscale were each significantly correlated with the subscale mean scores, with *r*'s ranging from .50 to .83, all of which were significant at the .01 level (with degrees of freedom ranging from 76 to 83). None of the 11 items was more highly correlated with another subscale than it was with the Computer Skills subscale. The 10 items (questions 12 through 21) on the Independent Learning subscale were significantly correlated with the subscale, with *r*'s ranging from .50 to .74 (*df*=82 or 83), all of which were significant at the .01 probability level. None of the Independent Learning items was more strongly correlated with another subscale than it was with the Independent Learning scale. The Dependent Learning subscale was comprised of six items (#22-27), all of which were more strongly correlated with the Dependent Learning subscale than with any other subscale. Pearson correlations (two-tailed, 81-83 degrees of freedom) between these items and the subscale average score ranged from .61 to .78 and were all significant at the .01 level. One of the Dependent Learning items (#24 "I wait until the last minute to work on assignments") was almost as strongly correlated with the Independent Learning subscale (r=.607) as it was with the Dependent Learning subscale (*r*=.614), suggesting that it is not a particularly good Dependent Learning subscale item.

The Need for Online subscale is comprised of five items (#28-32), that were each more highly correlated with that subscale than with any other. Pearson *r*'s ranged from .50 to .75 with between 81 and 83 degrees of freedom. All *r*'s were significant at the .01 level. There are 13 items (#33-45) on the Academic Skills subscale. Two of these (#37 "I need faculty feedback on my completed assignments" and #39 "I need classroom discussion to learn") were not significantly correlated with the subscale mean. The

remaining 11 items were each significantly correlated with the subscale (*r*'s ranged from .39 to .73, with between 81 and 83 degrees of freedom) with *p*-values of .01.

The relationship between student success in online courses, subscale scores, student motivation and demographic factors.

Correlates of student success in online courses. Pearson correlation coefficients were calculated between each of the five subscales and the student's grade point average (GPA) for online classes during the semester. None were statistically significant. Next, a correlation was calculated between the number of online courses the student took in the semester and the student's online GPA that term. This was also not significant. There was, however, a moderate correlation between the number of online classes a student took during the semester and his/her online performance, $r(61) = .26$, $p < .05$ employing a two-tailed test. Online performance was calculated using the following coding scheme: 1 = F or W in all Online Courses; 2 = Passed at Least One Online Course and Failed or Withdrew from One or More Online Courses; 3 = D or Better in Their Only Online Course; 4 = D or Better in All Online Courses. As expected, there was a significant correlation between a student's online GPA for the semester and his/her performance in online class as measured above ($r[60] = .73$, $p < .01$ employing a two-tailed test).

The impact of student motivations on student success and subscale scores. Do students with different motivations for taking online courses have different levels of student success? Do they respond differently on any of the subscales? To address the first question, nine independent sample *t*-tests were calculated (one for each of the nine motives provided in the fall administration of the survey). The mean online GPA for those who responded "yes" to a particular motive were compared with the mean online

GPA of those who did not select the particular motive. None of these *t*-tests produced a significant *t*-value, indicating that online GPA did not differ as a function of any of the motivations to take online courses.

To address the second question (i.e., do any of the subscale scores differ as a function of any of the motives to take online courses?), independent sample *t*-tests were calculated for each of the five scale scores for each of the nine motives included in the survey. There were significant differences between students' scores on one or two subscales for six of the nine motives: (1) Students who were motivated to take an online course to control the time when they study had significantly higher Computer Skills ($t(40) = -3.31$, $p < .005$) and Depending Learning ($t(40) = -2.13$, $p < .05$) mean scores than the students who did not identify controlling their study time as a motivator; (2) Students who selected an online course to set their own learning pace had significantly higher Computer Skills ($t(41) = -3.51$, $p < .01$) and Academic Skills ($t(41) = -5.67$, $p < .01$) than those who did not identify this as a motive for taking online courses; (3) Students choosing online classes because it suited their learning style had significantly higher Academic Skills mean scores ($t(41) = -3.94$, $p < .01$) than students who did not have this as a motivating factor; (4) Students who took an online course because there were no in-person seats available had significantly lower Computer Skills scores ($t(41) = 2.31$, $p < .05$) than students who did not select online courses for this reason; (5) Students who were motivated by online faculty and student interaction scored significantly higher on the Academic Skills scale (M=4.5) compared to those without this motivation (M=3.88; $t[41] = -3.24$, $p <.05$), but there were only two affirmative responses to this item; (6) Finally, students who took an online course in order to maintain their

anonymity scored significantly higher on the Academic Skills subscale than those not wishing to be anonymous (t[41]=-2.29, p<.05), but only one person responded "yes" to this particular motivation. There were no other statistical differences on the subscales between the students who chose one of the remaining motives for taking an online class and the students who did not choose that motive:

- To save travel time
- More comfortable participating online than in-person, and
- Other

The largest distinction between students' scale scores and motives occurred on the Academic Skills subscale, indicating that variability between students who were not influenced to take an online course to set their learning pace, to suit their learning style, to maintain anonymity, or for the faculty and student interaction, was greater than the variability within the group as a whole on this subscale.

The impact of demographic variables on student success and subscale scores. Do students with different demographics have different levels of student success? Do they respond differently on any of the subscales? To determine whether online GPA or any of the 5 subscale scores differ by demographic factors, two-tailed *t*-tests were calculated for the following four demographic characteristics: Age Category (18-24 vs 25 and Older), Home vs Visiting Status, Enrollment in Face-to-Face or Hybrid Course (Yes/No), and Credit Load (spring 2009; 1-11 credits vs 12 or more). (1) Students 24 years old or younger had lower average scores on the Independent Learning subscale compared to students 25 and older ($t(79) = -2.61$, $p < .05$). (2) Thompson Park native or home students scored significantly higher on Academic Skills compared to visiting

students ($t(38) = 2.13$, $p < .05$). Information on home school was only collected in the fall administration of the survey. (3) Students who were concurrently enrolled in face-to-face or hybrid classes (vs those who were only enrolled in online classes) had significantly lower online GPA's (M=2.69 vs 3.34; $t[59]$=-2.51, p<.05). The results do not distinguish between students whose choice it was to take an online course as opposed to those who took the online course because there were no face-to-face or hybrid seats available. (4) There was no statistical evidence of a difference on any of the subscales or on online GPA as a function of credit load in the spring administration of the survey.

Discussion

The survey results and student focus group were used to inform the first two research questions.

Are there student behaviors and characteristics that impede student success in online classes?

The results of the study were inconclusive regarding student characteristics that are likely to predict student performance in online classes. There was no correlation between any of the five subscales and a student's online grade point average. Unlike the Kerr et al. (2006) studies, four characteristics emerged for predicting online student success. The relationship between independent learning and dependent learning was interesting to the researchers since the names of two subscales imply students who self identified as independent learners would be a different group than those who were dependent learners. Pearson *r* scores for each of the questions in the independent learning subscale were significantly or moderately correlated to the subscale using a two-tale test at a confidence level greater than .01. The *r* values ranged from a high of .738 to a low of

.505. Similarly, the questions comprising the dependent learning subscale were moderately or significantly correlated to the dependent learning scale with *r* values ranging from .776 to .554 at *p* less than .01.

The researcher suggests the title of independent learning subscale may be a misnomer. Only three of the 10 statements comprising the independent learning subscale specifically address the process of learning; the majority of the questions relate to procrastination, prioritizing responsibilities, managing time, multi-tasking, and self-motivation generally. The three questions that address learning relate to the student's ability to make time for her coursework, the student's self-discipline to study, and a student's assumption of responsibility for her learning. Perhaps "self-discipline" would better describe the subscale and explain the strong correlation between the two seemingly contradictory subscales. Additionally, personal characteristics such as procrastinator, time-manager, as well as goal oriented, self-disciplined, and self-motivated were used in the 10 questions comprising the independent learning sub scale. Students' interpretations of the terms, especially those that could be construed to have a negative connotation, may have influenced their responses. Statements describing actions, such as requiring help or leaving tasks unfinished, were used in the six questions related to dependent learning and leave less room for differences in interpretation.

Is Kerr, Rynearson, and Kerr's (2006) questionnaire titled Test of Online Learning Success (TOOLS) a reliable predictor of online student success in Thompson Park Community College?

There were several findings that were inconsistent with the literature. More than half of the Thompson Park cohort taking online classes was younger than 25, as opposed

to the literature that reports the majority of students taking online classes are 25 or older. Students who responded to the survey and provided access to their grades were more successful than online students as a whole as reported in the literature or in the institution as a whole. They were also more successful than the Thompson Park overall student success rate. Thompson Park success rate for all courses was 74% and overall online success rate was 63%; the responding cohort of students successfully completed their online courses 80% of the time. Another anomaly in the composition of the cohort group was the students' grade level. Only 20% of the students had earned fewer than 31 credits. Therefore the vast majority of the students had a proven academic record as opposed to 30% of the Thompson Park student body, suggesting students who completed the survey and provided access to their grades may not be representative of all online students. Those who answered the survey were engaged in their online class to receive the invite and were more experienced college students. Also 80% of the students reported they had a grade point average of 3.0 or greater.

The focus group sessions were transcribed and coded in Cycle IV in addition to the compilation of the survey results. The focus group discussion reinforced the importance of the new and expanded demographic questions on the second administration of the survey. One such inquiry was the demographic question on a student's motivation for taking online classes. Over half of the students indicated they chose the online course to control their study time and set their learning pace; students seeking these two controls with their learning would be well advised of actions they might take to counteract their lower likelihood of success. The findings suggest that TOOLS online readiness survey may not be the appropriate instrument, because it was

not a reliable predictor of online student success at Thompson Park. Other online readiness instruments are available and may be more helpful in advising student's of their probable success in online classes based on their characteristics and behaviors.

Limitations

The scope of the study was narrow and examines one aspect of a complex multi variable online learning experience. Multiple factors impact student performance and completion in a class. Those factors related directly to students alone are only a fraction of the equation. Metzner and Bean's (1987) model of nontraditional student attrition has 26 variables that are academic, environmental, and social. The variable only accounted for 29% of the variance in dropout and did not include variables related to the instructor, pedagogy, or the educational environment. Tinto (1993) suggests a comprehensive study of retention leading to an integrated system encompassing the full range of student academic and social experience on campus and external to the college. The wider view enables institutional officials to discern which experiences are differently important in shaping different types of outcomes.

The respondent groups were not characteristic of the Thompson Park student body as far as credits earned; the respondent groups were much more experienced students than the college as a whole. The overall college student demographic shows that only 30.7% of all students enrolled in fall 2009 had earned more than 30 credits. However, the responding cohort reported that 87.2% of the spring and 73.8% of the fall students had earned 31 or more college credits.

The timing of the administration of survey tool may have limited the responses to students who had demonstrated self-dependency skills to navigate the barriers students

face to be actively involved more than half way through the semester. Students were invited to take the survey between the eighth and twelfth week of a 15-week semester. Eighty-seven percent of the students earned a grade of D or better, and the passing rate of all online classes for the two semesters was significantly higher than not only the college-wide average of 74%, but also the 66% average for spring 2009 and fall 2009 online courses. Frydenberg (2007) found that the attrition rate in the first week of online classes was double the rate in the face-to-face classes. Since the questionnaire was issued so late in the semester the students that took the survey were more likely to be doing well in the class. Even though the survey was administered late in the semester, it was sent out before the non-punitive withdrawal date.

Just as limiting the study to one component of the online learning environment has research limitations as multiple factors impact on student success, narrowing the study to solely student success cannot fully explain why some students succeed and others do not with online courses.

Future Research

The TOOLS instrument did not provide predictive capabilities of an online student's success. Testing the predictive ability of other readiness surveys could determine whether they are more reliable at predicting student success in online classes at Thompson Park Community College. Another possible research study would be to repeat this study with students before they begin the online class to determine whether the composition of the online student cohort that begins online classes is the same as those two thirds of the way into the semester. With a pre-enrollment assessment students could be provided with support as indicated by the self-assessment, especially with computer

skills and time management. Results of the treated group could be compared to the student success of the students who did not participate in the online preparation support. A future study might include gathering information regarding gender that was not collected in this study; the literature reports the majority of online students are women; a demographic question regarding gender could be added to a future survey. The most difficult yet the most informative future studies will examine the impact of factors aside from the student such as the instructor, the course design, and the course delivery technology has on student success.

CHAPTER VII

ROLE OF THE RESEARCHER

The researcher serves as the dean of Academic Affairs at the college and finds the success gap between face-to-face and online courses problematic. The Teaching and Learning Center (TLC) supports online instructor training, assists online students, populates content into online shells, assists faculty in the development of their online content, and serves as a pedagogy resource center. The TLC falls under the researcher's direction and is charged with the quality of online courses through a quality review process and instructor training. The researcher is responsible for the integrity of the college's degrees regardless of the delivery mode

As dean of Academic Affairs I supervise the Teaching and Learning Center (TLC), the department that supports online instruction. The TLC is a faculty resource that delivers instructor training, assists in the development of online courses, helps with web design, researches innovative technologies, and promotes online offerings. Online faculty must complete the TLC online certification course before they can teach online. The Center staff is charged with the development of new online courses and programs. They work with faculty to design course structure for a quality educational experience.

The researcher is interested in the findings of this action research to inform the development and implementation of a process to increase online student success. Eliminating the achievement gap between face-to-face and online classes ensuring comparable student success in all mediums is the researcher's responsibility. She is responsible for student outcomes and it is important that she maintain an open mind to

determine the cause of the lower online success rate. Identifying the root of a problem is the first step toward developing a solution. As a student in the Rowan Educational Leadership Program, the researcher shares a common bond with the students she is studying. Balancing family and work responsibilities as a student, the researcher shares the perspective of many online students.

Having worked at a community college for the past 23 years I have committed myself to the community college mission of providing access to affordable quality educational programs. Community colleges enrich lives through access to educational opportunities for all. The open door policy welcomes all students regardless of previous educational background or skills. Online courses provide access to students who may not be able to attend a scheduled face-to-face class because of work, family, or a variety of other factors. Quality education applies to all programs and delivery methods. The fact that online students are generally less successful than the face-to-face students is unacceptable.

Student outcomes, regardless the delivery method or location must be the same. As dean of Academic Affairs, it is my responsibility to ensure the integrity of the college's academic programs for the academic content, the quality of instruction, and the appropriate faculty training and support. The researcher is a champion for equality in educational environments for all students, but has little experience as an online student. It is limited to being a guest in an online literature class for several weeks and a participant in three weeks of online instructor training. She has not taught an online class, but taught college students for 13 years. Although every effort was made to ensure

objectivity, these biases had to shape the way the researcher viewed and analyzed the data.

As a student, the researcher prefers auditory learning environments and personal interaction with regularly scheduled class meetings. At the same time, she also recognizes the benefit of being able to study any time any place with demanding work and family schedules. For students with the same preferences, the choice to take an online course is a trade-off between the opportunity to take the course and delivery preference. Regardless, if the college offers distance education courses it must do so with an equal likelihood of student success.

My Relationship to the Participants

It is unlikely that the researcher directly interacted with any of the students surveyed. She has no influence on the students' grades or success in the classes. The dean of Academic Affairs has relatively little direct contact with students. Student interaction is limited to student complaints, violations of the academic integrity code, or grade appeals. There is a remote chance students selected for the survey recognized the researcher's name if they had been on the Dean's List. The fact that the researcher does not supervise faculty may account for the low student response rate on the surveys as faculty sent the survey requests to the students.

The action research project with the goal to improve online student success, will continue past the cycles of this dissertation as the researcher employs her leadership skills to implement procedures to alert students to their added responsibilities as online students. Kotter's eight-stage change process (Kotter, 1996) will be employed. The Higher Education Opportunity Act (2007) established the sense of urgency. The Act

requires regional accrediting agencies to demonstrate that courses or programs taught at a distance are of sufficient quality to achieve the stated objective for which the course or programs are being offered; but does not require separate distance or correspondence education standards.

The action research and the literature will guide the college in the development of procedures to fulfill the college mission of access, including success to online students at Thompson Park Community College.

CHAPTER VIII

FINAL THOUGHTS

My dissertation symposium defense crystallized the impact the Rowan experience had on my behaviors, views and attitudes as well as the impact I had on my institution. I was able to articulate how I implemented leadership theories and principles to aid distance education students in the online environment, and my journey of personal discovery and leadership development.

The lessons learned and skills developed were accelerated through a simulation of urgency to complete multiple tasks within a tight time frame. The need for hard work, perseverance, and decisive actions forced discipline, focus, reflection, and new perspectives, congruent with the literature's characteristics of effective leaders. I was able to internalize the importance of these attributes and recognize the need to hone them. The most valuable lessons I take with me are:

- Communication and trust are essential for effective leadership
- Integrity is essential
- Authenticity is transparent
- Persistence is rewarded
- Courage is necessary
- Personal values trump being liked
- Development and growth are continual

Subtle perspective changes in my approach and behaviors resulted in significantly improved outcomes not just with the action reach project but also with relationships and my responsibilities. After sharing the news of my successful symposium with two of my

direct reports, and thanking them for being excellent followers, they readily commented on my transformation citing an observation of me as I charged two statewide groups to define and articulate information literacy and technological competency for statewide use. I derived my new found confidence from the skills developed during the rigorous program leading to awareness and greater inner peace. Developing a wider lens coupled with a focus on the needs of my audience was a challenge that I embraced and in turn was rewarded with the awareness of my rote ways and the need to overcome my inertia towards change. The wider lens guides my decision making process making some decisions easy and quick and the realization that others are more complex needing more research and input. New perspectives were instrumental in enhancing the fulfillment of my every day responsibilities.

I used Kotter's (1996) eight-step change process to help students who chose to take online courses to understand their added responsibilities and challenges as online learners. Relying heavily on Kotter's first step to create a sense of urgency, I leveraged the development of the college's Education Services Master Plan and the Higher Education Opportunity Act to create the campus wide sense of urgency. Congruent with his second and third step I formed a guiding team who developed a vision and strategy that will aid online student success. Bolman and Deal's (2003) four cultural frames guided my approach to step four to tailor the message to multiple audiences, recognizing the existence of different cultural frames even within existing groups. Those who embraced the vision were empowered to act. The process recognized that many of the barriers to change are largely systemic (Argyris, 1990; Senge, et al., 1999). Those who will implement the change need input into the plan design for the plan to be operational.

Obtaining nursing faculty acceptance to pilot the new student readiness instrument was an early win. More short term wins are expected to come from the analysis of the nursing student performance. Regardless whether the results are conclusive or not the project has been the catalyst to focus attention on the needs of online students, instructors and other variables related to online learning. The heightened institutional awareness sows the seeds of cultural change. I will persist and build upon the momentum with the goal to improve online student success.

Prompted by Dr. Crabill's question, I have given some more thought about my leadership style. I continue to cling to the tenets of servant leadership because of my strong desire to help others. Helping others does not have to be a one-to-one endeavor as it was when I taught and assumed the responsibility of every student's success. I embrace a wider perspective of the style in which I have the opportunity to help a large number of students through the many facets of my job such as academic program integrity, course rigor, appropriate student support, and affordable access to classes. I came to the recognition that a servant leader is not a slave; discounting my early titular leadership roles where I allowed my followers to dominate my actions far more than I did theirs in fear of being disliked. That is no longer the case. I am reexamining the characteristics of transformational leadership that were part of my original leadership platform that I later removed as a result of my self-assessment. Once again I am reflecting whether I posses those attributes as I have grown.

In line with forward looking thoughts, new challenges will aid and test my metamorphous and growth. As Collins' (2001) analogy of the flywheel, my continued growth is likely to be less laborious; my learning process has momentum; the arduous

task to overcome inertia is behind me. Continual practice and reflection of being aware, agile, and compassionate will serve me well. The events at the college in the past few weeks, since I submitted my dissertation for review is a case in point. The college is going through a drastic cultural change due to abrupt and unusual leadership changes and financial difficulties. The institution's image has been scarred leaving the community shocked and confused. The situation tests my ability to remain unbiased and non judgmental; as I assure and direct my staff and others to stay the course of the institution's mission of providing quality, affordable education. The turbulent environment serves as a training ground in the application of leadership theory as I respond to a new president and executive vice president's leadership style and help others do the same.

I appreciate the institution's vote of confidence to continue my leadership growth as I serve as a tri-chair of the institutions periodic review report process. Three days after my symposium, I attended the regional accrediting agency's workshop on addressing the institution's progress since its last accreditation visit in 2008. Over the next year and a half I will be analyzing the institution's progress in addressing its 2008 self-study recommendations, engaging cross-college involvement, as well as addressing the institution's leadership and fiscal challenges for the future of the institution. Writing the report and coordinating many voices will provide the opportunity to continue to develop more effective communication skills.

Participating in the writing of the report fits nicely into the outline of my writing improvement plan. Creswell (2009) provides helpful advice to create a habit of writing, to develop an organized, coherent writing style. Most appealing is his advice to read well-

known books from literature for their illustrative clear prose, something I have denied myself over the past few years focusing on course and work related literature. I have also investigated several free online writing courses; Purdue is currently on the top of my list. Continue focus on the principles and steps in critical thinking will benefit my communication skills to effectuate more personal growth and development.

The future will be exciting, challenging, and rewarding as I will continue to open my mind, approach situations from multiple vantage points and seek my challenges to serve the college community.

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Appendix A.1

Online Student Survey Spring 2009

Online Student Survey
Administered spring 2009

Directions: The following 45 short statements relate to your ability to perform different tasks. There is no right or wrong answers so your first reaction is usually the best. Please do not omit any item. If an item does not relate to you, rate it as not applicable. Your efforts will help identify tasks that are most important for online student success. Please click on the statement that most closely describes you.
Students will be given the option to respond:

(0) Not Applicable
(1) Strongly Disagree
(2) Disagree
(3) Neither Disagree nor Agree
(4) Agree
(5) Strongly Agree

The survey was designed by Kerr, Ryneason, and Kerr.

1 I am capable of learning new technologies.
2 I am capable of sending and receiving e-mail.
3 I am capable of attaching files to an e-mail message
4 I am a competent internet browser.
5 I am capable of using standard word processing software.
6 I am capable of managing files on a computer.
7 I can download new software when necessary.
8 I can install new software when necessary.
9 I can copy and paste text using a computer.
10 I am capable of using discussion boards online.
11 I am capable of using chat rooms on line.
12 I am capable of prioritizing my responsibilities.
13 I am a good time manager.
14 I am a procrastinator.
15 I am capable of making time for my coursework.
16 I am able to balance many tasks at one time.
17 I am goal oriented.
18 I am self-disciplined when it comes to my studies.
19 I am self-motivated.
20 I take responsibility for my learning.
21 I am capable of critical thinking.
22 I often leave tasks unfinished.
23 I require help to understand written instructions.
24 I wait until the last minute to work on assignments.
25 I have trouble comprehending what I read.
26 I need faculty to remind me of assignment due dates.

27 I need incentives/rewards to motivate me to complete a task.
28 Because of my personal schedule, I need online courses.
29 It is difficult for me to go to campus to complete course requirements.
30 I need online courses because of my geographical distance from the college.
31 I need online courses because of my work or family schedule.
32 I need the freedom of completing coursework at the time and place of my choosing.
33 I can learn by working independently.
34 I am self-directed in my learning.
35 I am capable of solving problems alone.
36 I need face-to-face interaction to learn.
37 I need faculty feedback on my completed assignments.
38 I am a good reader.
39 I need classroom discussion to learn.
40 I am capable for asking for help when I have a problem.
41 I am comfortable learning new skills.
42 I read carefully.
43 I am a good writer.
44 I am capable of following written instructions.
45 I am capable of conveying my ideas in writing.

Please complete the following information about you.
I am
_____ 18-24
_____ 25 or older

The number of credits I am taking this semester is:
_____1-11
_____12 or more

I have previously earned the following number of college credits:
_____0 to 30
_____31 to 60
_____over 60

I have successfully completed an online class with a grade of D or better:
_____Yes
_____No

I am taking a face-to-face or hybrid class this semester:
_____Yes
_____No

I am taking the following online class this semester:
_____ Art Appreciation
_____ Chemistry in Life
_____ Police Role in the Community
_____ English Composition
_____ Business Writing
_____ Nutrition and Health
_____ American Civilization I
_____ Intermediate Algebra
_____ American National Government
_____ Educational Psychology

Please provide your student ID if give the researcher permission to match your responses to your grade after the final grades are submitted.
_____

Appendix A.2

Online Student Survey Fall 2009

Online Student Survey
Administered Fall 2009

Your participation in this survey is totally voluntary. You do not need to answer any question that you are uncomfortable with. All responses will be kept anonymous and confidential. Your class standing will not be affected in any way based on your participation. The purpose of this survey is to obtain information about online student technological and study skills. Your responses will be used as a guide for first-time online students. The research is being conducted as part of Rowan University Educational Leadership Doctorial Program course work. You may contact Nancy Kegelman, the principal investigator at 732-224-2221 or nkegelman@brookdalecc.edu or Dr. Robert Campbell, the faculty sponsor, at 856 256-4500 x3817or Campbell@rowan.edu if you have questions.

Directions: The following 45 short statements relate to your ability to perform different tasks followed by several statements about you. Please click on the statement that most closely describes you. There is no right or wrong answers so your first reaction is usually the best. Please do not omit any item. If an item does not relate to you, rate it as not applicable.

The responses following the 45 statements will be:

(0) Not Applicable
(1) Strongly Disagree
(2) Disagree
(3) Neither Disagree nor Agree
(4) Agree
(5) Strongly Agree

The survey was designed by Kerr, Ryneason, and Kerr.

1 I am capable of learning new technologies.
2 I am capable of sending and receiving e-mail.
3 I am capable of attaching files to an e-mail message
4 I am a competent internet browser.
5 I am capable of using standard word processing software.
6 I am capable of managing files on a computer.
7 I can download new software when necessary.
8 I can install new software when necessary.
9 I can copy and paste text using a computer.
10 I am capable of using discussion boards online.
11 I am capable of using chat rooms on line.
12 I am capable of prioritizing my responsibilities.
13 I am a good time manager.
14 I am a procrastinator.

15 I am capable of making time for my coursework.
16 I am able to balance many tasks at one time.
17 I am goal oriented.
18 I am self-disciplined when it comes to my studies.
19 I am self-motivated.
20 I take responsibility for my learning.
21 I am capable of critical thinking.
22 I often leave tasks unfinished.
23 I require help to understand written instructions.
24 I wait until the last minute to work on assignments.
25 I have trouble comprehending what I read.
26 I need faculty to remind me of assignment due dates.
27 I need incentives/rewards to motivate me to complete a task.
28 Because of my personal schedule, I need online courses.
29 It is difficult for me to go to campus to complete course requirements.
30 I need online courses because of my geographical distance from the college.
31 I need online courses because of my work or family schedule.
32 I need the freedom of completing coursework at the time and place of my choosing.
33 I can learn by working independently.
34 I am self-directed in my learning.
35 I am capable of solving problems alone.
36 I need face-to-face interaction to learn.
37 I need faculty feedback on my completed assignments.
38 I am a good reader.
39 I need classroom discussion to learn.
40 I am capable for asking for help when I have a problem.
41 I am comfortable learning new skills.
42 I read carefully.
43 I am a good writer.
44 I am capable of following written instructions.
45 I am capable of conveying my ideas in writing.

Please complete the following information about you.

I was motivated to take an online course (check any that apply)
_____to be able to control the time when I study for my online class
_____to save travel time
_____to be able to set my learning pace
_____online suits my learning style
_____for faculty and student interaction
_____because there were no in-person seats available
_____to maintain my anonymity
_____because I am more comfortable participating online than in-person classes
_____Other

Before you took your first online class, what was your best source of information regarding the skills you needed to be an online student?
____Counselor
____Other students
____An online readiness survey
____Personal research
____Online orientation
_____None – found out once in the class
_____Other

I am
_____ 18-24
_____ 25 to 40
_____ 41 or older

The number of credits I am taking this fall is:
_____1-6
_____7-12
_____13-18
_____19 or more

I work the following number of hours per week:
____ None
____ 0 to 10
____11 to 20
____21 to 30
____over 30

I am
_____a Brookdale student
_____a visiting student taking this online course(s) at Brookdale

I have previously earned the following number of college credits:
_____0 to 30
_____31 to 60
_____over 60

I have successfully completed an online course with a grade of D or better:
_____Yes
_____No

My college GPA is:
_____ Not applicable – first time college student

_____ Less than 2.0

_____ 2.0 to 2.99

_____ 3.0 or greater

I am taking a face-to-face or hybrid class this fall:

_____Yes

_____No

I am taking the following online course(s) this fall:

_____ ANTH 105 – Cultural Anthropology

_____ BUSI 221 – Business Law I

_____ COMP 129 – Information Technology

_____ ECON 106 – Micro Economics

_____ ENGL 122 – English Composition: Research and Writing

_____ ENGL 158 – Introduction to Literature

_____ HESC 115 – Nutrition and Health

_____ HIST 106 – World Civilization II

_____ MATH 136 – Math for the Liberal Arts

_____ NURS 163 – Nursing and Human Needs in the Community

_____ NURS 263 – Managing and Coordinating Nursing Care

_____ PLGL 135 – Family Law

_____ PSYC 206 – Human Growth and Development

_____ PSYC 218 – Educational Psychology

_____ SPAN 101 – Elementary Spanish I

Please provide your student ID if give the researcher permission to match your responses to your grade after the final grades are submitted.

_____

Appendix B

Email to Faculty (Survey)

Dear _____,

I am writing to request a favor that you ask your students in your _____class to take a 10 minute survey. I am currently enrolled in Rowan's Educational Leadership Ed.D program. This semester I am taking an applications fieldwork seminar and am conducting a pilot research project. I will be comparing online student self-identified characteristics against their success in their online classes. Your class is one of the 10 randomly selected classes that I would like to survey this semester.

I am using a survey designed by Drs. Kerr, Rynearson, and Kerr from the University of Texas Brownsville. Students are asked to respond to 45 short statements regarding their personal skills or behaviors. The statements fall into the following five categories: computer skills, independent learning, dependent learning, need for online delivery, and academic skills. A copy of the survey is attached. The actual survey is being administered through Survey Monkey.

If you agree please send the following email to your students. If you will not be able to send the request to your students please let me know.

I greatly appreciate your help and your student's time. If you have any questions do not hesitate to contact me at nkegelman@brookdalecc.edu or 732-224-2221.

Nancy

Dear Online Student,

You are invited to participate in a research project designed to match student characteristics with online student success. It should take you no more than 10 minutes to responding to 45 short statements about you. The findings will be used to inform future online students about online student's skills and behaviors when considering taking online courses. Your participation is totally voluntary and will have no impact on your grade. No names will be used and no one other than that I will have access to the data. If you grant permission at the end of the survey, your responses will be matched up to your final course grade using your student ID. Your survey responses will be destroyed after the data is compiled. The research is being conducted as part of Rowan University Educational Leadership Doctorial Program. You may contact me, Nancy Kegelman, the principal investigator, at 732-224-2221 or at nkegelman@brookdalecc.edu or Dr. David Hespe, the faculty sponsor, at 856-256-4702 or at Hespe@rowan.edu if you have questions.

Please log into the survey at
https://www.surveymonkey.com/s.aspx?sm=ZPWiYStShcSNIwIcchphRg_3d_3d

Thank you in advance for your help.

Nancy Kegelman

Appendix C

Email to Faculty (Focus Group)

Email to Faculty regarding student invites to the focus groups

Emailed October 9 and 10, 2009

I hope all is well with you. I am writing to ask a favor, specifically for you to email your online students with my note below inviting them to participate in a focus group. As part of my Rowan doctorate program I am doing research on student characteristics and online student success. I am planning two student focus groups in Lincroft on either Monday October 19 from 2:15 to 2:45 or Thursday October 22 from 11:45 to 12:15. I will be sending you another request in a few weeks asking your students in your NURS 263 DE 87A class to complete a survey. I appreciate your help. Nancy

Here is my invite, modify it as you see fit, and send to your students. Many thanks.

Nancy Kegelman, Dean of Academic Affairs, is doing research on online student success as part of her Rowan University doctorate program. She has asked me to invite you to attend a focus group to share your experience as an online student and to provide advice to first time online students. Your participation is totally voluntary. If you choose to participate you will be in a group of other online students. The sessions will be approximately 30 to 45 minutes long. Your responses will be anonymous and all the data gathered will be confidential.

If you are interested and are available to be in Lincroft on either Monday Oct. 19 at 2:15 or Thursday Oct. 22 at 11:45 please contact Dean Kegelman at nkegelman@brookdalecc.edu or call her at 732-224-2221 for the location. Dean Kegelman thanks you in advance for taking your time to read this email and would greatly appreciate your input.

Appendix D

Online Student Focus Group Questions

What online course(es) are you taking?
Why did you take an online course?
Describe the optimal online learning environment.
What skills do you need to be a successful online learner?
What skills did you develop during the class?
What enhanced your online experience? Why?
What were your challenges? Why?
What motivated you to complete your class assignments?
What would you recommend to first-time online students? What should they know before they start an online class?
What would you recommend to online instructors to help future online students?