University of Louisville

ThinkIR: The University of Louisville's Institutional Repository

---

Electronic Theses and Dissertations

5-2015

The impact of participation in a first-year seminar on increased usage of campus resources, academic and social integration and first-to-second-semester persistence at a two-year community and technical college.

Kaye Lafferty 1964-
University of Louisville

Follow this and additional works at: <https://ir.library.louisville.edu/etd>

Part of the [Student Counseling and Personnel Services Commons](#)

Recommended Citation

Lafferty, Kaye 1964-, "The impact of participation in a first-year seminar on increased usage of campus resources, academic and social integration and first-to-second-semester persistence at a two-year community and technical college." (2015). *Electronic Theses and Dissertations*. Paper 2085.
<https://doi.org/10.18297/etd/2085>

This Doctoral Dissertation is brought to you for free and open access by ThinkIR: The University of Louisville's Institutional Repository. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of ThinkIR: The University of Louisville's Institutional Repository. This title appears here courtesy of the author, who has retained all other copyrights. For more information, please contact thinkir@louisville.edu.

THE IMPACT OF PARTICIPATION IN A FIRST-YEAR SEMINAR ON INCREASED
USAGE OF CAMPUS RESOURCES, ACADEMIC AND SOCIAL INTEGRATION
AND FIRST- TO SECOND-SEMESTER PERSISTENCE AT A TWO-YEAR
COMMUNITY AND TECHNICAL COLLEGE

By

Kaye Lafferty

B.A., Western Kentucky University, 1986
M.A. E., Western Kentucky University, 1989
E.D.S., Western Kentucky University, 1994

A Dissertation

Submitted to the Faculty of the
College of Education of the University of Louisville
in Partial Fulfillment of the Requirements
for the Degree of

Doctor of Philosophy
in Counseling and Personnel Services

Department of Educational Counseling Personnel
University of Louisville
Louisville, Kentucky

May 2015

Copyright 2014 by Kaye Lafferty

All rights reserved

THE IMPACT OF PARTICIPATION IN A FIRST-YEAR SEMINAR ON INCREASED
USAGE OF CAMPUS RESOURCES, ACADEMIC AND SOCIAL INTEGRATION
AND FIRST- TO SECOND-SEMESTER PERSISTENCE AT A TWO-YEAR
COMMUNITY AND TECHNICAL COLLEGE

By

Kaye Lafferty
B.A., Western Kentucky University, 1986
M.A. E., Western Kentucky University, 1989
E.D.S., Western Kentucky University, 1994

A Dissertation Approved on

December 3. 2014

by the following Dissertation Committee:

Michael Cuyjet, Dissertation Co-Chair

Patrick Hardesty, Dissertation Co-Chair

Amy Hirschy, Committee Member

Aaron Hughey, Committee Member

DEDICATION

Dedicated to the memory of my grandmother,

Laura Harper Grissom.

I miss you more each day.

ACKNOWLEDGEMENTS

I would like to thank many individuals who have shared and helped me in making my long educational journey.

I would like to express my deep appreciation and thanks to my dissertation committee members: Dr. Michael Cuyjet (chair), Dr. Patrick Hardesty (co-chair), Dr. Amy Hirschy, and Dr. Aaron Hughey. Your steadfast leadership, encouragement, guidance, expertise, and perseverance will be forever remembered. Thank you for instilling the desire in me to want to pursue the doctorate.

A special heartfelt thanks goes to Dr. Michael Cuyjet. His unwavering dedication was instrumental in helping me fulfill my long-term dream of earning a doctorate. His countless hours of mentoring, reading, motivating, and providing feedback were pivotal to my success in completing the doctoral dissertation.

Another special thank-you goes to Dr. Patrick Hardesty for his invaluable advice on statistical analyses, and for championing my final efforts in pushing me to the culmination of my dissertation. Without both of my co-chairs' unfailing efforts and support, my dream may have never become a reality.

Additional extended acknowledgements go to many other individuals who have served as mentors, encouragers, and supporters to me during my arduous process. Jackie Powell, University of Louisville's IRB coordinator, has been an inspiration to me since the first day I submitted paperwork to collect data. She listened to me and supported me

as I embarked on the IRB process. There need to be more people in this world like Jackie Powell.

Another person I want to personally thank is Eric Detweiler. Eric's extensive editorial advice and APA knowledge has provided me an invaluable network of support. Eric, you are truly the APA king and I will be forever grateful to you for all your writing and editing advice.

I will be forever thankful for Dr. Suzette Scheuermann's positive optimism and passion, insightful discussions, and suggestions. Her enthusiasm is truly contagious. Dr. Scheuermann, I will cherish you and all you have done for me during this dissertation journey. You have sacrificed many hours of your life to help me accomplish my goal. Words cannot express the gratitude that I have for you. Please continue to be a supporter to doctoral students as they embark on this long journey. I hope this is the beginning of many special future working opportunities coming our way together.

I would like to thank Jefferson Community and Technical College for allowing me to conduct research for my dissertation. There are many at Jefferson who have listened, prayed, and supported me during this process. I will never forget the kindness they all shared. Particular thanks to my immediate colleagues: Robin Harrington, Andy Martin, James Wright, Jr., Tony Leslie, Larry Johnson, Sandra Chambers, Charles Burget, Donna Linker, and Sarah Phillips. They have been my rock and sounding board during my tenure writing the dissertation. A special thanks goes to Tony Leslie, my fellow counselor and professor, who has continued to carry my academic counseling workload for me over the last two years so I could focus on completing my doctorate. Tony, you are and have been a true friend for over 30 years. Other Jefferson faculty and

staff have been alongside me, including Dr. Linda Bledsoe, Dr. Shawna Anderson, Dr. Laura Smith, Dr. Denise Gray Lackey, Dr. Telly Sellars, Dr. Randy Davis, Dr. Diane Calhoun-French, and Dr. Tony Newberry. Thank you for always providing me words of inspiration, support, and encouragement.

Lastly, I want to thank the fellow doctorate students who have walked the dissertation path with me: Dr. Christy Kane, Dr. Katie Partin, Terri Martin, Lisa Moran, Dr. Matt Bergman, Dr. Angela Taylor, and Dr. Kate McAnulty.

ABSTRACT

THE IMPACT OF PARTICIPATION IN A FIRST-YEAR SEMINAR ON INCREASED USAGE OF CAMPUS RESOURCES, ACADEMIC AND SOCIAL INTEGRATION AND FIRST- TO SECOND-SEMESTER PERSISTENCE AT A TWO-YEAR COMMUNITY AND TECHNICAL COLLEGE

Kaye Lafferty

December 3, 2014

Student attrition has been a focus of college administrators for many years and will remain a critical concern for higher education (Bean, 1985; Tinto, 1987). The problem of student attrition is more severe at community colleges than at four-year institutions (Andreu, 2002; Lundberg, 2002; McCabe, 2000). Many institutions are implementing first-year seminar programs to increase persistence during the first year of college. The purpose of this study was to ascertain whether participating in a first-year seminar course will increase a student's academic engagement and attachment to the environment, usage of campus resources and participation in campus events, use of the counseling center, and commitment to complete, as well as decrease outside barriers compared to students that do not participate in a first-year seminar course. This study utilized the theoretical frameworks from Tinto's (1993) student integration model, Bean and Metzner's (1985) student attrition model, and Braxton, Hirschy, and McClendon's (2004) revised student attrition model. The study employed a cross-sectional posttest-only control design. Data were obtained from a convenience sample and an administered questionnaire. Descriptive and inferential statistical calculations were performed,

including multivariate analyses of variance. The research showed that students attending a first-year seminar reported being more academically engaged ($F[1, 246] = 33.1, p = .00$) and attached to the environment ($F[1, 246] = 32.9, p = .00$). Students attending a first-year seminar reported using more campus resources ($F[1, 246] = 72.9, p = .00$), participating in more campus events ($F[1, 246] = 21.8, p = .00$), using more counseling services ($F[1, 246] = 16.13, p = .00$), and being more committed to complete ($F[1, 246] = 6.7, p = .01$). Other findings included that African-American students reported greater benefits from the first-year seminar than Caucasian students and that greater benefits were reported by full-time students and older students (>25) than part-time and younger students (18-25). Limitations, implications for practice, and recommendations for future study are presented.

TABLE OF CONTENTS

	PAGE
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
ABSTRACT	vii
LIST OF TABLES	xiv
CHAPTER I: INTRODUCTION.....	1
Background and Overview of Persistence Problem.....	1
Persistence and Community Colleges.....	3
Changing Student Demographics	4
Academic Difficulty.....	5
Lack of Attachment.....	6
Outside Barriers	6
Commitment to Complete.....	6
Persistence and the First-Year Seminar (FYS)	7
Statement of the Problem.....	8
Purpose of the Study	10
Rationale and Significance for the Study.....	12
Theoretical Framework.....	14
Research Questions.....	18
Delimitations.....	19

Operational Definitions.....	19
Conclusion	21
CHAPTER II: REVIEW OF THE LITERATURE	22
The Evolution of Two-Year Community Colleges.....	23
Community Colleges’ Mission	25
Community College Funding.....	25
Theoretical Framework.....	27
Student Demographics in Community Colleges.....	30
Persistence and Demographic Factors	32
Age.....	32
Gender.....	33
Race/Ethnicity.....	33
Enrollment Status.....	34
Community College Attrition and First-Year Seminars	34
Historical Origins of the First-Year Seminar.....	36
Purpose, Objectives, and Goal Outcomes of First-Year Seminars	39
Types of First-Year Seminars	41
First-Year Seminar Course Topics and Content	43
First-Year Seminar Course Instruction/Pedagogy	45
Course Scheduling and Course Assignments	47
Grading and Credit.....	49
Assessment.....	50
Campus Resources and Counseling Services	52

First-Year Seminars and Campus Resources	55
First-Year Seminar and Student Engagement	58
Academic Integration	63
Social Integration	66
First-Year Seminar and Persistence	67
Exemplary Community College First-Year Seminar Courses	71
Jefferson Community and Technical College: Site Selection	75
Jefferson Community & Technical College First-Year Seminar Course	76
Summary	81
CHAPTER III: RESEARCH DESIGN AND METHODOLOGY	83
Purpose of the Proposed Study	83
Research Questions and Hypotheses	83
Research Questions	83
Research Hypotheses	84
Research Design	85
Sampling Method	86
Procedure	88
Instrumentation	91
Student Engagement Survey	91
Structure of the Student Engagement Survey	92
Scoring the Instrument	92
Construct Validity	93
Factor Analysis	95

Internal Consistency Reliability of the Instrument	97
Data Analysis Procedures	98
CHAPTER IV: RESULTS.....	99
Test for Relationship of Attendance and Demographics	99
Testing of Assumptions	100
Assumptions.....	100
Results.....	103
Race.....	103
Age.....	103
Enrollment Status.....	103
Follow-Up ANOVAS	104
Results of Research Questions.....	104
Results for Hypotheses	107
Effect Size η^2	108
Summary	109
CHAPTER V: DISCUSSION.....	111
Discussion of Research Findings	113
Demographic Data Findings	119
Limitations of the Study.....	119
Implications for Practice	122
Recommendations for Future Research	124
Conclusion	127
REFERENCES	131

APPENDICES	165
Appendix A: Informed Consent/Preamble.....	165
Appendix B: Student Engagement Survey	167
Appendix C: Survey Administration Script.....	174
Appendix D: Faculty Recruitment - Initial Letter.....	176
Appendix E: Faculty Recruitment - Second Letter.....	178
Appendix F: Thank-You Note to Instructor.....	180
Appendix G: National Community College Benchmark Data	181
Appendix H: Intercorrelations of the Items of the SES	183
Appendix I: Oblique Rotation - Factor Loadings	185
Appendix J: Varimax Versus Oblique Rotation of Items	186
Appendix K: Steps to Developing the Student Engagement Survey	187
Appendix L: Student Engagement Survey Scoring in SPSS	188
Appendix M: Rotated Factor Matrix of the Student Engagement Scale	193
Appendix N: Summary of Statistical Analyses to Be Used in the Study	195
CURRICULUM VITA	197

LIST OF TABLES

TABLE	PAGE
1. Theoretical Frameworks for Current Study	30
2. Demographics and Frequencies of the Study Sample.....	87
3. Definitions of Key Variables	93
4. Eigen Values and Percentages of Variances Associated with Each Component.....	94
5. Cronbach's Alpha for the Student Engagement Scale's Observed Data.....	97
6. Cross-Tabulation of Demographics with Attendance to First-Year Seminar	100
7. Scales of Student Engagement Survey: Mean Scores and Standard Deviations for Race/Ethnic Group by Attendance to First-Year Seminar.....	104
8. Scales of Student Engagement Survey: Mean Scores and Standard Deviations for Age Group by Attendance to First-Year Seminar	105
9. Scales of Student Engagement Survey: Mean Scores and Standard Deviations for Enrollment Group by Attendance to First-Year Seminar	106
10. Multivariate Analysis of Student Engagement Scales by Attendance to First-Year Seminar: Effect Size and Observed Power	109
11. National Community College Benchmark Data	181
12. Intercorrelations of the Items of the SES (Student Engagement Survey).....	183
13. Intercorrelations of the items of the SES, Continued	184
14. Oblique Rotation: Factor Loadings.....	185
15. Varimax Versus Oblique Rotation of Items.....	186

16. Student Engagement Survey Scoring in SPSS.....	188
17. Rotated Factor Matrix of the Student Engagement Scale (N = 288)	193
18. Summary of Statistical Analyses to Be Used in the Study	195

CHAPTER I

INTRODUCTION

Background and Overview of Persistence Problem

Student attrition has been a focus of college administrators for many years and will remain a critical concern for higher education (Bean, 1985; Tinto, 1987). Student attrition is costly to students as well as institutions of higher learning. Empirical evidence has shown that withdrawing from college involves a significant cost to the student, including loss of monetary and occupational potential (Marcotte, Bailey, Borkoski, & Kienzl, 2006; McCarthy & Kuh, 2006; Pascarella, 1997). Graduates with a two-year associate degree earn an average of \$180,000 more across their lifetimes than individuals who attain only a high school diploma (Bailey, Calcagno, Jenkins, Kienzl, & Leinbach, 2006; Day & Newburger, 2002; Kane & Rouse, 1995).

According to a recent report from the United States Census Bureau (2013), the average annual median income for adults who have earned associate degrees is approximately \$13,000 less per year than adults who have earned bachelor's degrees. The report asserts that, over the course of a 45-year working life, that loss amounts to a \$1.17 million difference between college graduates and non-college graduates. Thus the more education achieved, the more earning power. Any level of education is an investment in future earnings and career potential.

Student attrition also has negative financial consequences for higher education institutions because more college funding is dependent on tuition revenue (Sydow &

Sandel, 1998). The financial consequences associated with attrition have become the impetus for colleges and universities to examine ways and methods to reduce the rate of attrition. Understanding the factors that contribute to attrition is paramount due to the high financial costs associated with college attendance.

University administrators must recognize that factors contributing to student attrition are multifocal. These include factors associated with students and the situations they face personally, and the educational settings in which students are asked to learn (Kuh, Kinzie, Schuh, Whitt, & Associates, 2005; Strange & Banning, 2001; Tatum, 2000).

Academic and social integration remains one of the most effective ways to reduce student attrition, and it should include involvement from student-affairs professionals and faculty (Borglum & Kubala, 2000; Engstrom & Tinto, 2000; Hampton, 2004). Tinto (1994) defined academic integration as the involvement between students and their academic environment to help them make a smooth transition to college, work toward their academic goals, and succeed in the classroom (pp. 47-51). He defined social integration between students and other individuals within the collegiate environment. Tinto noted that students would remain in college if they perceived a fit between their college environment and their educational goals, which leads to academic and social integration. Another effective way to alleviate student attrition is to increase a student's desire to remain enrolled by offering effective first-year experience initiatives. An extensive body of compelling research identifies the first year of college as the greatest time for promoting student learning and reducing student-attrition rates (Barefoot,

Gardner, Cutright, Morris, Schroeder, Schwartz, Siegel, & Swing, 2005; Cuseo, 2003; Ishler, 2005; Skipper, 2005; Upcraft, Gardner, & Barefoot, 2005; Wild & Ebbers, 2002).

More colleges and universities are implementing first-year experience (FYE) programs to combat attrition and to promote student success. Research has shown that if students can make it through the first year successfully, the chances that they will persist improve significantly (Bailey & Alfonso, 2005; Barefoot, 1993a; Cofer & Somers, 2000; Mohammadi, 1996; Skipper & Argo, 2003). More than half of community college students who drop out do so during the first year of college (ACT, 2012; American Association of Community Colleges [AACC], 2006; Napoli & Wortman, 1998; Robles, 2002; Summers, 2003).

Persistence and Community Colleges

The problem of student attrition is more severe at community colleges than at four-year institutions (Andreu, 2002; Lundberg, 2002; McCabe, 2000; Phelan, 2000; Summers, 2003). Indeed, the National Center for Education Statistics (NCES, 2004) emphasized that almost half of the students entering two-year colleges and more than one-fourth of students in four-year institutions leave at the end of the first year.

According to the 2009 Community College Survey of Student Engagement (CCSSE, 2009), fewer than 10% of community college students who withdraw will return within four years, and the percentage of students who leave within the first year is higher in community colleges than any other type of institution of higher learning. A growing body of literature posits that, while much research has been conducted on four-year institutions and student-retention efforts, student attrition continues to be a challenge for community colleges where less research has been conducted (Andreu, 2002; Bailey &

Alfonso, 2005; Hossler, Ziskin, & Gross, 2009; NCES, 2004; Pascarella & Terenzini, 2005; Summers, 2003).

According to the American Association of Community Colleges (AACC, 2006), the problem of student attrition in community colleges has become salient because more students are expected to begin their postsecondary education in community colleges due to economic reasons. According to the Community College Research Center (2006), enrollment in two-year colleges has grown faster than enrollment at four-year institutions. Community college enrollment has increased from 1 million students in the 1960s to over 6 million in 2005—a 600% increase (AACC, 2006). Tinto (1994) contended that community colleges are enrolling over half of all undergraduates in the United States, which enables them to be the entry point for many who have traditionally been left out of educational opportunities. President Barack Obama (2009b) conveyed in his recent *White House Summit on Community Colleges Report* that community colleges saw a 17% enrollment surge between 2007 and 2009 because of economic downturn and laid-off workers that were searching for new skills and job training. Community colleges are expected to accommodate a wide variety of students who face financial, academic, and personal challenges that impede retention (Obama, 2009b).

Changing Student Demographics

The challenge of retaining students has much to do with the type of students who are enrolling in community colleges. The demographics of today's first-year students in community colleges have changed and a greater number of students from minority populations (49%) and low-income households (44% with family income less than \$25,000 per year), as well as first-generation students (42%) and adult returning students

(45%), are enrolling for the purpose of earning a certificate, diploma, or degree (Bettinger & Long, 2005; Matus-Grossman & Gooden, 2002; Pascarella, Wolniak, Pierson, & Terenzini, 2003; Pike & Kuh, 2005; Steltenpohl & Shipton, 1986; Szelenyi, 2001; Thayer, 2000). These changing demographic populations exhibit greater persistence problems, with only one-third of students completing a program of study, an associate degree, or even a certificate (Bailey et al., 2006; Burd, 2004). The lower tuition rates coupled with the open-door policies at community colleges have broadened access to postsecondary education for these high-risk students; therefore, many different factors contribute to the student-attrition problem, and the reasons for community college attrition are numerous.

Academic Difficulty

Academic difficulty is cited as one of the greatest reasons for attrition because many students lack the basic academic skills required for college (Attewell, Lavin, Domina, & Levey, 2006; Bailey, 2009; Boylan, 2002; Levin & Calcagno, 2008). Boylan (2002) stated that over 73% of entering students require remedial or developmental education in at least one area of reading, writing, or math. A tremendous number of students are not adequately prepared for the rigors of college work and are underprepared for academic success. Researchers have found that the need for remedial courses at community colleges significantly increases a student's risk of dropping out (Attewell et al., 2006; Bailey, 2009; Boylan, 2002; Levin & Calcagno, 2008; Simmons & George, 1995). According to the NCES (2004), students who begin their college career at two-year colleges take an average of 71 months to complete their bachelor's degree, while

students who begin their college career at four-year colleges take an average of 55 months to complete their bachelor's degree.

Lack of Attachment

Another prevalent cause of attrition is the inability to adjust to the social life of the college. A student's failure to connect and become involved in the campus community exacerbates student-retention issues (Chang, 2002; Kezar & Kinzie, 2006; Kuh, 2005; Napoli & Wortman, 1998). Pascarella, Smart, and Ethington (1986) studied "the persistence of 825 students from 85 different community colleges over a nine-year period, and academic and social integration was the greatest predictor of persistence" (p. 62). A growing body of literature noted that the first six weeks of the first year are a critical time for a student to develop a sense of community (Carey, 2005; Mohammadi, 1996; Sydow & Sandel, 1998; Tinto, 1994).

Outside Barriers

Other contributing factors include the multiple roles that compete for a student's time and energy (Matus-Grossman & Gooden, 2002). Most community college students work part or full time to support their families in addition to attending class part or full time. More than 50% of students have to get a job in order to survive, and most of these jobs are low skilled and require many long hours that impact the time needed to concentrate on classroom studies (Matus-Grossman & Gooden, 2002). These competing demands may cause students to fall behind in their coursework, which in turn leads to poor grades and withdrawal from an educational institution.

Commitment to Complete

Community colleges are placing a great deal of emphasis on student retention, and administrators perceive retention rates as indicators of academic quality and student success (Bailey & Alfonso, 2005; Cofer & Somers, 2000; Cohen & Brawer, 2003; McCabe, 2000; McGrath & Spear, 1991; Mohammadi, 1996; Wild & Ebbers, 2002; Zhai & Monzon, 2001). There has been widespread implementation of programs to improve retention, with an increased emphasis on programs designed to target first-year students. Hoachlander, Sikora, and Horn (2003) noted that fostering student success in the first year is pivotal for student persistence. One of the most pervasive programs implemented to improve student persistence is the first-year orientation seminar (Davig & Spain, 2004; Fidler & Hunter, 1989; Gordon & Grites, 1984; Hunter, Skipper, & Linder, 2003; Hyers & Joslin, 1998; Schnell & Doetkott, 2003; Starke, Harth, & Sirianni, 2001; Stovall, 2002; Zeidenberg, Jenkins, & Calcagno, 2007).

Persistence and the First-Year Seminar (FYS)

Many institutions are implementing first-year seminar programs to increase persistence during the first year of college. Many researchers have concluded that first-year seminars are positively linked with freshman-year persistence and degree completion, with the greatest impact on low-income, first-generation, and minority populations (Cuseo & Barefoot, 1996; Goodman & Pascarella, 2006; Hunter & Linder, 2005; Upcraft, Gardner, & Barefoot, 2005). In addition, first-year seminar participation has focused on increasing levels of faculty-student interaction and utilizing more campus resources (Cuseo, 2003; Davis, 1992; Ewell, 2001; Sidle & McReynolds, 1999; Fidler & Fidler, 1991). Schnell and Doetkott (2003) reported that there are many studies that share the impact of first-year seminars on increasing student retention and include cost

effectiveness. The research strongly suggests that the investment in a first-year seminar is not only an educationally effective intervention but also a cost-effective practice that reaps economic benefits and requires minimal funds (O’Gara, Karp, & Hughes, 2009). The revenue that it generates offsets incurred costs and the course more than justifies itself.

According to Cuseo (n.d.), students who participated in a first-year seminar reported greater use of campus services and increased frequency and interaction with faculty. Barefoot (2000) noted that students who participated in first-year seminars demonstrated a statistically significant difference in persistence and graduation rates over a five-year period compared to students who did not enroll.

Statement of the Problem

Higher-education administrators have been concerned about the attrition and persistence rate of college students for more than 70 years (Andreu, 2002; Bailey & Alfonso, 2005; Braxton, 2001; Braxton, Hirschy, & McClendon, 2004; Cofer & Somers, 2001). First-year attrition rates are higher for community colleges than for any other type of institution (Berger & Lyon, 2005; Cofer & Somers, 2000; Cohen & Brawer, 2003; Mohammadi, 1996; Summers, 2003). Further, an increasingly larger portion of the community college student body is made up of older students, part-time enrollees, and commuters (Bailey, Jenkins, & Leinbach, 2005).

Colleges and universities are searching for intervention programs to ameliorate attrition at community colleges (AACC, 2006; Grayson & Grayson, 2003; Marcotte et al., 2005; McIntosh & Rouse, 2009). Burd (2004) noted that most community college students have aspirations of earning a certificate, diploma, or degree, but only 36%

achieve that goal within six years, while 53% of their four-year counterparts meet that goal.

Research has been conducted on retention initiatives in four-year institutions, and the retention literature centers on retention for residential students (Bean & Noel, 1980; Bers & Smith, 1991; Borglum & Kubala, 2000; Braxton, 2001; Braxton & Hirschy, 2005; Braxton et al., 2004; Braxton, Sullivan, & Johnson, 1997; Cofer & Somers, 2000; Summers, 2003). Very little research has been conducted on non-residential students, who represent a greater majority of students enrolled in community colleges (Braxton & Hirschy, 2005). Most of the earlier research on retention efforts was designed to retain 18-year-old students living in residential halls; therefore, several researchers have noted that a more in-depth understanding is needed to alleviate the burgeoning problem of community college attrition (Bailey & Alfonso, 2005; Bers & Smith, 1991; Braxton, 2001; Braxton & Hirschy, 2005; Cofer & Somers, 2001).

Further, community college attrition rates have garnered increased attention from policymakers due to declining state budgets, growing enrollment, and greater outcome-based accountability for community colleges across the country (AACC, 2006; McCabe, 2000). Community colleges are facing greater scrutiny than ever because of their mission of openness, accessibility, and affordability. President Barack Obama (2009a) called community colleges the “unsung heroes of the American Educational System and they provide a gateway for millions of Americans to get good jobs to have a better life” (p. 16). The president noted that two-thirds of all jobs in 2020 would require advanced training and education, and that college completion should be important goals for community colleges. President Obama has challenged community colleges to increase the

number of graduates and program completers to 5 million by 2020—an ambitious 50% increase. Obama’s new completion agenda will prompt community colleges to rise to its new challenges by reaffirming their commitment to completion and retention while maintaining their commitment to access and quality (Obama, 2009a).

Kentucky’s economic future depends on producing more college graduates. It is estimated that 54% of all Kentucky jobs will require a postsecondary education by 2018 (Spalding, 2012). By 2020, Kentucky graduation rates are projected to rise to 14.8% from the average national rate of 13% (Kornstein, 2007). Institutions of higher learning, especially those with open-door admissions policies, must recognize that many students will have difficulty achieving their educational potential without an effective intervention to ameliorate attrition. Colleges and universities continue to examine new methods to help students succeed and to improve persistence rates. The greatest need for community colleges is to increase student-persistence rates by identifying students most likely to drop out and to design and implement successful intervention strategies.

A compelling body of research has indicated that the first-year seminar is an effective intervention to reduce community college attrition (Barefoot, Warnock, Dickinson, Richardson, & Roberts, 1998; Cuseo, 2009; Davis, 1992; Derby & Smith, 2004; Gardner & Jewler, 2003; Helmer, 2005; Mohammadi, 1996; Porter & Swing, 2006; Summers, 2003; Zeidenberg et al., 2007).

Purpose of the Study

The present study will help college administrators and stakeholders understand ways of alleviating community college attrition by examining the value of the first-year seminar. Studies offer empirical evidence that the first-year seminar is one of the most

cost-effective programs, with documented economic benefits, for institutions intent on increasing first-year persistence (Barefoot, 2000; Cuseo, n.d.; Swing, 2004). Programs' cost-effectiveness is key because community colleges have fewer resources to spend on first-year experience initiatives compared to their four-year counterparts.

According to early cost-efficiency research conducted by Gardner (1980), at the University of South Carolina, for every \$1.00 used to support the first-year seminar, the program generated \$5.36. More recently, Schuh (2005) noted that each 1% increase in first-year retention generated approximately \$500,000 in revenue by the time first-year students graduated. Schuh (2005) also asserted that \$5.10 is returned to the college in tuition dollars for every dollar invested in their first-year seminar, or student success course.

There is more compelling evidence for support of the first-year seminar than for any other course in the history of higher education (Barefoot et al., 2005; Cuseo, 1991). This study will seek to build on this evidence by determining whether there is a significant difference between outcomes for students who enroll in the first-year seminar and those who do not. The seminar in question focuses on fostering greater levels of faculty-student engagement; increasing usage of campus student resources, including advising and study centers; and demonstrating more first- to second-semester persistence (Barefoot, 1993a; Dooris & Blood, 2001; Fidler & Fidler, 1991; Fidler & Shanley, 1993; Gardner, Upcraft, & Barefoot, 2005).

The results of the study will add to the body of knowledge about first-year seminars and help improve aspects of the student experience that affect commitment to complete throughout ensuing semesters. The study will augment current research on

extending and sustaining the student-instructor connection throughout the first year and until graduation. Another prevalent way it will add to the first-year seminar knowledge base is through exploring the indirect effects of student outcomes via the educational experience in the classroom. This will be achieved through establishing active-learning techniques and pedagogies in order to identify early interventions for targeting students at risk of dropping out. The first-year seminar will be the vehicle for gathering assessment data on students entering college.

The purpose of this study is to ascertain whether participating in a first-year seminar course would promote greater academic engagement, attachment to the environment, use of campus resources including the counseling center, participation in campus events, and commitment to complete a degree despite outside barriers.

Rationale and Significance for the Study

Student attrition and persistence remain frequently studied topics in the higher education arena. Research on community college attrition is sparse despite the fact that it has gained widespread recognition. Community colleges are assuming increased responsibility for the education of more than half of new students attending postsecondary institutions (AACC, 2006; NCES, 2004; Tinto, 1994). Statistical data show that only one-half of first-time college students at two-year colleges persist to the second year (AACC, 2006; Community College Research Center, 2006). Community colleges are faced with mounting pressure to demonstrate results despite their decreasing state budgets. As open-admissions institutions, community colleges cannot be selective in their admissions process and are enrolling a much wider variety of students than four-year institutions. They are enrolling greater numbers of high-risk students with lower

academic levels and who are not prepared for college. Community colleges' open-door philosophy, coupled with a highly diverse student body, has led to lower success and completion rates. Levin (2000) contended that a community college student's needs are very different than a four-year student's needs. Community colleges must find a way to address the needs of their students to help them get involved on campus.

Fostering integration—defined as “incorporating as equals into society or an organization of individuals of different groups” (Kuh, 2005, p. 92)—into the campus community is paramount because numerous studies have shown that student involvement is the key to persistence (Belcheir, 2003; Bers & Smith, 1991; Borglum & Kubala, 2000; Braxton & McClendon, 2001; Kuh, 2005; McCarthy & Kuh, 2006). Indeed, researchers have found that the greater the involvement in the college community, the greater the probability that students will persist. Kuh (2005) asserted that the primary reason for attrition is the fact that students do not feel connected, and student engagement remains the single most significant predictor of student persistence. The greater the level to which the student is socially integrated into a college or university, the more likely it is they will have a greater level of satisfaction with the institution. A satisfied student is more likely to get involved socially and academically on campus. Fidler (1991) ascertained that students who did not form supportive peer relationships within the first year at an institution were less likely to return for their sophomore year. The impact of involvement upon persistence is crucial during the first ten weeks of college when the transition to college is not yet complete and personal relationships have not yet been formed (Bers & Smith, 1991; Borglum & Kubala, 2000; Hagedorn, Maxwell, Rodriguez, Hocesvar, & Fillpot, 2000; Tinto, 1994). Community colleges have been hampered in their ability to

integrate students into the collegiate environment because of the absence of dormitories. Most students are unlikely to spend additional time on campus outside of their classrooms; so, for many students the classroom may be the only place where involvement occurs. Consequently, students who interact with their instructors develop a support network and are more likely to persist in classes (Chickering, 2000; Fike & Fike, 2008; Hagedorn et al., 2000; Major & Taylor, 2003).

More research is needed to help community colleges understand if the first-year experience increases students' commitment to complete, academic engagement and attachment to the academic community, use of resources, and resilience to outside barriers resulting in greater success rates by getting students involved in campus support services. These ambitious goals are extremely critical in order to provide a scalable, systemic, long-term change that will ameliorate community college attrition.

Theoretical Framework

Several theoretical frameworks guide this study. Persistence frameworks have sought to explain factors affecting a student's decision to withdraw from an institution. Such conceptual models include Tinto's (1994) student integration model, Bean and Metzner's (1985) student attrition model, and Braxton, Hirschy, and McClendon's (2004) theory of student departure in commuter colleges and universities model.

Tinto's (1994) student integration model demonstrated that retention is related to the student's ability to become involved and valued in their institution. Tinto's model is one of the most noted and cited theories in student retention literature. The model postulates that students will remain in college if they perceive a congruent fit between their college environment and their educational goals (Tinto, 1994). A good

institution/student match will lead to greater academic and social integration into the institution, resulting in a greater likelihood of persistence. Tinto defines academic integration as the “formal education of students including grade performance and his intellectual development during the college years” (Tinto, 1975, p. 104).

Social integration is defined as the “informal education of students including extracurricular activities and students’ affiliations” (Tinto, 1975, p. 105). Students that do not feel at home in an institution or do not believe that an institution can help them meet their goals are unlikely to persist. Academic and social integration play a prevalent role in a student’s departure decisions. Tinto’s (1993) framework, derived from Durkheim’s suicide theory, proposed that a student’s desire to withdraw hinges on many factors, including background characteristics, initial goal and institution commitment, and academic and social integration.

Although Tinto’s theory “enjoys near paradigmatic stature,” there is much criticism from researchers about its empirical validity for students in community colleges (Karp, Hughes & O’Gara, 2008, p. 49). Some attrition researchers state that Tinto’s model lacks validity for community college populations. The model was primarily developed for students at four-year institutions (Banta, 1999; Bean & Metzner, 1985; Braxton, 2001; Cofer & Somers, 2000; Liu & Liu, 1999; Karp et al., 2008; Morante, 2003). Braxton (2000, 2001) examined college-student retention literature and noted that a revision to the theory is warranted to address the needs of diverse college students in community colleges. Braxton’s (2000) theoretical assertion was that Tinto’s model does not place sufficient emphasis on student entry characteristics, such as age, gender,

race/ethnicity differences that constitute a majority the community college population, on the student's persistent decisions.

Poor academic preparedness, part-time status, and working full time may each have an impact on students' academic and social involvement with the institution.

Braxton sought to modify Tinto's theory and create a more inclusive student-departure model. There is empirical evidence that Tinto's model could benefit from revision and refinement, especially for the nontraditional populations of community colleges. Various studies have been conducted to examine the empirical limitations of Tinto's model for community colleges (Braxton, 2001; Braxton & Hirschy, 2005; Braxton, Milem, & Sullivan, 2000; Karp et al., 2008).

For instance, Braxton, Hirschy, and McClendon (2004) stated that "the explanatory power of Tinto's theory to account for student departure in two-year colleges remains undetermined and open to empirical treatment" (pp. 17–18). The researchers found that commuter institutions recognized the influence of academic learning communities and the institutional climate, in addition to external influences away from campus, on departure decisions. After carefully examining theoretical community-college retention literature, Braxton et al. (2004) argued that a revised departure theory would be more appropriate for the nontraditional commuter students who dominate community colleges. Another of the most noted differences between Tinto's model and Braxton's revised departure theory is the role "that academic environment plays in the student's perception of the campus and how the types of environments promote persistence" (p. 48).

The present study will examine the impact of the first-year seminar (an academic environment) on engagement and attachment to the academic community, including participation in campus events and use of the counseling center. The study also examines students' commitment to complete and the presence of outside barriers that may impact persistence in the community college setting.

Braxton (2001) noted other prevalent differences between the student integration model and the revised departure model, including the role of external influences and support (e.g., involvement and support from family, employers, and friends) and the role that finances play in withdrawal decisions. In 1993, Tinto revisited his student integration model and included student finances as a key component in the adjustment of the student to the college (Tinto, 1994). All the models discussed above have been widely cited in research on first-year seminars. Barefoot and Fidler (1996) stated that if first-year seminars depart from established theoretical frameworks, there is a decrease in effectiveness as measured by student persistence and satisfaction.

Many retention theories exist in the literature, but many of those theories are based on research from traditional four-year institutions and are not applicable to the community college population. Many researchers have noted the need for developing a theoretical model for student retention relevant to the community college setting (Braxton, 2000; Hossler, Ziskin, & Gross, 2009; Mohammadi, 1996; Summers, 2003; Wild & Ebbers, 2002). For example, McCabe (2000) ascertained that retention rates for community colleges are significantly lower than the rates of their four-year counterparts. Additionally, he noted that traditional theories are not appropriate for community

colleges because many of the students possess different demographic and socioeconomic characteristics.

Bean and Metzner's (1985) student attrition model appears to be appropriate for studying students' departure decisions at two-year community colleges. The researchers emphasized the limitations of Tinto's model in predicting the withdrawal decisions of students in community colleges. They developed a conceptual framework to explain attrition and retention of nontraditional students. Bean and Metzner's (1985) central assertion is that environmental factors have a greater impact on departure decisions of adult students than other variables. External factors include organizational support, financial problems, and time constraints, all of which are extremely important obstacles to nontraditional students' various roles in life. Social integration plays a diminished role in the Bean and Metzner model compared to Tinto's framework. Depictions of such models appear in Chapter 2, Table 1.

Research Questions

After controlling for age, gender identity, race/ethnicity, and enrollment status,

1. Is there a difference in academic engagement between students who completed a first-year seminar and students who did not complete a first-year seminar?
2. Is there a difference in attachment to the environment between students who completed a first-year seminar and students who did not complete a first-year seminar?
3. Is there a difference in commitment to complete the degree between students who completed a first-year seminar and students who did not complete a first-year seminar?

4. Is there a difference in attendance to campus events between students who completed a first-year seminar and students who did not complete a first-year seminar?
5. Is there a difference in use of the counseling center between students who completed a first-year seminar and students who did not complete a first-year seminar?
6. Does a significant difference exist in use of campus resources (e.g., advising, counseling center, etc.) between students who complete a first-year seminar and who do not complete such a seminar?
7. Do outside barriers have less of an effect on students who complete a first-year seminar versus those who do not?

Delimitations

The present study was conducted on the downtown and technical campuses of Jefferson Community and Technical College—two of six campuses—and the study's findings may not be applicable to all additional campuses. The study tracks students for a semester and does not look longitudinally across multiple semesters. Jefferson Community and Technical College is a public institution and serves a diverse population; the ability to generalize the results to public colleges and universities may be difficult due to differing student populations.

Operational Definitions

- Academic Engagement: The “formal education of students including grade performance and intellectual development during the college years” (Tinto, 1975, p. 104).

- Attachment to Environment: The “informal education of students including extracurricular activities and students’ affiliations” (Tinto, 1975, p. 105).
- Attrition: Students who fail to reenroll at an institution in consecutive semesters (Berger & Lyon, 2005).
- Campus Resources: The grounds, buildings and anything that can be used for support or help in a college. Particular emphasis on counseling centers, career development centers, learning resource centers and tutoring, and academic advising.
- Commitment to Complete: Expressed intention to continue engagement in a particular endeavor to completion (Bean & Metzger, 1985).
- Community and Technical College: “Any institution regionally accredited to award the associate of arts or the associate of science as its highest degree” (Cohen & Brawer, 2003, p. 5).
- First-Year Seminar: “A course designed to assist students in their academic and social development and in their transition to college” (Hunter & Lindner, 2005, pp. 275-276). A small discussion-based course in which students and their instructors exchange ideas with a strong emphasis on creating community in the classroom.
- First-Year Student: A student entering a college or university for the first time, and with fewer than 30 credit hours in a year.
- FYE 105: The first-year seminar course offered to first-time freshman at Jefferson Community and Technical College.
- Outside Barriers: External obstacles that prevent or block a students’ persistence (CCSSE, 2009).

- Participation in Campus Events: Involvement in experiences that occur outside of the formal curriculum (CCSSE, 2009).
- Persistence: The continued enrollment, including summers, of a college student until that student has completed a college degree (Summers, 2003).
- Retention: The ability of an institution to retain a student from admission through graduation (Berger & Lyon, 2005).

Conclusion

The remainder of the study is organized into four chapters. Chapter 2 presents a review of related literature centering on first-year seminars, two-year colleges, and the impact of the seminar on first-year persistence, engagement, and connection to campus resources. Chapter 3 describes the research design and methodology of the study. An analysis of data is presented in Chapter 4. Chapter 5 contains a summary, conclusions, and recommendations of the study.

CHAPTER II

REVIEW OF THE LITERATURE

Colleges and universities are focusing more efforts on the first-year experience due to high rates of attrition occurring during the first year of college. Incorporating first-year seminars into curricula has been shown to be one of the most successful methods for reducing community college attrition and promoting the success of first-year students (Cuseo, 2009). The purpose of this study was to ascertain whether participating in a first-year seminar course would promote greater academic engagement, attachment to the environment, use of campus resources including the counseling center, participation in campus events, and participants' commitment to complete their degree despite outside barriers when compared to students who do not enroll in a first-year seminar course.

The following literature review synthesizes research on the role of the first-year seminar and its impact on student attrition. First, a brief discussion of the evolution of two-year colleges' mission, funding, and student demographics is presented. This is followed by a discussion of persistence and demographic factors and how they impact community college attrition. The review then describes three student-attrition models that guide the current study and offers an overview of the historical background of first-year seminars. This is accompanied by a thorough description of their current status. Next, the impact of the first-year seminar on students' usage of campus resources, academic and social integration, and persistence is described. The review concludes with a discussion

of exemplary first-year seminar programs, including a detailed description of the current study at Jefferson Community and Technical College.

The Evolution of Two-Year Community Colleges

Community colleges enroll more than thirteen million students per year (AACC, 2006). Despite surging college enrollment, community colleges have not always been the desired higher education pathway. Community colleges' roots extend to the late 19th century, with the first private liberal-arts college established in 1851 as part of a reform movement to provide a greater portion of the population with access to higher education (Cohen & Brawer, 2003; Coley, 2000; Morest, 2006). Prior to 1851, only a few public four-year institutions offered some two-year degree options, including Laswell Junior College in Massachusetts and Vincennes University in Indiana (Cohen & Brawer, 2003). The first private junior college grew out of a movement by many advocates of four-year institutions to move the first two years of general education to a junior college, which reflected European models of higher education (Cohen & Brawer, 2003; Coley, 2000; Morest, 2006). Advocates felt that four-year institutions should concentrate on scholarly research activities instead of teaching lower-level preparatory courses, which they viewed as a burden. Early junior-college curricula focused on liberal-arts education, with the goal that students would transfer to four-year institutions (Ayers, 2002; Cohen & Brawer, 2003; Coley, 2000; Morest, 2006). Enrollment for the early junior colleges ranged from 150-200 students—mostly women preparing to become grammar-school teachers (Ayers, 2002; Cohen & Brawer, 2003). The Industrial Revolution was perhaps one of the most noteworthy precursors of the community college movement of the United States (Levin, 2000; Reitano, 1998). Early 20th-century leaders came to recognize the need for a more

skilled workforce, and public community colleges grew out of junior colleges' recognition of the need to seek new, innovative ways to train the local community (Levin, 2000; Reitano, 1998). Spearheaded by Joliet Junior College in 1901, many public high schools began to add vocational/job training programs in their junior and senior years (Cohen & Brawer, 2003). In response to the call from local industries, governments, and economies, curricula experienced a paradigm shift from liberal-arts education to vocational/occupational training (Levin, 2000; Reitano, 1998). Following the Great Depression, colleges began focusing on job-training programs to address the widespread employment explosion and the shortage of the skilled workforce. After World War II, many new skilled jobs were created due to economic transformation and the creation of the military's G.I. Bill (Cohen & Brawer, 2003). In 1948, higher education options thrived, with newly created public community colleges designed to serve the training needs of the community and veterans (Levin, 2000). During the 1950s, 330 public community colleges existed in the United States, with enrollment skyrocketing in the 1960s (Cohen & Brawer, 2003). During the 1960s, public community colleges became a national network with 457 community colleges in existence. Enrollment continued to grow steadily after the 1960s (Cohen & Brawer, 2003). According to Community College Research Center (2006), there are more than 1,132 community colleges operating across the United States, educating more than half of the undergraduate students in the nation. Of the 1,132 community colleges in existence, 986 are public, 115 are independent, and 31 are tribal institutions. There are 89 private junior colleges currently operating in the United States (Coley, 2000). Since the inception of the first community college, more than 100 million people have attended community colleges (AACC, 2006). In the early

years, two-year colleges were known as two-year junior colleges, but the term was changed to “community colleges” in 1992 (Cohen & Brawer, 2003). Enrollment at two-year colleges continues to grow at a rate higher than four-year institutions. Total enrollment at two-year colleges increased from under one million students in the early 1960s to over 8.3 million as of the fall of 2012 (Community College Research Center, 2013).

Community Colleges’ Mission

Community colleges are grounded on the principles of accessibility and affordability, and they send clear messages to prospective students that they are less expensive than four-year institutions (AACC, 2006). The community college “open-door accessibility” mission, coupled with lower tuition rates, makes the colleges extremely popular with students because they are inclusive institutions that serve individuals seeking retraining for a career. Other goals of community colleges include meeting the needs of young adults by removing barriers to obtaining an affordable and accessible education, preparing students to transfer to four-year institutions, and providing remediation to a large number of students lacking basic skills (Boylan, 2002; Higbee, Arendale, & Lundell, 2005; Nora, 2000; O’Bannon, 1997).

Community College Funding

Community college funding is derived from tuition and fees; federal, state, and local appropriations; and grants and gifts from local business and industry (AACC, 2006; McCabe, 2000). Most of the funding is allocated from state appropriations, tuition, and fees. Community colleges are facing formidable challenges because state funding is lacking due to draconian budget cuts. The institutions face limited financial resources and

struggle with retention rates, degree or certificate completion rates, and transfer rates (McCabe, 2000; O'Bannon, 1997). During these daunting economic times, community colleges must establish a body of research-based evidence and accountability to show federal, state, and local governments the advantages of attending two-year institutions and their success in matriculating students. Establishing community colleges' value and worth will show policymakers that budget cuts only deepen the abyss of funding for community colleges across the country (AACC, 2006; McCabe, 2000).

Colleges are often awarded state and federal funding based on their completion rates. Community colleges are at risk with regard to securing state and federal funding due to the low completion rates. Bailey, Calcagno, Jenkins, Kienzl, and Leinbach (2006) noted that nearly 90% of students beginning their postsecondary education in public two-year institutions, including transfer students, express an intent to attain a certificate or degree. In reality, only 28% of first-time, full-time associate degree-seeking students graduate with an associate degree within three years, and fewer than 45% have met that goal six years later (Burd, 2004). Part time students graduate at lower rates than full time students. While community colleges have lower completion rates than their four-year counterparts, it is often hard to measure success by graduation/completion rates because not all students who enroll in community colleges intend to obtain a credential or transfer (Burd, 2004). Many students enroll to take a specific course or two, to upgrade job skills, or perhaps to satisfy personal enrichment objectives. For these students, completion as measured by the award of a formal credential or transfer is not an appropriate indicator of whether they have met their objectives (Burd, 2004). According to McClenney, McClenney, and Peterson (2007), director of the Community College Leadership

Program, one of the main reasons graduation rates are low at community colleges is that such rates never mattered for community colleges until the completion agenda was initiated. In 2010, United States community colleges awarded 401,080 certificates and 556,355 associate degrees for a total of 957,435 credentials awarded (National Center for Education Statistics, 2013). In 2010, the Kentucky Community and Technical College System awarded 17,567 certificates and 7,270 associate degrees for a total of 24,837 credentials awarded (Kentucky Council on Postsecondary Education, 2013).

Theoretical Framework

There are numerous conceptual models in the persistence literature that seek to explain factors that could affect a student's decision to persist or withdraw from an institution. Many of these conceptual models have been developed for students at four-year institutions and lack validity for the community college population (Cofer & Somers, 2001). The present study utilizes a blending of three theoretical frameworks to inform the research study. The three frameworks are Tinto's (1993) student integration model, Bean and Metzner's (1985) student attrition model, and Braxton, Hirschy, and McClendon's (2004) theory of student departure in commuter colleges and universities model.

Tinto's (1993) student integration model recognized that students enter college with an array of background characteristics including socioeconomic status, race, gender, and age, as well as goals and commitments. Tinto noted that students should disengage from past relationships and family culture so students can learn to assimilate into the collegiate environment. Once in college, students experience both academic and social integration, which play a pivotal role in their departure decisions. Tinto noted that

positive interactions within the academic and social realm of the college increase the student's intentions, goals, and commitments to persist. Students who withdraw from college have failed to successfully integrate into the college's academic and social environment.

Bean and Metzner's (1985) student attrition model proposes four sets of variables affecting withdrawal: academic performance, intent, defining student entry characteristics (e.g., age, ethnicity, gender), and environmental variables. Academic variables influence the student's decision to persist. Poor academic outcomes and academic unpreparedness could lead to academic dismissal. Environment variables were one of the most influential predictors in persistence. The environmental variables that Bean and Metzner (1985) note include finances, hours of employment, outside/off-campus support, and family responsibilities. The Bean and Metzner (1985) model posited that environmental variables were more significant than academic variables for nontraditional or commuter populations. Additionally, the researchers did not find social integration to be an important factor in their attrition model.

Both Tinto (1994) and Bean and Metzner (1985) agree that students come to the institution with a number of student entry characteristics—including age, gender, race/ethnicity, etc.—and that the student must be committed to the institution academically in order to remain in the environment. The theories differ regarding the social integration factor and the environmental variables, the second of which was prevalent in Bean and Metzner's model but nonexistent in the earlier work of Tinto (1975).

The third model that informs the present study is Braxton, Hirschy, and McClendon's (2004) model. This model is an updated model for commuter institutions based on Tinto's theory. Braxton et al. (2004) noted that there are different college experiences for students that attend community colleges versus traditional residential colleges. Many of the reasons that these students leave, including environmental factors, finances, lack of family and outside support, and hours of employment, are beyond the scope of Tinto's model. These external forces play an important role in the departure decisions of community college students. Commuter students are more likely to attend part time, live away from campus, and experience family and work demands (Braxton et al., 2004). Students have obligations that occur away from the campus, therefore their time on campus is limited and likely to take place in the classroom. Braxton et al.'s (2004) model noted that social networks are less likely to form at community colleges because such institutions lack structured communities in which students can establish membership. Campus life is not an integral part of the community college experience, therefore students must build membership in the classroom. Implementing classroom structures that promote meaningful interaction and active learning is important because the probability of departure decreases for students who participate in a community of learning. Braxton et al.'s (2004) model stated that enrollment status plays a role in students' departure decisions. Full-time students are less likely to withdraw from college than their part-time counterparts. Table 1 provides a detailed representation of the aspects of each theory that will guide the research.

Table 1

Theoretical Frameworks for Current Study

Frameworks		
Tinto's (1993) Student Integration Model	Bean and Metzner's (1985) Student Attrition Model	Braxton, Hirschy, and McClendon's (2004) Model
• Student Entry Characteristics • Age • Gender • Race/Ethnicity • Academic Integration • Social Integration	• Environmental Variables • Finances • Family Demands • Hours/Employment • Student Entry Characteristics (Age, Gender, Race/Ethnicity) • Academic Integration	• Environmental Variables • Enrollment Status • Finances • Family Responsibilities • Hours of Employment/ External Environment • Student Entry/Active Learning

Note. Items in bold are constructs investigated in this study.

Student Demographics in Community Colleges

Community colleges are the starting point of access for many students who have socioeconomic and academic barriers that would impede and inhibit postsecondary

success. The community college mission of access and affordability provides students with an opportunity to attend college that otherwise would not be possible.

Community college student demographics have changed dramatically since the 1970s (Bailey, Jenkins, & Leinbach, 2005; Ishler, 2005; Steltenpohl & Shipton, 1986). Matus-Grossman and Gooden (2002) noted that older students, part-time students, full-time workers, evening students, commuter students, minority students, first-generation students, and students with lower socioeconomic status constitute the majority of the population enrolled in today's community colleges. The enrollment status of students has changed significantly—today, 61% are part time (Cofer & Somers, 2001; Pascarella, Wolniak, Pierson, & Terenzini, 2003; Pike & Kuh, 2005; Thayer, 2000).

Pike and Kuh (2005) observed that community colleges have become more ethnically diverse, with minority students comprising 49% of individuals attending community colleges compared to 19% in 1970. According to Ishler (2005), community colleges have experienced a rise in the number of students who are older, first-generation immigrants, and single parents. The average age of a community college student is 28 and 30% of students are older than 40 (Cofer & Somers, 2001; Ishler, 2005). Forty-two percent of students are the first generation in their family to attend college, with a significant number comprised of women and those employed full time to support dependents living in the household (AACC, 2006; Cofer & Somers, 2001). Forty-two percent of part-time students work more than thirty hours per week and over 19% of full-time students work more than thirty hours per week. Thirty-six percent are ethnically diverse with Hispanics experiencing the greatest growth (AACC, 2006; Cofer & Somers, 2001). Lastly, 13% are single parents and 6% are not United States citizens (AACC,

2006). The household incomes of two-year college students are significantly lower than those of four-year college students. Twenty-nine percent have annual household incomes less than \$20,000 (AACC, 2006; Cofer & Somers, 2001). Additionally, a greater number of academically unprepared students attend community college than do four-year institutions (Boylan, 2002; Roueche & Roueche, 1993; Upcraft & Swing, 2007; Watson, 2000). Seventy-six percent of community college students must take remedial courses that do not count toward college credit (Boylan, 2002; Watson, 2000). A common thread observed in community colleges nationwide is a high rate of student failure and attrition due primarily to the academic under-preparedness of students.

Persistence and Demographic Factors

An extensive review of the persistence and retention literature revealed many factors that could have an influence on students' decisions to drop out or stay in school. Pascarella and Terenzini (2005) conducted a synthesis of the first-year seminar literature and found that few research studies exist that control for precollege differences. Those precollege differences include gender, age, and ethnicity. Additionally, a study by Reason (2003) suggests that race or ethnicity should be used as a background variable for retention studies. Other researchers have suggested age, gender, and enrollment status as other variables explaining college student attrition (Bean & Metzner, 1985; Bradburn, 2002; Burke, Goff, Ibrahim, & Lamont, 2005; Ryder, Bowman, & Newman, 1994; Seidman, 2005; Weidman, 1985; Woosley, 2004).

Age

Numerous studies have found that a student's age appears to be a significant factor in predicting academic success or persistence in postsecondary institutions. In an

earlier study by Choy and Premo (1995), older students demonstrated greater success and persistence than did their younger counterparts. Similar studies conducted by Mercer (1993) and Farabaugh-Dorkins (1991) stated that older students may have more non-academic responsibilities that influence withdrawal decisions. Ryder et al. (1994) reported that nontraditional students were less likely to finish college and graduate than traditional students. They asserted that factors associated with age, such as family responsibilities and employment, may affect student retention. Additionally, they found that students who were likely to withdraw from school were likely to be over the age of 30. While numerous researchers have found that younger students may have significantly higher retention rates than older students, a few studies found that age was not significantly different for students who withdraw or those who persist (Bean & Metzner, 1985; Fike & Fike, 2008; Nealy, 2008; Woosley, 2004).

Gender

Many research studies have investigated the effects of gender on student attrition. Most of the studies are mixed in their findings. Some researchers have found no significant differences between the retention rates of male and female students (Bean & Metzner, 1985; Fike & Fike, 2008; Hall, 1997; Nealy, 2008; Wild & Ebbers, 2002). Other studies have reported that female students were retained at a significantly higher rate than male students (Hall, 1997; Miller, Janz, & Chen, 2007). In an earlier research study, Harrington (1993) reported consistently higher retention rates for males compared to females. Miller, Janz, and Chen (2007) noted that women graduated at higher rates than men at both two-year and four-year institutions.

Race/Ethnicity

Rendon, Jalomo, and Nora (2000) found ethnicity to be a statistically significant factor in persistence. The researchers found that White and Asian-American students are more likely to persist toward a degree than their African-American and Hispanic counterparts. Other researchers have come to similar conclusions, including that ethnic minorities have lower retention rates at colleges and universities (Bailey, Jenkins, & Leinback, 2005; Lang & Ford, 1988; Szelenyi, 2001). Tinto (1994) stated that Caucasian students were more likely than either Hispanic or African-American students to earn a college degree after six years. Asian-American students tended to persist at higher rates than students of other ethnicities. Contradictory to Tinto, Bean and Metzner (1985) did not find ethnicity to be significant after controlling for other factors, stating that there is no relationship between ethnicity and student retention.

Enrollment Status

Community college students possess different characteristics than traditional students. Fike and Fike (2008) asserted that two-thirds of community college students attend on a part-time basis. A study conducted by O'Toole, Stratton, and Wetzel (2003) reported that students enrolled on a full-time basis demonstrated a higher retention rate than students enrolled on a part-time basis. Other studies validated the assertion that students enrolled in more hours are more likely to persist (Bean & Metzner, 1985; McCormick, Geis, & Vergun, 1995).

Community College Attrition and First-Year Seminars

Current student demographics, coupled with community colleges' open-access policy and mission, are significant influences on the problematic student-attrition rate in the community college environment. Community college student attrition remains a

severe problem, with over 50% of students withdrawing before they reach the second year of college (AACC, 2006; ACT, 2012). Community colleges are experiencing rising enrollments, shrinking state appropriations, and growing public accountability.

The scope and significance of community college attrition rates have been explored in the empirical literature, which indicates that a primary strategy for reducing student attrition is the early identification of students who are more likely to withdraw and the subsequent implementation of interventions for those students (Cuseo & Barefoot, 1996; McGrath & Spear, 1991; Mohammadi, 1996; Summers, 2003; Sydow & Sandel, 1998). The strongest intervention strategy for reducing attrition rates is the first-year seminar (Cuseo & Barefoot, 1996; Fidler & Hunter, 1989; Gordon & Grites, 1984; Hunter & Linder, 2005; Hyers & Joslin, 1998; Miller, Janz, & Chen, 2007; Schnell & Doetkott, 2003; Schnell, Louis, & Doetkott, 2003). There has been substantial research examining the impact of a comprehensive approach to first-year seminars. A first-year seminar can provide students with the support needed during the critical first year of college (Purnell & Blank, 2004). Schnell et al. (2003) revealed that “students involved in some type of organized first year intervention are more likely to be retained and graduate” (p. 385). Other researchers have found that students who participate in a first-year seminar achieve higher grades and reported higher levels of satisfaction and involvement in campus activities (Starke, Harth, & Sirianni, 2001).

Pascarella and Terenzini (1991) concluded that “the weight of evidence suggests that a first year seminar is positively linked with both freshman-year persistence and degree completion” (pp. 410–411). Studies conducted on first-year seminars reached similar conclusions in 2005, finding that first-year seminars provide positive and

statistically significant advantages to students who enroll in such courses (Porter & Swing, 2006). Numerous studies have indicated that first-year seminar participation promotes persistence into the second year and over longer periods of time (Davig & Spain, 2004; Porter & Swing, 2006; Wild & Ebbers, 2002; Zimmerman, 2000). Other findings indicated that first-year seminars positively affect grade point averages, student involvement in campus activities, and utilization of campus resources (Barefoot, 1993a; Davis, 1992; Fidler & Hunter, 1989; Hunter, Skipper, & Linder, 2003; Hyers & Joslin, 1998; Maisto & Tammi, 1991; Schnell et al., 2003; Zeidenberg et al., 2007).

Historical Origins of the First-Year Seminar

The first-year seminar concept began its evolution because many colleges recognized a need to orient new students into the collegiate environment (Drake, 1966; Dwyer, 1989; Gordon, 1989; Mamrick, 2005). Gardner (1989) reported that the first-year seminar course was introduced as an extended orientation course and began as early as 1888 at Boston University. Other researchers have different historical interpretations regarding the inception of the first extended orientation course. Gordon (1989) asserted that the first orientation course began at Johns Hopkins University in 1877, with Harvard University following in 1889. Additionally, Mamrick (2005) asserted that the first “non-credit” course began at Lees College in 1882 and the first “for credit” course began at Reed College in 1911. Regardless of these various historical perspectives, the extended orientation course movement began as a call for colleges to respond to the special needs of first-year students and prepare them for a successful college life.

In 1910, two college presidents at two prestigious universities, Harvard and Stanford, proposed that freshmen become segregated into dormitories away from the

other students; consequently, advisors would live with the freshmen to help guide and orient them about the campus culture and other issues entering students might encounter (Siegel, 1989). These ambitious movements at Harvard and Stanford universities paved the way for other colleges to begin discussing the need to orient new freshmen on campuses across the country.

Gordon (1989) contended that an array of credit and non-credit courses began at universities and community colleges preceding World War I, and stated that one-third of colleges and universities were offering orientation courses by 1930. According to a 1941 study, nine out of ten students were required to take an extended orientation course (Gordon, 1989). Additionally, the study noted that students who enrolled in the course were more knowledgeable about the campus and campus life than students who did not take the course. Another survey conducted in 1948 indicated that 43% of two- and four-year institutions surveyed required an extended orientation course (Gordon, 1989). According to J. Gardner (personal communication, October 6, 2012), in 1882 Lees College became the first two-year institution to offer a first-year seminar. Additionally, V. Gordon (personal communication, October 8, 2012) lamented that her original research excluded community college numbers in a historical evolution chapter. The extended orientation course continued to enjoy rapid growth until the 1950s, when faculty began to question the course's content. Faculty argued that orientation courses should not be awarded academic credit due to their "life adjustment" content. Due to the lack of support from faculty as well as university and college leadership, the extended orientation course was discontinued at most colleges and universities during the 1960s (Drake, 1966; Gordon, 1989; Mamrick, 2005).

The extended orientation course did not experience renewed emphasis until the early 1970s, when more adult, first-generation, and unprepared students arrived at colleges and universities across the country and college retention efforts thus rose to the forefront (Drake, 1966; Dwyer, 1989; Gordon, 1989; Ishler, 2005; Mamrick, 2005). In his response to a campus riot at the University of South Carolina in 1972, President Thomas Jones charged faculty to reexamine ways that the institution could focus attention on the needs of entering students. Jones's vision was the catalyst for the first-year seminars in existence today (Gardner, 1986).

John Gardner, a University of South Carolina history professor, spearheaded the current American first-year seminar movement. Gardner developed and implemented a special course for new freshmen that would assist them in making the personal and social transition to college and would help them succeed throughout their collegiate experience (Barefoot, 1993b). Gardner (1986) declared that colleges and universities were undergoing a change in how they welcomed, supported, and acclimated new students to the campus community and experience. Gardner's new orientation course served as the impetus for the birth of the first-year experience movement. The first-year experience movement was a national and international effort to improve the first year because first-year students face many unique challenges that could have an effect on student retention.

Barefoot and Fidler (1996) argued that the increased effort to focus on new students arose because colleges were seeing a decrease in students of traditional age, alarming college dropout rates, an increased emphasis on diverse students enrolling in the collegiate environment, and a lack of academically prepared students. Faculty, staff, and college leadership began to express concern for students' academic and social needs.

The past orientation course model served as the foundational base for the contemporary seminars in existence today (Gahagan, 2002; Upcraft & Hunter, 2005). The contemporary course became known as the “freshmen orientation course” and “freshman seminar.” The first-year seminar does not seek to replace the traditional first-week orientation that most colleges require for new freshmen. Indeed, the first-year seminar is viewed as an extension of the initial first-week orientation and broaches additional topics needed for first-time freshmen (Gardner & Hansen, 1993).

According to Upcraft et al. (1989), the name changed to “first-year seminar” to reflect the course’s academic rigor and its acceptance in the academic world. The use of the word “freshman” was dropped in order to shift to a more gender-inclusive and respectful terminology (Upcraft et al., 1989). The first-year seminar concept has grown tremendously over the last 30 years and led to the establishment of the National Resource Center for the Freshman Experience at the University of South Carolina and the Policy Center on the First Year of College at Brevard College in North Carolina. The National Resource Center for the Freshman Experience, which has since replaced “Freshman” with “First-Year,” was established in 1986 and has become the leading recognized source of information about the first-year experience (Tobolowsky et al., 2008). Universities and colleges have a heightened interest in learning how to alleviate problematic issues that first-year students face in higher education. The primary emphasis of the resource center was to create a place where colleges and universities could obtain first-year seminar research data, knowledge of innovative first-year trends, and information about a plethora of other topics centered on first-year programming (Tobolowsky et al., 2008).

Purpose, Objectives, and Goal Outcomes of First-Year Seminars

Gardner (1986) defined the purposes of the first-year seminar as follows: (a) to help students gain knowledge and understanding of the mission and culture of the institution; (b) to introduce essential student-success skills and help students recognize the important campus resources designed to help them succeed; (c) to increase first- to second-year persistence; and (d) to support progression to graduation. Employing a first-year seminar course is one of the best ways to reduce student attrition rates at two-year community colleges (Barefoot, 1993a; Cuseo & Barefoot, 1996; Gardner, Siegel, & Cutright, 2001).

In 2009, the National Resource Center for the First-Year Experience conducted a national survey of first-year seminars to gather information about first-year seminars in American higher education (Padgett & Keup, 2011). The survey presented objectives for the first-year seminar course at two- and four-year institutions. The three most-reported objectives for first-year seminars in four-year institutions were (a) developing academic skills, (b) developing a connection with the institution, and (c) providing an orientation to various campus resources and services. However, according to Gardner, Barefoot, and Swing (2001), two-year colleges' three most-reported objectives for the first-year seminar course were (a) providing an orientation to various campus resources and services, (b) developing academic skills, and (c) developing a connection with the institution.

Additionally, first-year seminar experts Barefoot et al. (2005) noted that the most common objectives in first-year seminars include increasing student-to-student interaction, enhancing faculty-to-student interaction, promoting students' involvement and time on campus, promoting academic engagement, and assisting students with

insufficient academic preparation for college. The researchers noted that the most frequently assessed outcome of the first-year seminar has been its impact on student retention/persistence. Swing (2004) stated that other targeted outcomes for the first-year seminar include improved study, academic, cognitive, and critical-thinking skills, participation in campus activities, a sense of belonging and acceptance, and increased student interaction with faculty and staff.

Types of First-Year Seminars

First-year seminars are extended versions of traditional orientation courses with a greater emphasis on the academic preparation necessary to succeed in college (Gardner, 1986). The first-year seminar provides support for the transition from high school to college, with a concerted effort on “frontloading” student coping skills during the first semester of college (Fidler & Hunter, 1989; Upcraft et al., 2005b). In addition, the first-year seminar emphasizes small discussions designed to alleviate problematic first-year issues in order to ensure future success and prepare students for the college’s expectations and the general demands of college life (Barefoot et al., 2005). Upcraft et al. (2005) noted that most “first-year seminars aim to help students become better assimilated to and engaged in college-level learning” (p. 472). First-year seminar courses are adaptable to a great variety of institutional settings, structures, and students (Swing, 2002a).

The numbers of institutions that are offering first-year seminar courses has increased dramatically since the late 1980s. The 2009 National Survey of First-Year Seminars found that 95% of two- and four-year institutions surveyed offered a first-year seminar (Padgett & Keup, 2011). The popularity of first-year seminars has grown, and

variations in structure and content have increased. Barefoot (1993b) asserted that there are five common types of seminars that currently exist in higher education institutions across the country: (a) extended orientation seminars, (b) academic seminars with uniform content or common themes, (c) academic seminars on a variety of topical themes, (d) professional or discipline-based seminars, and (e) basic study-skills seminars (i.e., remedial seminars).

Barefoot and Fidler (1996) described and defined the types of seminars that are prevalent on today's campuses. First, the extended orientation seminar is defined as a "success course or college survival course" (p. 7). The extended orientation seminar's topics include orientation to campus resources, time management skills, academic and career planning, and student developmental issues. Faculty, student-affairs professionals, and college administrators are used to teach the course. Second, an academic seminar with uniform academic content addresses interdisciplinary or theme-oriented course topics offered for general-education credit and exposes students to academic skills (e.g., critical thinking and expository writing). Academic seminars cover a variety of topics that center on an academic theme specified for special populations of students (e.g., transfer students, international students, learning communities, undeclared students). Academic seminar courses are predominantly taught by faculty and student-affairs professionals. Third, professional or discipline-based seminars are designed to prepare students for the demands of a specific major or discipline and the professional environment. Faculty members serve as the primary instructors for professional or discipline-based seminars. Fourth, basic study-skills seminars are offered for academically underprepared students who lack academic skills like note-taking, reading

texts, and preparing for exams. Faculty and student-affairs professionals are the primary individuals who instruct these courses. Some first-year seminars are hybrids of the various types.

The extended orientation seminar remains the most common type of seminar offered at most universities and colleges. Although extended orientation seminars remain the most common type, they may not be appropriate for all types of institutions.

Academic seminars have increased their popularity on most four-year campuses (Hunter & Linder, 2005). An existing body of research indicates that there are many variations of the first-year seminar course and each one of the variations reported an increase in students' first- to second-year persistence, interactions with faculty and staff, and ability to use campus resources. Helmer (2005) noted that the most commonly reported correlation of seminar participation is improvement in first- to second-year retention. Tobolowsky et al. (2008) contended that basic study-skills seminars resulted in higher rates of first- to second-year retention, whereas academically oriented seminars resulted in greater student connections with peers. An abundance of first-year seminar research has shown that participation positively affects retention, grade point averages, graduation rates, student involvement in campus activities, and usage of campus support services (Barefoot et al., 1998; Berger & Lyon, 2005; Boudreau & Kromrey, 1994; Fidler & Hunter, 1989; Hyers & Joslin, 1998; Keup & Barefoot, 2005; Morante, 2003; Purnell & Blank, 2004; Stovall, 2002).

First-Year Seminar Course Topics and Content

There is a taxonomy of topics for the first-year seminar course, and the 2009 National Survey of First-Year Seminars asked respondents to list the most important

topics in their first-year seminars: “The four most frequently selected topics were (1) study skills (39.8%); (2) campus resources (42.4%); (3) time management (34.8%); (4) academic planning/advising (35.7%)” (Padgett & Keup, 2011, p. 42). Two frequently reported course topics were critical thinking and study skills: “Nearly sixty percent (59.6%) of two-year institutions reported study skills as a first-year seminar course topic, while over forty percent (40.6%) of four-year institutions reported critical thinking as a course topic” (p. 45). Two-year colleges put less emphasis on diversity, financial literacy, and specific disciplinary topics than four-year institutions.

Study-skills topics had greater significance for two-year colleges because many two-year college students are not prepared for the rigors of college work. This is evident given that 73% of two-year students need remedial work (Boylan, 2002; Gardner & Jewler, 2003; Levin & Calcagno, 2008). Four-year campuses place greater emphasis on critical thinking compared to their two-year counterparts (Padgett & Keup, 2011). Cuseo (1991) found that successful first-year seminars provide students with information about courses and academic plans of study, financial aid, and services that address the students’ interests, values, and abilities, as well as access to faculty, goal-setting assistance, and help with self-esteem issues. Many guest speakers are incorporated into seminars to speak about their college expertise. Rhodes and Carifio (1999) noted that, regardless of the topics covered, the students must consider the topics and content beneficial or the seminar will not be effective. According to Barefoot (1993b) and Gardner, Barefoot, and Swing (2001), many students found that the course helped them develop improved time-management skills, goal-setting abilities, and study habits. Other researchers stated that the course helped students develop realistic career plans for the future, encouraged

responsible academic behaviors, and aided in appropriate course selection for future semesters (Schnell et al., 2003; Upcraft et al., 2005; Wilkie & Kuckuck, 1989).

According to a meta-analysis conducted by Barefoot et al. (2005), best-practice first-year seminar topics include self-exploration, time management, meta-cognition, critical thinking, active learning, study skills, test-taking strategies, writing and communication skills, literacy skills, college major and career exploration, finances, relationship-building, diversity, and health and wellness.

First-Year Seminar Course Instruction/Pedagogy

Gardner (1986) reported that first-year seminar courses are housed in the academic-affairs division in a majority of higher education institutions. The 2009 National Survey of First-Year Seminars reported that academic affairs served as the administrative unit for 54.2% of two- and four-year institutions, followed closely by student affairs for 42.1% and a first-year program office for 3.7% (Padgett & Keup, 2011). Of the respondents, 63.9% reported that they had a first-year seminar director, and 36.1% had first-year seminar directors serving in a full-time capacity.

Jewler (1989) determined that course instruction for the first-year seminar is equally important to course material taught in the classroom. A growing body of empirical literature states that course instruction and pedagogy should depart from the traditional lecture format and incorporate group discussions, collaborative projects, role-playing, and guest lecturers (Belcheir, 2003; Chickering, 2000; Cross, 2002; Cuseo, 1993; Sivan, Leung, Won, & Kember, 2000). Other researchers noted that first-year seminars should include such active-learning techniques as collaborative and cooperative learning, group projects, and oral presentations (Elsner, 2002; Keup & Petschauer, 2011;

McClure, Atkinson, & Wills, 2008; Swing, 2002b; Tsui, 2002). Swing (2004) postulated that pedagogy should incorporate a variety of teaching methods, meaningful discussions, and engaging homework assignments, and allow students to work collaboratively with each other. Students should take a prevalent role in the class, with shared responsibilities for teaching and learning in the seminar coupled with formal and informal feedback techniques (Cross, 2002; Cuseo, 1993; Elsner, 2002; Gardner, 1990; Gardner & Jewler, 2003; Keup & Petschauer, 2011; Policy Center on the First Year of College, 2000). Barefoot and Fidler (1996) recommended that course assignments in the first-year seminar should be intentionally designed to connect new students with key academic-support professionals and campus resources. Gardner and Jewler (2003) advised that institutions should use their best instructors to instruct the courses and that instructors should possess motivational skills, demonstrate empathy, and utilize innovative teaching techniques. The researchers demonstrate that instructors' genuine concern for students' academic success significantly influences students' decisions to persist or drop out. It is extremely important that instructors interact with students inside and outside the classroom. Gardner (1990) stated that "instruction in first-year seminars requires instructors who are interested in intense student content, understand and embrace the unique goals, content, and evolve to meet the changing needs of both the students and the institution" (p. 43). Instructors for first-year seminars include faculty, administrators, student-affairs staff, and undergraduate or peer instructors. A team approach is sometimes employed, which involves pairs of instructors teaching the first-year seminar course. Some researchers have found that counselors are often the best choice for instructing the course because they have an understanding of student development theory

and recognize the needs of first-year students (Jordan, 2000; King & Kerr, 1995; Turner & Berry, 2000). Numerous researchers have concluded that an ongoing professional-development series devoted to improving faculty and staff pedagogy as well as infusing active learning and technology into the classroom in order to improve student learning is paramount (Gardner, 1992; Major & Taylor, 2003; Swing, 2002a).

The 2009 National Survey of First-Year Seminars reported that, for two-year colleges, the teaching responsibility lies with adjunct faculty (9.1%), full-time non-tenure-track faculty (6.6%), student-affairs professionals (39.1%), tenure-track faculty (42.1%), and other campus professionals including administrators (3.1%) (Padgett & Keup, 2011). Peer instruction is not present in two-year colleges. Four-year colleges reported that the teaching responsibility lies with tenure-track faculty (4.1%), full-time non-tenure-track faculty (13.4%), student-affairs professionals (24.3%), adjunct faculty (28.1%), graduate students (27.0%), undergraduate students (2.1%), and other campus professionals, including administrators (1.0%). The pedagogical findings for two-year colleges were significantly different than those at four-year institutions.

Employing adjunct faculty for the majority of course instruction could present challenges for two-year colleges as this leaves less-experienced faculty instructing the students. In most cases, less-experienced faculty are not familiar with the skills needed to adequately teach the course, and counseling skills are needed more than teaching skills (Gardner, 1986, 1992). Peer instruction is present at four-year institutions but lacking at two-year institutions, which could have deleterious effects because peers often have the best results with other peers (Gardner, 1986, 1992).

Course Scheduling and Course Assignments

Many researchers have stated that the most critical time for new students' success is the first six weeks of college (Barefoot, 1993a; Davis, 1992; Gardner, 1992; Hunter & Linder, 2005; Tinto, 1994; Upcraft et al., 2005). Students should enroll in a seminar during their first semester of college to learn about the college's policies and procedures, acquire knowledge about campus resources to help with the students' success, and build self-discipline skills to help the students maximize their chances to succeed and reach their academic potential in future semesters (Barefoot, 1993b). Seminars should employ proactive strategies to help new students understand the expectations of the college environment before students have an opportunity to experience confusion, disappointment, and feelings of failure (Gardner et al., 2001; Schnell et al., 2003). Writing assignments are noteworthy and provide an opportunity for writing practice, which promotes effective communication skills and develops student self-confidence (Elsner, 2002; Jewler, 1989; Spiezio, Baker, & Boland, 2005). Jewler (1989) recommended that first-year students engage in journal writing to document their experiences and adjustment to college. Journal-writing assignments enhance the relationship between student and instructor, helping with student success (Zimmerman, 2000). A student needs to experience trust, care, and empathy from a college representative, which can facilitate future engagement with faculty and staff (O'Gara, Karp, & Hughes, 2009). Padgett and Keup (2011) emphasized that the average size of a seminar program is around 20-25 sections with approximately 20-29 students in each section. Of the institutions that reported, 41.6% enroll around 20-24 students in each first-year seminar course and 23.1% enroll 25-29 students. National surveys postulated that first-year seminars vary in length from one or two weeks to as long as two full semesters

(Fidler & Fidler, 1991). Empirical research indicates that the optimum length of a first-year seminar is one full semester (Carducci, 2006). This length allows students more contact time with content coverage, skill development, social and emotional bonding, and greater retention efforts with other peers (Carducci, 2006).

Grading and Credit

Approaches to and the results of grading first-year seminar courses are mixed. Proponents of course grading contend that the grading system will be designed according to how institutions perceive the purpose and content of the course (Gardner, 1986). Grading for the course is determined by individual colleges. The majority of course instruction is conducted by faculty who note that a letter grade is the preferred method of grading (Gardner, 1986). Other empirical research states that some institutions assign students a pass/fail or satisfactory/unsatisfactory (Jewler, 1989; Swing, 2004). Gardner (1989) stated that “there are advantages and disadvantages to pass/fail or the traditional letter grading” (p. 242). Pass/fail grading alleviates stress and anxiety and enables students to concentrate on the course content rather than the grading method. Letter grading is instrumental in motivating and increasing participation in the course (Gardner, 1989). Jewler (1989) suggested that letter grading produces better quality work and contributes to increased self-esteem. During the inception of seminars in the 1970s, the pass/fail grade was the preferred method of grading, but in recent years letter grades have been considered most effective. Because of the academic reputation and rigor of the course and its content, letter grades may need to be assigned. Padgett and Keup (2011) noted that 84.9% of first-year seminars are letter graded and 72.2% of the seminars are

one semester in length. Sixty-six percent of two-year colleges use letter grades for the course.

Fidler and Fidler (1991) and Barefoot and Fidler (1996) indicated that 60% of all colleges and universities offer the seminar as an elective course and 40% require the course for graduation. Two-year colleges are more likely to offer the seminar as an elective (66%) rather than a graduation requirement. Padgett and Keup (2011) revealed that the most recent survey on first-year seminars indicated that 42.5% of responding institutions offer the course for one credit unit, 12.6% offer the course for two credit units, and 33% offer the course for three credit units. Twelve percent of two-year colleges offer the course for three credit units. Barefoot (1993b) noted that extended orientation courses are more likely to carry one credit in comparison to all other seminar types. Cuseo (1991) emphasized that there is empirical support regarding the first-year seminar course being offered for three credit units. This confirmed the findings of Pascarella and Terenzini (1991), who noted that orientation sessions that are extended in length and comprehensive in design tend to be empirically associated with greater student-retention rates. First-year seminars are often viewed as an extended orientation, and evidence from Swing (2002a) suggested that they should carry more credits as this resulted in more student contacts with larger group outcomes. The majority of two-year institutions offer the course for one credit unit instead of the three credits offered by their four-year counterparts.

Assessment

Cuseo (1991) determined that compelling empirical evidence suggests the first-year seminar is one of the most-assessed courses in the higher education arena. The need

for assessment arises from the need to document the seminar's effectiveness because of college budget reductions and the need to continually revise and improve the seminar (Barefoot, 1993b; Dooris & Blood, 2001; Gardner et al., 2001; Upcraft, 2005). Barefoot (2000) noted that the two major goals of first-year seminar assessment are (a) gathering information in order to evaluate the program's overall effectiveness or impact, and (b) improving the program's quality. Some policymakers, administrators, and faculty believe that the first-year seminar does not hold merit or credibility in the academic arena (Banta, 1999; Cuseo, n.d.; Ewell, 2001; Swing, 2001; Upcraft, 2005). Swing (2004) asserted that there should be an alignment between course outcomes and assessment. Researchers noted that one should regularly assess first-year seminar practices and student outcomes (e.g., specific course topics and teaching strategies). Assessment should be built into the first-year seminar course proposal, along with systematic guidelines for assessment (Carducci, 2006; Cuseo, n.d.; Swing, 2004; Upcraft, 2005). In an effort to validate the substantive nature of the course, the NRC and the Policy Center on the First Year of College were established to collect and publish formal research on first-year seminars across the country. According to Padgett and Keup (2011), 56.5% of participating institutions reported that they formally assessed the first-year seminar course. However, 33.8% stated that they did not formally assess or evaluate the first-year seminar course, and 9.7% reported no answer. The NRC's research noted that the key to the first-year seminar's effectiveness and continuation relies on assessment (Padgett & Keup). While only 56.5% formally assessed the first-year seminar, it is interesting to note that over 91.1% assessed the seminar course by having students complete instructor evaluations. Gardner (1986) stated that, in order to ensure the credibility of the assessment report,

someone should conduct the assessment who has not been associated with the first-year seminar and who has no vested interest in the outcome. Barefoot (1993b) stated that “the modern first-year seminar is one of the most dynamic curricular innovations of the twentieth century and these courses have evolved to meet the changing needs with the potential to continue to be one of the most adaptable and useful staples” (p. 63). Padgett and Keup (2011) found that the three most effective assessment strategies are student evaluations (91.1%), institutional data (78.9%), and survey instruments (72.2%).

Campus Resources and Counseling Services

First-year seminars familiarize students with campus resources and result in an increased usage of campus resources, particularly counseling centers, career-development centers, learning-resource centers, tutoring, and academic advising (Cuseo, 2009; Hunter & Linder, 2005). Purnell and Blank (2004) observed that more students are entering postsecondary institutions with greater problems and stress than in previous years. Students possess greater psychological problems and experience more personal issues, including depression, anxiety, eating disorders, and a lack of the academic skills needed to enter the collegiate environment. A growing body of empirical research has found that more first-year students withdraw from college because of social-adjustment issues than because of academic reasons (Barefoot, 2004; Bishop & Brenneman, 1986; Keup & Barefoot, 2005; Purnell & Blank, 2004; Robles, 2002; Turner & Berry, 2000; Wilkie & Kuckuck, 1989). This plethora of social-adjustment issues and major life transitions increases the demand for college counseling centers. Turner and Berry (2000) postulated that students who seek personal counseling are less likely to withdraw from college, which is extremely important during the first year of college when dropout rates are the

highest. Counseling centers are designed to assist students in addressing their current problems, preventing problems from occurring, and dealing with developmental issues including roommate problems and interpersonal relationship issues (Turner & Berry, 2000). Counseling centers provide students with valuable resources that support students during the first year of college.

First-year seminars incorporate career exploration and planning into their curriculum because it is essential to connect the current college experience with students' future career aspirations (Belcheir, 2003; Cross, 2002). Research has indicated that most first-year students are unsure what career they want to pursue in the future, and first-year seminars are becoming the catalyst for identifying career goals (Cuseo, 2003). Students become aware of what potential careers might be most compatible with their personal interests, abilities, and values. Additionally, students are encouraged to explore, investigate, plan, and prepare for career success, which impacts their graduation and persistence rates (Davig & Spain, 2004; Fidler, 1991; Fike & Fike, 2008; Habley & McClanahan, 2004; Skipper, 2005). Career planning is paramount for helping first-year students make career decisions and develop plans of action.

Learning and resource centers are designed to help improve the academic skills first-year students need (Belcheir, 2003; Boylan, 2002; Levin & Calcagno, 2008; Perlin, 2004; Purnell & Blank, 2004). Sixty percent of students entering higher learning institutions do not have the academic skills needed for graduation (Boylan, 2002). Barefoot (1993a) found that college students underutilize academic support and learning-resource centers designed for underprepared students. Cuseo (2003) indicated that underprepared students who utilize learning-resource centers experience extremely

effective results with regard to retention and academic grades, especially if those services are utilized during the first year of college. Most first-year students report that they will use academic learning and support centers; however, by the end of the first year, almost half of those students never used the services (Boylan, 2002; Levin & Calcagno, 2008).

Academic advising is one of the most important services that institutions can promote to students during the first year of college. Students who perceive academic advisors as good or excellent are more likely to interact with faculty and perceive the collegiate environment to be more supportive (Creamer & Scott, 2000; Crockett, 1978; Frost, 1991; Gordon & Habley, 2000; Habley, 2000; Ishler, 2005; McArthur, 2005; Smith, 2002; Wychoff, 1999). Academic advising plays an integral role in students' success throughout their educational career. At the postsecondary level, academic advising is critical for successful student retention and graduation. Since community colleges are open-door institutions catering to a wide variety of individuals, academic advising creates a vital connection between what a student needs and what the institution has to offer. Studies have shown that academically weak students who receive counseling and advising are able to improve their academic performance, thereby increasing the retention rate (Bailey & Alfonso, 2005). A good academic advisor plays an integral role in improving such students' academic success. A well-developed academic-advising program offers students a chance to have a continuing discussion with a caring and knowledgeable adult who can help them shape a meaningful learning experience for themselves.

Developmental advising involves a systematic process that helps students plan their entire educational experience, clarifying values, providing students with all possible

educational opportunities, and monitoring and mentoring students through the arduous educational process (Habley, 2000). Quality advising enables students to seek help during challenging and confusing times in order to stay on a path to graduation. Advisors are instrumental in assisting students with educational planning and decision-making. Habley (2004) indicated that prolonged indecision about academic majors or career goals leads to greater attrition. The sooner an advisor can establish a trusting relationship with a student, the less likely the student will be to withdraw from school.

Advisors should assess students to ascertain what student-support services can be most effective for each student. Jordan (2000) noted that advisors must be cognizant of a first-year student's critical issues or the advisee may flounder and withdraw from college. It is essential that the advisor establish an interpersonal, mentoring relationship or students will not open up and share their critical issues. Student services and academic services must work together to market student-support services aggressively to first-year students and make their transition to college more successful. Current trends reveal that a disconnection exists between student perception and the use of academic advising. According to the 2009 Community College Survey of Student Engagement (CCSSE, 2009), students seem to consider academic advising to be the most important campus service, but they rarely use it. Ninety percent of students feel that academic advising is very important or somewhat important, but only 56% of students use this service and 35% say they rarely or do not use the service.

First-Year Seminars and Campus Resources

One of the most noted outcomes of the first-year seminar is a greater usage of campus resources (Barefoot & Fidler, 2006). Many first-year students are not aware of

the broad array of campus resources available to assist them with overcoming barriers to their academic success. Purnell and Blank (2004) postulated that first-year students must see the services as important to their success rather than evidence of weakness or they will not use them. One challenging task for higher education institutions is to provide quality campus resources that will enable and support the students. Another daunting task is to help make students aware of these services and encourage them to use the services in order to ensure their success. Pascarella and Terenzini (2005) stated that “students who utilize these resources report higher levels of satisfaction and get more out of their college experience” (pp. 610–611).

Many institutions have examined and noted the importance of the effect that first-year seminars have on increasing students’ knowledge and their use of campus resources. For example, Brigham Young University reported that first-year seminar students were more likely to be knowledgeable about and utilize career planning, academic advisement, library services, and study-skill improvement services than students who did not enroll in a first-year seminar (Barefoot, 2008).

Other campus-specific research conducted at a myriad of institutions includes a prominent study conducted at the University of South Carolina, which distributed a freshman evaluation survey to all new freshmen in the falls of 1974 and 1978. Sidle and McReynolds (1999) found that first-year seminar students were more likely to be aware of and use a variety of campus services than students who did not participate in a first-year seminar.

Another noteworthy study, which was conducted at Marietta College, found that first-year seminar participants made greater use of such resources as writing centers,

advising centers, and counseling services than those who did not enroll in the course (Cuseo, n.d.).

Fidler and Fidler (1989) asserted research at Glassboro State College that students reported that without the first-year seminar course they would not have known about the resources available to help them succeed and that 92% felt that participating regularly in campus activities would help them know where to go should problems arise.

Several reviews of studies have been conducted, including a study conducted at Champlain College in Vermont, that found first-year seminar participants showed an increase in usage of learning-resource centers and tutoring services compared to nonparticipants. Research at the University of California at Santa Barbara noted an increase in the utilization of library services and career-resource centers after the adoption of the first-year seminar as a required course for graduation (Barefoot, 2008).

Another prominent researcher in the field found that, at Marymount College, students who enrolled in and completed the first-year seminar attended more campus events and joined more student organizations (e.g., student government and campus athletic organizations). Students who completed the first-year seminar connected to co-curricular opportunities at higher rates than students who did not take the course (Cuseo, n.d.).

Grayson and Grayson (2003) noted that first-year seminar participants understood and used more campus resources because student-service professionals made class presentations and often incorporated a campus-resource scavenger hunt into the first-year seminar.

Research at the University of Delaware showed that students who used personal, academic, and career-counseling services persisted at greater rates than students who did not use the services (Cuseo, n.d.). Additionally, the researchers found that students who utilize campus resources are more likely to persist until graduation. Similar findings were recorded at Columbus College, Bowling Green State University, Muskegon Community College, Salt Lake Community, and Amarillo College (Cuseo, n.d.).

First-Year Seminar and Student Engagement

Kuh (2005) defined student engagement as “the extent to which students are actively involved in meaningful educational experiences and activities” (p. 89). Student engagement has two central tenets that are student-driven and institution-driven (Kuh, 2003). Student engagement occurs when students spend greater amounts of time and effort on their academic studies and engage in other activities outside the classroom. Additionally, the institution plays a prevalent role in student engagement by introducing and encouraging students to participate in activities in order to integrate the students into the campus community (Borglum & Kubala, 2000; Kuh, 2005, 2008; McCarthy & Kuh, 2006; Pascarella & Terenzini, 2005; Schnell et al., 2003).

The success of first-year students centers on the connections they make with individuals and resources at their postsecondary institution (Swaner & Brownell, 2009). Swaner and Brownell (2009) noted that the first year of college brings many academic, social, and emotional changes, and institutions must share in the responsibility of helping first-year college students integrate academically and socially. Establishing a supportive and challenging campus environment for first-year students is paramount—otherwise the college risks students withdrawing (Kuh, 2003; Kuh et al., 2005; Upcraft et al., 2005).

Students expect the campus environment to be responsive and helpful, especially during the initial six to eight weeks of the first semester. This is the time students form an impression and decide whether they belong in college.

Institutions must send clear and consistent messages about what they expect academically and socially of entering students (Barefoot et al., 2005; Borglum & Kubala, 2000). Students are most likely to succeed when expectations are high and they receive the support they need to rise to those expectations. Kuh (2005) reported that the major purposes of first-year seminar courses are to provide realistic information about the transition to college and to create a socially supportive environment.

Academic and social integration play a dominant role in students' departure decisions. Tinto's (1993) theoretical framework emphasized the importance of how well students are integrated into the academic and social systems of the collegiate environment. Students must feel connected to the institution or the attrition will likely occur. Tinto's views have been validated by an abundance of studies. One of the most noted studies that confirmed his findings includes a 17-year investigation of the first-year seminar at the University of South Carolina: Fidler and Fidler (1991) found that first-year seminar participants were more likely than nonparticipants to establish greater levels of social and academic integration and had greater persistence rates. Other researchers have noted the limitations of Tinto's theory for the community college student, which demonstrates the need for a model for student retention in the community college setting. Elkins, Braxton, and James (2000) emphasized that Tinto's research needs to be replicated in the community college. Braxton (2000) stated that community college

researchers are recognizing the importance of developing a theory of student retention for community college populations.

Several studies have used Tinto's theory as the theoretical lens for two-year community colleges, and the results of those studies were mixed. A meta-analysis conducted using six studies proved that integration was important for degree persistence, but the form of integration was not known (Pascarella & Terenzini, 2005). Several researchers have found that academic integration was pivotal to community college persistence, but social integration did not have an effect on persistence (Braxton & Hirschy, 2005; Braxton, Milem, & Sullivan, 2000). Some studies have found that background characteristics and external circumstances influenced persistence to a greater degree than on-campus influences (Bean & Metzner, 1985; Braxton, 2000; Braxton, Sullivan, & Johnson, 1997; Tinto, 1994). Belcheir (2003) contended that classroom involvement is instrumental in academic integration but that such integration also extends past the classroom. Finally, Braxton et al. (2004) tested Tinto's theory on two-year community colleges and asserted that although Tinto's model is effective for residential colleges and universities, community colleges found a lack of support for Tinto's theory for promoting academic and social integration.

The first-year seminar has great impact on how well students become integrated into the academic and social aspects of college, increases student involvement, and helps students develop a sense of belonging in the campus community (Borglum & Kubala, 2000; Kuh, 2005; McCarthy & Kuh, 2006). Successful academic and social integration into the college environment reinforces a student's desire to remain at the college (Kuh, 2005). Academic and social integration is important to institutions because postsecondary

institutions have noted the importance of getting students connected from the very first day they visit the college campus (Belcheir, 2003; Chang, 2002). Institutions must “frontload” students with all the information needed to help them persist to graduation. The sooner institutions address the persistence problem, the greater the likelihood that they can address retention efforts (McCarthy & Kuh, 2006).

Gordon and Grites (1984) ascertained that the first-year seminar course provides structure and guidance necessary for the student to survive the first year. Pascarella and Terenzini (1991) postulated that first-year seminars are the catalysts for establishing academic adjustment and social integration early in college, which leads to a greater likelihood of persistence and degree completion. First-year seminars are the foundation for getting students more involved in the social and academic life of an institution. Students need to feel a sense of belonging if they are to persist to the second year; greater integration leads to higher persistence rates. Elsner (2002) claimed that institutions must ensure that the first-year seminar curriculum is extremely organized in order to help students realize they are making progress toward attaining their degree during the first year of college.

Starke, Harth, and Sirianni (2001) studied a treatment group of seminar participants and a control group of non-seminar students at Ramapo College and reported significant differences between the two groups on self-reported student engagement measures. Students who participated in the course attended more events on campus, belonged to more student organizations, were more comfortable with faculty, spoke more frequently with faculty outside the class, and were more familiar with college support services.

Cuseo (n.d.) conducted a meta-analysis of first-year seminar outcomes and found that seminar participants at Dunaphy University felt that they shared a greater sense of community with fellow students, were more comfortable talking to professors, were more capable of solving problems, and were more positive about their overall experience at the university. Barefoot (2000) found considerable evidence that seminars were effective at integrating students into the life of the college. Integration was measured by participants' attendance at more college functions, participation in more extracurricular activities, greater awareness of college services, and more positive attitudes toward teaching and counseling services. In a later study at the same university, Hunter and Linder (2005) corroborated the earlier finding that seminars helped students become assimilated into the ongoing life of the college and provided them with emotional and social linkages that stimulated them to remain in college and become leaders on campus.

In a study conducted at Bloomsburg University, one of Pennsylvania's 14 state universities, students were randomly assigned to be course participants or nonparticipants. Results revealed that course participants reported higher levels of both academic and social integration. Participants reported more interactions with peers and with faculty outside the classroom, greater use of student services, and higher rates of participating in student clubs and organizations (Cofer & Somers, 2001). Similarly, a study conducted at the University of North Carolina at Charlotte randomly assigned students as participants or nonparticipants in a first-year seminar, and the students who participated in the seminar reported significantly more informal social contact with faculty than nonparticipants throughout the first year of college (Kezar & Kinzie, 2006).

A substantial body of empirical research has noted that student engagement leads to increased student learning (Kuh, 2005; Pascarella & Terenzini, 2005), college persistence (Davig & Spain, 2004; Stovall, 2002), and graduation rates (ACT, 2012; Hoachlander, Sikora, & Horn, 2003). Other researchers have found that the first-year seminar contributes to the social integration of first-year students and that the course provides opportunities for first-year students to develop academic skills necessary to function effectively in a college environment (Boylan, 2002; Levin & Calcagno, 2008; Summers, 2003).

Academic Integration

The integration of new students into the academic environment is one of the most critical factors for first-year student success. Tinto (1994) defined academic integration as the involvement between students and their academic environment to help them make a smooth transition to college, work toward their academic goals, and succeed in the classroom. Additionally, he reported that academic integration, as opposed to social integration, had more impact on academically challenged students.

Many students are entering postsecondary education disengaged from the learning process and may be deficient in their study habits and academic skills. Student expectations about the amount of time necessary to be successful are often unrealistic (Belcheir, 2003). Students may appear less motivated and possess lower aspirations, with many of them expecting to receive good grades with less academic effort. Levin and Calcagno (2008) noted that developmental students had a higher probability of departure because they are not prepared for college and have not been integrated into the academic setting of the community college. Tinto's (1993) theoretical framework emphasizes the

importance of academic and social integration in the campus community and notes that without integration occurring, students are more prone to withdraw from college.

Academic integration is extremely important in the community college setting because students spend less time on campus than their four-year counterparts (Elsner, 2002), and their time on campus is spent mostly in the classroom (Belcheir, 2003; Cross, 2002; Major & Taylor, 2003).

Frequent student-faculty interactions inside and outside of class are pivotal to promoting students' academic integration and they can lead to student persistence (Belcheir, 2003; Cross, 2002). Increased faculty and student interaction is most likely to occur in smaller colleges (Belcheir, 2003).

A review of the literature reveals that student-faculty contact outside the classroom is strongly correlated with student retention (Belcheir, 2003; Jacoby, 2000; Kuh, 2005; Pascarella & Terenzini, 1991; Pascarella, Terenzini, & Bliming, 1999). Elsner (2002) noted that strengthening classroom experiences is paramount to helping students reach their potential, and colleges must set high standards to promote success in the classroom. Students learn and retain information when they are actively involved in the learning process rather than receiving information in a passive way.

Faculty need to reinforce messages to their students in the early weeks of the semester, stating what they expect of the students and providing frequent feedback to students on their academic progress in the course (Chickering, 2000; Pascarella, 1997; Tagg, 2003). First-year seminars promote increased opportunities to build and cultivate stronger relationships with faculty inside and outside the classroom. Research has confirmed that students who enroll in a first-year seminar course will exhibit higher

levels of academic integration, demonstrate better study habits, and experience increased motivation to be successful as opposed to students who do not enroll in such a course (Cuseo, 1991; Fidler & Hunter, 1989; Gardner, 1986; Skipper & Argo, 2003).

Hunter and Linder (2005) noted that students enrolled in first-year seminars reported experiencing a more supportive campus environment and engaging in more active and collaborative learning than students not enrolled in first-year seminars. First-year seminar courses foster academic integration by helping students develop a sense of belonging through small class discussions that instill motivation and confidence (Chickering, 2000; Cross, 2002; Swing, 2004).

In order to be successful, students must seek to understand what their institutions expect of them academically and socially and then set realistic goals for themselves. Students must also learn how to balance the demands of social, personal, and academic concerns. First-year seminars acquaint students with the academic rigors and standards of college, including how these are different than high school.

First-year seminars promote both the academic and social integration of students into the institution by providing more opportunities for faculty contact and by introducing students to cultural and educational activities on campus. Increased academic integration fosters institutional commitment and leads to persistence into the sophomore year (Fidler, 1991; Keup & Barefoot, 2005). Keup and Barefoot (2005) found that students who participated in a first-year seminar course reported that they were more challenged academically, participated in more active and collaborative learning activities, interacted more frequently with faculty and staff, gained more from their first year of college, and were satisfied overall with their college experience. Stovall (2002) and Upcraft (2005)

found that students enrolled in a first-year seminar reported greater levels of academic performance, received higher grades, and developed better study habits.

Faculty members are instrumental in promoting higher levels of student engagement by using active pedagogical strategies like active and collaborative learning and classroom-based problem solving. Faculty must set high expectations and hold students accountable for reaching those expectations. Swing (2004) stated that high expectations for student performance lead to greater student engagement and make students more likely to persist to graduation.

Colleges need to understand the importance of challenging and supporting students during the first year of college and make a concerted effort to help the students succeed. Colleges need to recognize the need for students to make connections within the institution to staff or faculty members in order to ensure that students feel a sense of community and have a trusted individual to consult when problems arise. Students need to feel that the institution takes a serious interest in their academic progress.

Social Integration

Tinto (1994) described social integration as interactions between students and individuals within the collegiate environment. Social integration is achieved through informal student/peer interactions, extracurricular activities, and student associations (Skipper & Argo, 2003; Thomas, 2000). Braxton et al. (2004) claimed that new student orientation is the perfect opportunity for students to socially interact with their peers, which promotes social integration. Many researchers have asserted that social integration plays a limited role in the community college student's persistence decisions because community college students possess different student characteristics than residential

students and they commute to college (Bean & Metzner, 1985; Braxton et al., 2004; Fike & Fike, 2008). Pascarella and Terenzini (2005) noted that Tinto's model has limited applicability for commuter students because they found that social integration did not have a positive relationship with persistence decisions. Other research has noted that social interaction had an effect on community college students' persistence rates and commitment to college (Thomas, 2000).

First-year seminars are perhaps the greatest innovation for introducing and incorporating social integration in the community college setting. Pascarella and Terenzini (1991) postulated that first-year seminars should incorporate strategies to help students adjust socially into the collegiate environment. Many new students are not adequately prepared to handle the significant social and personal changes that occur when they enter college. It is important for students to learn what to expect socially, which will lead to greater confidence and feelings of security. First-year seminars teach students to learn to balance their different responsibilities and activities, and they provide realistic information about the transition to college (Porter & Swing, 2006; Steltenpohl & Shipton, 1986). Students who are more socially integrated or involved in campus life are more likely to persist. Additionally, the first-year seminar fosters a better understanding of the collegiate environment and provides opportunities in the classroom to promote social integration within the community college (Belcheir, 2003; Elsner, 2002; Zeidenberg et al., 2007).

First-Year Seminar and Persistence

Student attrition has been a topic of discussion for many institutions for more than a century, and much research exists that explores the topic in greater depth (Barefoot,

2004; Bean & Metzner, 1985; Bean & Noel, 1980; Boudreau & Kromrey, 1994; Braxton, 2001; Braxton, Hirschy, & McClendon, 2004; Habley & McClanahan, 2004; Pascarella & Terenzini, 2005; Sidle & McReynolds, 1999; Tinto, 1994). Community colleges grapple with unsatisfactory rates of student persistence. National attrition rates for all types of institutions have been increasing since the early 1980s (NCES, 2004). A growing body of research indicates that student attrition is greatest during the first year of college for all types of institutions (Barefoot, 2004; Fidler, 1991). Studies have indicated that students withdraw from college during the first year at rates of 25% at four-year institutions and more than 50% at two-year colleges (Tinto, 1994). Grayson and Grayson (2003) noted that higher education institutions need to address the current retention problem and focus on measures to reduce attrition rates for all types of institutions.

Colleges and universities need to examine their retention-intervention programs to ascertain their effectiveness and should redesign them if needed (Bean & Noel, 1980; Braxton, 2000; Tinto, 1994). These institutions must support entering students and commit to helping students succeed. Federal as well as state-level agencies and policymakers are using retention and graduation rates as measures of accountability for determining financial funding to educational institutions (Bailey et al., 2006). Retention impacts sustainability for academic programs and institutional effectiveness (Bailey et al., 2006). Higher education institutions need to address and understand why students are leaving so they can redesign effective retention interventions to help students remain and have a positive college experience, complete their academic goals, and enter the workforce (Kane & Rouse, 1995; Marcotte et al., 2005).

Ease of accessibility, lower tuition rates, and open-door status allow greater numbers of underprepared students to enroll in community colleges. Most four-year institutions have outsourced developmental education to community colleges, suggesting that many do not place value on these courses (Carey, 2005). Improving the effectiveness of developmental and remedial education is one of the primary issues that community colleges must endeavor to address. Seventy-three percent of first-time students require developmental or remedial studies in at least one area. Research shows that first-year developmental students entering an institution have a greater propensity to withdraw because they lack academic skills and support. Other researchers have found that students who completed developmental or remedial courses had significantly higher persistence rates than students who did not take the courses, with many of these students going on to earn an associate degree. Bailey (2009) noted that developmental students must receive an opportunity to succeed and persist by enrolling in the necessary developmental and remedial coursework through community colleges (Attewell, Lavin, Domina, & Levey, 2006; Boylan, 2002).

Empirical research has revealed that first-generation community college students have lower persistence rates than non-first-generation students (Thayer, 2000). Additionally, research shows that students from lower-income families are less likely to complete a degree program than those from higher-income families (Thayer, 2000).

There is extensive empirical evidence in support of the first-year seminar's persistence impact, with many of the programs serving as benchmarks for replication. Porter and Swing (2006) noted that there is a body of widespread research on first-year seminars that has expanded considerably over the past years, including research at

Sacramento City College indicating that students who participated in the first-year seminar persisted at a 50% higher rate than students who did not participate in the course.

Other noted researchers observed that Miami Dade Community College had a 67% first-year retention rate for students who completed a first-year seminar course versus a 46% retention rate for nonparticipants (Gardner, Upcraft, & Barefoot, 2005). A landmark study conducted by Fidler and Fidler (1991) revealed that, for 16 consecutive years, students who enrolled in and completed the first-year seminar were more likely to persist to the sophomore year than first-year students who did not take the course. In eleven of the sixteen years, these differences reached statistically significant levels despite the fact that course participants had higher course loads and lower predicted academic potential.

Five additional studies suggest that—irrespective of differences in gender, ethnicity, and age—the course has positive outcomes on persistence and retention, including one study at Ramapo College that employed a “time series” study and demonstrated the average freshman-to-sophomore retention rate for cohorts of first-year students participating in the first-year seminar during a five-year period immediately after the course became a college requirement was significantly higher than the average retention rate for first-year students who had entered the college during the three-year period immediately before the course was created (Starke, Harth, & Sirianni, 2001).

Other positive outcomes of the course include a study at Chabot College, a two-year public college in California, which indicated that first-year students who completed a seminar course persisted through the second quarter of college at a rate almost eight times higher than non-seminar participants (Barefoot, 1993a).

Kuh (2008) stated that students at Indiana University-Purdue University Indianapolis who participated in a first-year seminar course displayed first-year retention rates that were significantly higher than nonparticipants. Empirical literature collected at the University of Maryland at College Park noted that students who took the first-year seminar course displayed significantly higher rates of retention throughout their first four semesters on campus compared to a control group of students who did not take the course (Hyers & Joslin, 1998).

Researchers at Georgia College showed that participants returned at higher rates than nonparticipants in eight out of ten years of the study. The results supported another study that was conducted at Bowling Green State University, which revealed that course participants had higher retention rates than their counterparts who did not take the course. Lastly, Columbia College noted in their retention literature that the retention rate for participants in the college's first-year seminar was 58%, while the rate for nonparticipants was 48% (Lang, 2007).

Exemplary Community College First-Year Seminar Courses

There are an increasing number of institutions that are evaluating the seminars on their campuses. Accompanying the growth of first-year seminars, an extensive body of research literature has developed on the effectiveness of the seminars. First-year seminar courses have proven to be effective intervention tools in improving persistence rates, resulting in greater student engagement and encouraging utilization of an array of campus resources. In their landmark book *Achieving and Sustaining Institutional Excellence for the First Year of College*, Barefoot et al. (2005) noted that benchmark community college first-year models exist to highlight salient attributes that community college must possess

to be considered exemplary. Additionally, the author of the current study examined Jefferson Community and Technical College's (JCTC) Dashboard data to create a comparison group based on JCTC's characteristics and enrollment numbers in order to identify benchmark institutions. Based on the author's findings and Barefoot et al.'s book, the two benchmark community colleges are Sinclair Community College and J. Sargeant Reynolds Community College. Comprehensive research studies conducted at Sinclair Community College and J. Sargeant Reynolds Community College have provided empirical evidence that the first-year seminar course has significantly affected persistence rates, leading to greater student engagement within the college and student utilization of a greater variety of campus resources (Gardner, 1980; Shanley & Witten, 1990; Watson, 2000).

Sinclair Community College, an urban community college located in downtown Dayton, Ohio, is the largest community college at a single location in the state. Featured in the *New York Times*, Sinclair was touted as one of the best community colleges in the nation (Nealy, 2008). In 2009, Sinclair had an enrollment of 25,345 students with over 15 programs available. Sinclair is a leading Achieving the Dream college that has undergone recent improvements in student success and retention during the first year of college. A recent trend is more colleges moving toward requiring a first-year experience seminar program. Sinclair has implemented a mandatory orientation and a three-credit-hour first-year experience course. The mandatory orientation and first-year experience course were designed to help new students make a successful transition to college and to provide the impetus to aid in retention. According to Gardner (1980), the first-year experience is based on the concept that success during the first year provides the foundation on which

the rest of the college experience is based. The orientation and extended orientation course focuses on providing enhanced orientation to the university by teaching students the skills that promote college survival (Fidler & Shanley, 1993; Shanley & Witten, 1990). First-year seminar classes are small, with no more than 25 students per class. Instructors are drawn from faculty and student-affairs administrators who participate in a week-long development program preparing them to instruct the course. Course objectives for the program include an extensive orientation of the college campus, introduction to campus resources, exposure to academic and social involvement within the college, and establishing a strong base of support for students (Gardner, 1986). Jewler (1989) emphasized the elements that students need to learn through a first-year seminar course. A first-year seminar course engages students in group-planning activities, library research, career and academic planning, and activities that promote the use of campus resources needed for success. Sinclair has undergone a major initiative to infuse technology throughout the curriculum. The first-year seminar requires that students engage in class discussions, work in small-group settings, or partake in more reflective writing assignments. The extended orientation course is taught for a full semester, allowing for continuity of contact between the seminar instructor and new students throughout their first term of college. The course provides ample opportunity for peer bonding and provides students with strategies to enhance the likelihood of their academic success and retention in the college. Research data on the successful program reported that participants in the course had higher sophomore return rates than nonparticipants. These findings were impressive because course participants were academically less prepared, and a higher proportion were at-risk, undeclared, and/or minority students, than

those not enrolled in the course. Other reported findings include increased student-to-student interaction, increased faculty and student interaction outside the classroom, and increased student involvement and time on campus.

J. Sargeant Reynolds Community College, established in 1972 in Richmond, Virginia, has grown into the third-largest college in the Virginia Community College System. Between its three major campuses, five off-campus sites, and distance learners, the college has over 28,000 degree-seeking students. Faculty, staff, and administrators are committed to serving first-year students regardless of age, minority status, and first-generation status. The college is committed to high expectations and innovation, leading it to be recognized as a Vanguard Learning College and as an exemplar community college in the United States. The college is recognized for its 34 two-year occupational/technical programs, five transfer programs, and 60 career-studies certificate programs, which require less than one year of full-time study. Its significant accomplishments include enrolling more than 250,000 in for-credit courses since its inception. J. Sargeant provides a new student orientation program for all new students prior to the semester the student plans to enroll. The new student program is called SOAR (Student Orientation, Advising, and Registration). The SOAR model involves traditional orientation and group advising sessions, and mandates that all students enroll in a student-success course. The course's stated goals include increasing students' chances to be academically successful by teaching academic-survival skills, providing an orientation to the college and the resources available to students, and increasing students' academic and social involvement within the college. Course assignments in J. Sargeant's first-year seminar are intentionally designed to connect new students with key academic-support

professionals and campus resources. Barefoot and Fidler (2006) noted that one of the most reported outcomes of first-year seminars by institutions across the country is promoting student awareness and knowledge of key campus programs and increasing usage of college resources and services. J. Sargeant engages in innovative pedagogical practices such as active and collaborative learning, classroom-based problem solving, and significant reflection through journals and other student writing. Student feedback informs instructional approaches. The college provides increased opportunities for students to become academically and socially integrated. This augments students' institutional commitment and leads to increased student retention, which is evident in the college's impressive retention rate.

Jefferson Community and Technical College: Site Selection

Jefferson Community and Technical College (JCTC) is a comprehensive institution of higher education based in Louisville, Kentucky, and the largest of sixteen colleges forming the Kentucky Community and Technical College System. JCTC is the region's largest provider of undergraduate postsecondary education, offering over 70 distinct fields of study and over 300 career credentials. JCTC enrolled 14,346 students on six campuses in the fall 2012 semester, which equates to a 40% growth rate since 2003. JCTC serves a diverse student population seeking a better life through education. Of those students declaring race/ethnicity when surveyed, 23.5% selected African American—the highest percentage of African-American students served by any KCTCS colleges. Over 700 international students from 91 countries of origin also attended JCTC during 2012-2013. According to the AACC & ACT's (2012) Faces of the Future fall 2012 survey data, 61.1% of JCTC students are first-generation college students. Other

salient findings include that 59.6% of JCTC students are female and 40.4% are male. Twenty-six years is the average age of a JCTC student. While 67.5% of students attend part time, 37.3% attend full time. Eighty-three percent of students receive student financial aid. The percentage of students who identified themselves as a major wage earner in their household is 39.6%. The annual median family income is \$16,360 (FAFSA, 2012). While 80.5% of students need one or more developmental course, there is only a 43.55% pass rate in developmental courses. JCTC ranks ninth in the nation for awarding credentials. In 2012, JCTC awarded 1,878 certificates, 3,165 certificates, 197 diplomas, and 1,090 associate degrees. Its graduation rate was 12%, which is average for urban community colleges but last among all KCTCS institutions. Twenty-six percent of students are enrolled as non-credential-seeking or have not confirmed a degree path. JCTC's data mirror national community college student data with regard to enrollment status, age, and ethnicity. Appendix G contains national community college benchmarking data used to compare community colleges from across the United States. This aggregated national and peer data is related to institutional outcomes in order to compare JCTC's performance in accountability measures with that of peer institutions. JCTC is thus compared to three peer institutions for this national comparison.

Jefferson Community & Technical College First-Year Seminar Course

In a national survey of more than 1,000 institutions that was conducted under the auspices of ACT, chief academic officers were asked to identify three campus retention practices that had the greatest impact on student retention. The reported practice that ranked first in terms of having the greatest impact on student retention was a "first year seminar" course for credit (Habley & McClanahan, 2004). A careful analysis of the

empirical retention literature, a low 12% graduation rate, and a 43.5% retention rate combined to serve as the impetus for a new first-year seminar policy at JCTC. Another impetus prompting the adoption of the first-year seminar was the fundamental shift in the community college's focus from access to completion. Before the original college policy was adopted, JCTC conducted an institution-wide examination of their needs and clearly defined course outcomes prior to implementation. The examination revealed that, without adequate attention to faculty preparation, consistency of course content, and pedagogical similarity, the value of the course may be diminished. The plan for assessment was outlined clearly prior to implementation of the course.

Implementing a new first-year experience program is a formidable challenge. Currently, the first-year seminar course at JCTC is not mandatory, but it is strongly recommended for all new first-time students enrolling at JCTC. Achieving Academic Success (FYE 105) is a three-credit-hour course with class enrollment not exceeding 25 students per section. The course is graded with letter grades: A, B, C, E, W, and I are the grades available to be earned for this course. Select groups of students are exempt from the FYE 105 course, including dual-credit students, students in adult-education Educational Enrichment Services classes, corrections students, and Workforce Solutions students. Others exempted include students who have successfully completed the first-year experience course through another accredited institution, those who have completed a degree through another accredited institution, non-credential-seeking students, and certificate-only students. The course competencies include the following: develop an educational plan that leads to a career path, research career choices, verbalize personal and educational goals, research transfer options, identify campus resources, demonstrate

use of information technology (Blackboard, student self-service, Peoplesoft, etc.), identify self-management skills, and identify basic strategies for academic success. A standardized syllabus and textbook is used for all sections of the course. The college textbook focuses on community college success, and the publisher, Cengage Learning, offers a wide range of professional-development support, including face-to-face training on the campus. The publisher customized the book and the cover of the textbook is unique to JCTC and contains the college's logo. A diverse curriculum addresses topics ranging from academic-improvement skills to university policies and procedures.

The course is taught by faculty from many different disciplines, student-personnel practitioners, and college administrators. Professional development is integral to the efficacy of the first-year seminar program, so instructors participate in training sessions before they are allowed to teach the class. Training sessions present an array of topics that emphasize increasing student engagement: different pedagogical approaches, classroom technologies, learning styles, motivation techniques, and active learning techniques. Regular meetings of all persons who teach the course are held periodically throughout the semester, and online discussions ensue that allow instructors to share new insightful ideas for teaching the course. A Blackboard repository is available for sharing class activities and exercises, and it includes a faculty resource manual for all instructors containing notes, recommendations, supplemental-material activities, handouts, quizzes, and exam questions for each topic of the seminar.

To remain an instructor of the first-year seminar course, instructors are required to attend ongoing professional-development workshops, discussions, webinars, and other approved continuing-education opportunities in order to maintain current knowledge and

skills. According to a study conducted by McClure, Atkinson, and Wills (2008), faculty involvement in a first-year seminar and related ongoing faculty training has many positive effects. The researchers found that faculty reported the teaching skills learned in the faculty workshops and practiced in first-year seminars were transferred to their discipline-based classes. Fidler (1991) examined the effects of attending workshops in preparation for teaching a first-year seminar on faculty teaching techniques and “found that teaching the seminar boosted faculty morale, helped faculty meet academic and non-academic needs of students and improved teaching in other courses across the campuses” (p. 23). According to the NRC’s national survey of first-year seminar programs (Padgett & Keup, 2011), 76.1% of respondents offered training for first-year seminar instructors. Due to the importance of relationship-building and social interaction in the course, it is required that students take the course in person rather than online unless they are enrolled in all online classes.

Beginning in spring 2013, a new pilot first-year experience course was introduced, prompted by the Achieving the Dream (AtD) initiative. The purpose of this mandate was to demonstrate the college’s commitment to equipping students for a successful college experience. This mandate implemented by the AtD initiative was a prestigious overarching framework and support system to move community colleges beyond their historic commitment to student access by incorporating student success. Student success moves from access to completion, emphasizing completion of credentials and degrees. The AtD initiative included a scalable system designed to enable low-income and minority students to meet and exceed high academic standards, and to better prepare them for success in the workforce and in transferring to universities. JCTC has

adopted strategies such as the first-year seminar in order to help students along the way from admission to graduation. The course is not mandatory but is strongly recommended. As numerous community college leaders state throughout the literature, “students don’t do optional.”

According to JCTC Dashboard, during the spring 2013 semester, 67 sections of the new first-year experience course were offered with 1,231 students enrolled in the course. Of those 1,231 students, 67.5% completed the course during the spring semester. Ninety-one percent of students stated that they would recommend this course to new students at JCTC. During the fall 2013 semester, 102 sections of the first-year experience course were offered with 2,373 students enrolled in the course.

The course follows research trends that assert that 66% of all two-year colleges offering the first-year seminar course give a letter grade for the course, which is computed in students’ grade point average (Barefoot & Fidler, 1996). Researchers also found that students prefer to take the course for credit rather than not for credit. More than 80% of two-year institutions offer the course for academic credit (Padgett & Keup, 2011). Cuseo (n.d.) reported that the research on first-year seminars indicates that the course benefits students of all academic levels, including the well-prepared student. The NRC’s 2009 survey revealed that 42.5% of responding colleges offered the course for one credit hour, 12.6% offered it for two credit hours, 33% offered the course for three credit hours, and 10% offered it for four or more hours (Padgett & Keup, 2011). The majority of institutions offer the course for one hour; however, the literature clearly states that, according to course assessment data, a three-credit-hour course is more effective than a one-credit-hour course (Swing, 2002a). There is mixed research on the issue of

mandatory versus elective course participation. Some researchers (Barefoot, 2000; Fidler & Hunter, 1989; Schnell et al., 2003) have opposed making the course a requirement, while others noted that a required course was most appropriate (Davig & Spain, 2004; Morante, 2003). Lastly, one remaining issue is the duration of the course. Many researchers have noted that the course varies in length from one or two weeks to as long as two full semesters (Barefoot, 2000; Swing, 2002b). Compelling empirical research has noted that greater retention-enhancing efforts are underway, and that greater course length results in more time for content coverage, so many researchers recommend conducting the seminar for a full semester (Barefoot et al., 1998; Cuseo, n.d.).

Summary

There is a growing body of research that posits that a student-success course is a powerful tool in supporting student success. First-year seminars have been shown to ameliorate attrition; generate higher levels of student engagement, including strengthening classroom engagement; and promote a seamless transition to college life. Data have continually shown that the greatest attrition occurs between the freshmen and sophomore years (Bean & Noel, 1980). JCTC's burgeoning enrollment, coupled with the new Achieving the Dream initiative, warrants first-year seminar research that can contribute to both the persistence literature and a deeper understanding of the relationship between first-year seminars and persistence at community colleges. The chapter presented a cogent argument that first-year seminars are germane to use of campus resources, academic and social integration, and persistence.

The review of the literature discussed the evolution, mission, funding, and student demographics of community colleges. Additionally, a discussion of the historical

evolution of the first-year seminar was followed by a thorough look at the seminar's status. The chapter examined the impact of the first-year seminar on campus resources, student engagement (academic and social), and persistence. The chapter concluded by reviewing discussions of exemplary first-year seminar programs and the structure of the particular first-year seminar that is the subject of this study.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

The following chapter describes the research methods employed in this study, including a description of its research design and sampling technique. The chapter concludes with information about data collection, instrumentation, and data analysis.

Purpose of the Proposed Study

The purpose of the study was to ascertain whether participating in a first-year seminar course would, despite outside barriers, promote participants' greater academic engagement, attachment to the environment, use of campus resources including the counseling center, participation in campus events, and commitment to complete a degree compared to students who do not enroll in a first-year seminar course.

Research Questions and Hypotheses

Research Questions

After controlling for age, gender identity, race/ethnicity and enrollment status,

1. Is there a difference in academic engagement between students who completed the first-year seminar and students who did not complete the first-year seminar?
2. Is there a difference in attachment to the environment between students who completed the first-year seminar and students who did not complete the first-year seminar?

3. Is there a difference in the commitment to complete the degree between students who completed the first-year seminar and students who did not complete the first-year seminar?
4. Is there a difference in participation in campus events between students who completed the first-year seminar and students who did not complete the first year seminar?
5. Is there a difference in use of the counseling center between students who completed the first-year seminar and students who did not complete the first-year seminar?
6. Does a significant difference exist in use of campus resources (e.g., advising, counseling center, etc.) between students who complete the first-year seminar and who do not complete a first-year seminar?
7. Do outside barriers have less of an effect on students who complete a first-year seminar compared to those who do not complete the first-year seminar?

Research Hypotheses

1. Students who complete a first-year seminar will exhibit greater ($p < .05$) academic engagement on the Student Engagement Survey compared to those who do not complete the seminar.
2. Students who complete a first-year seminar will exhibit greater ($p < .05$) attachment to the environment on the Student Engagement Survey compared to those who do not complete the seminar.
3. Students who complete a first-year seminar will display greater ($p < .05$) commitment to complete the degree on the Student Engagement Survey compared to those who do not complete the seminar.

4. Students who complete a first-year seminar will show greater ($p < .05$) attendance to campus events on the Student Engagement Survey compared to those who do not complete the seminar.
5. Students who complete a first-year seminar will show greater ($p < .05$) use of the campus resources on the Student Engagement Survey compared to those who do not complete the seminar.
6. Students who complete a first-year seminar will show greater ($p < .05$) use of the counseling center on the Student Engagement Survey compared to those who do not complete the seminar.
7. Students who complete a first-year seminar will report fewer outside barriers ($p < .05$) on the Student Engagement Survey compared to those who do not complete the seminar.

Research Design

A quasi-experimental cross-sectional posttest-only control-group design was employed for this study. Cross-sectional studies describe characteristics that exist in a population but do not determine cause-and-effect relationships between different variables (Campbell & Stanley, 1963; Creswell, 2003; Howell, 2007; Shavelson, 1996). Cross-sectional research gathers and presents data that can be collected in a relative short period of time to make inferences about a population of interest at one point in time (Campbell & Stanley, 1963; Creswell, 2003; Shavelson, 1996). The major benefit of a cross-sectional survey method is convenience (Creswell, 2003; Hieman, 2001).

Survey research is a widely accepted tool for conducting and applying basic social-science research methodologies (Creswell, 2003). Hinkle, Wiersma, and Jurs

(2002) noted that although participants are not randomly assigned to the control groups within this research design, it permits a study to estimate the impact of an intervention on its target population.

Sampling Method

Data were obtained from a non-probability convenience sample of students attending Jefferson Community and Technical College (JCTC). Convenience sampling ensures that there will be a high response rate and that the response rate will not be systematically biased (Pagano, 2001). The non-probability convenience sampling for this study took place in 12 course sections, with approximately 15-20 students in each English 101 classroom during regularly scheduled class meeting times in the spring 2014 semester. The statistical power for the study is .80, with a significance alpha level of .05 and medium effect size of .15, yielding a minimum sample of 260 (130 per group) to execute the study. The first-year seminar participant group ($n = 165$) achieved the minimum sample needed to conduct the study; however, the non-participant group ($n = 104$) failed to achieve the minimum sample size. This failure to meet the sample size could affect the results of the study and lead to greater Type II errors. Two hundred and eighty-eight students attempted to complete the survey, but complete surveys were received from only 269 participants. The demographic characteristics of the sample (e.g. gender, age, race/ethnicity, current enrollment status, hours worked per week, highest academic/educational goal, intent to persist, first-generation status, and financial-aid status) are broken down by completers and non-completers and summarized in Table 2. Frequencies of the sample's characteristics are presented based on participation and nonparticipation in the first-year seminar (FYS). Due to small numbers of participants in

some levels of the study’s categorical demographic variables—e.g., age (under 18), race (Asian American, Hispanic/Latino, and Pacific Islander), and gender (other and transgender)—variables with 10 or fewer participants were eliminated from the sample. Additionally, demographic variables intended for use in analysis turned out to be dichotomous when these small groups were removed. With the elimination of 17 participants, the final sample for analysis resulted in 252 participants.

Table 2

Demographics and Frequencies of the Study Sample (N =269)

Demographic Category	FYS Participant (n = 165)	Nonparticipant (n = 104)
Gender		
Female	84	48
Male	79	53
Other	1	3
Transgender	1	0
Age		
Under 18	1	0
18-24	101	54
25+	63	50
Race		
African American/Black	60	28
Asian American	7	3
Caucasian	86	65
Native	0	2
Hawaiian/Pacific Islander	2	1
Hispanic/Latino	10	5
Current Enrollment Status		
Full time (+ 12 credit hours)	129	58

Part time (< 12 credit hours)	36	46
Hours working per week (off campus)		
No job	35	26
1-10 hours	11	5
11-20 hours	18	15
21-30 hours	42	20
31-40 hours	36	18
> 40 hours	21	13
Hours working per week (on campus)		
1-10 hours	1	3
11-20 hours	0	4
21-30 hours	1	0
31-40 hours	0	0
> 40 hours	0	0
Highest academic educational goal		
Non-degree	0	0
Certificate	1	6
Diploma	25	17
Two-year/associate degree	34	30
Bachelor's degree	58	28
Graduate degree	47	23
Intent to persist		
Yes	136	86
No	16	8
First person in family to attend college		
Yes	58	30
No	107	74
Financial aid to continue at JCTC		
Yes	128	85
No	36	19

Procedure

The investigator of the study received approval by the Institutional Review Board (IRB) of the University of Louisville and the IRB of the Kentucky Community and Technical College System before data collection began (see Appendix A for a template version of the preamble). Upon receiving IRB approval from both institutions, the investigator took precautions to remove any bias by following a standardized process in

the data-collection process. The data-collection process was conducted during the spring 2014 semester.

The researcher prepared for recruitment by sending a recruitment letter to English 101 faculty whose classes had been selected to participate in the survey in order to schedule a time for in-class administration. The faculty recruitment email included a brief overview of the study and the use of the results from the study, and noted that an informed consent form would be provided prior to survey administration. The recruitment letter endorsed and encouraged participation in the survey (see Appendix D and E for a template version of this email).

Prior to the administration of the instrument, the researcher reviewed all test-administration protocols, including checking survey packets to ensure each packet contained the informed consent form/preamble, the survey, and pencils. On the scheduled date and time of survey administration, the researcher arrived 10 to 15 minutes early to meet and greet faculty in their respective classrooms. Once the students arrived in the classrooms and prior to survey administration, the researcher introduced the survey instrument to the participants, explained the survey's purpose, and asked participants to answer questions about informed consent. The traditional paper-and-pencil survey was designed to be completed in 15 minutes within one class period. Faculty remained in the classroom during the survey but they were not allowed to administer the survey. During the in-class administration, the investigator read the survey administration script to the class and followed the procedures outlined in the script. The survey administration script is enclosed in Appendix C. Additionally, the investigator provided each student with the following: the informed consent form/preamble, the survey, and a pencil. The

investigator showed students the survey, indicating that there were items on multiple pages and on the front and back of the survey.

Students' informed consent was obtained prior to participation in the survey's administration. After being given the consent preamble and having the researcher review it with them, participants were asked if they had any questions about the issues covered, including voluntary and minimal risk. Participants were told that they were under no obligation to access the study and that there would be no penalty for students who chose not to complete the consent form. Students were instructed to remain in the classroom while survey administration occurred. Once the participants had completed the consent forms, they were able to participate in the survey.

Confidentiality of data was maintained at all times and participants' identities remained anonymous. Names of survey participants were not made available to anyone outside those involved in the research process. The data obtained during the survey's administration was reviewed and analyzed only by the co-principal investigator of the study. The researcher stored survey materials in a locked and secured cabinet prior to entering them into the Statistical Package for the Social Sciences (SPSS). The researcher ensured data was entered correctly and completely as well as backed up regularly. Backup data was stored in a safe and secure location to prevent loss of data. The researcher assured confidentiality and privacy throughout the study.

At the conclusion of the survey at the end of the class period, the investigator collected completed surveys and placed them in the original course envelope. Survey administration occurred over a period of two weeks to ensure consistency. Participants were thanked for their time for participating in the survey. Additionally, the researcher

sent a follow-up email to faculty thanking them for allowing the researcher to conduct the survey in their respective classrooms (see Appendix F for the email template). Ongoing safety monitoring throughout the study was and is essential for continuous quality, improvement, and compliance.

Instrumentation

Student Engagement Survey

The Student Engagement Survey was developed by the researcher from the literature in order to measure student opinions regarding their involvement in the academic and social aspects of the college (see Appendix B for a template version of the survey). Factor analysis of the instrument showed a different factor structure than was originally proposed in the dissertation proposal, which had included academic integration, social integration, use of campus resources, student-faculty interaction, and student-peer interaction and persistence. The new factor constructs for the study include academic engagement, attachment to environment, use of campus resources, participation in campus events, use of counseling services, commitment to completion, and outside barriers. Please refer to Table 3 below for the construct definitions of the new scales. The original hypotheses were changed to reflect these new construct scales.

The researcher developed the survey by examining the theoretical and empirical literature on student engagement for commuter students and various models of student departure. Additionally, the instrument was derived, borrowed, and modified from items paralleling national surveys, including the Community College Survey of Student Engagement (CCSSE), the ACT Faces of the Future survey, the MAP-Works survey, and the Your First College Year survey. The questionnaire items operationalized the key

concepts detailed within the specific research questions and provided subscales that explored the main constructs being measured in the study (see Appendix K for steps for developing the survey).

Structure of the Student Engagement Survey

The revised instrument consisted of a five-section questionnaire containing 32 Likert-scale questions, five yes/no-scale questions, and demographic items. The five Likert scale items ranged from 1 (very likely) to 5 (very unlikely) on section one. Section one emerged from a review of the literature on factors that could impact commuter students. Section two of the survey contained nine Likert-type items that were scored ranging from 1 (very often) to 4 (never). Section two and three examined students' college experiences to measure the extent to which students are engaged in their environment whether academic nor non-academic. Section three of the survey contained ten Likert-type items with response options ranging from 1 (strongly agree) to 5 (strongly disagree). Section four of the survey contained seven Likert-scale items with response options ranging from 1 (4 or more times) to 3 (Have not used/0). Section four assesses the frequency of academic and student support resources provided by the college.

The final component of the survey included the demographic items. Demographic information collected consisted of nine items including gender, race/ethnicity, age, enrollment status, employment status, income, and academic major. Coding of the instrument is noted in Appendix L.

Scoring the Instrument

The instrument being scored is the one that emerged from the factor analysis. The factor-analysis results indicated which items belonged together, and scales were created

by summing the items (see Appendix L for instrument development and scoring). Items were summed, with lower scores indicating greater student engagement, attachment, participation in events, use of campus resources, use of the counseling center, and commitment, and fewer barriers to completing the degree.

Table 3

Definitions of Key Variables

Variable	Definition
Academic engagement	Formal education of students including “grade performance and intellectual development during the college years” (Tinto, 1975, p. 104).
Attachment to environment	Informal education of students including extracurricular activities and students’ affiliations” (Tinto, 1975, p. 105).
Use of campus resources	Means available to be used for support or help (CCSSE, 2013).
Participation in campus events	Experiences that occur outside of the formal curriculum (CCSSE, 2013).
Use of counseling services	Services that assist students in academic circumstance thereby providing a holistic approach to each student as an intricate as part of the university environment (CCSSE, 2013).
Commitment to complete	Expressed intention to continue engagement in a particular endeavor to completion (Bean & Metzger, 1985).
Outside barriers	Prevents or blocks an external influences (CCSSE, 2013).

Construct Validity

Using the full original sample ($N = 269$), an exploratory factor analysis was performed on the data to establish the survey instrument’s construct validity (Costello &

Osborne, 2005; Gorsuch, 1983; Pohlmann, 2004). The data from the student engagement scale administered to a sample ($N = 288$) was factor analyzed using a principal component method of extraction (PCA). Traditionally, principal component analysis is performed on a square symmetric matrix, a covariance matrix, or a correlation matrix using standardized data (Gorsuch, 1983; Kim & Mueller, 1978). These data were orthogonally rotated using the varimax procedure. Since the instrument has items with variable response scales, a correlation matrix was created using standardized data, as noted in Appendix H. Using a minimum Eigen value of 1.0 as the criterion for retaining factors, seven factors accounting for 66% of the variance were extracted (Kaiser, 1968).

Table 4

Eigen Values and Percentages of Variances Associated with Each Component

Component	Eigen value	Percentage of explained variance	Accumulated percentage of explained variance
1	9.77	31.50	31.50
2	3.43	11.06	42.56
3	1.99	6.43	48.99
4	1.61	5.20	54.19
5	1.35	4.34	58.53
6	1.11	3.59	62.12
7	1.06	3.42	65.54

Note. All communalities were greater than .50, with most being greater than .70.

The scree test demonstrates that four factors are retained to the point where the line levels off (see Figure 1 below).

Figure 1. *Scree test for Student Engagement Survey (N = 288)*

Additionally, an oblique rotation was performed that yielded three factors, as noted in Appendix I. A comparison between varimax and oblique rotation of items is located in Appendix J. The orthogonal solution with seven factors was retained because of conforming to specified criterion, conceptual simplicity, and ease of description. Overall, the factor structure that emerged was reasonably clear and interpretable, as noted below.

Factor Analysis

In these data, only items with loadings greater than .50 were retained. The first factor, which accounted for 31% of the variance, had nine items with all loadings above the cut-off of .50. This factor appears to capture items that related to students' classroom experiences with faculty and other students, therefore the first factor was named "academic engagement." The second factor had five items with loadings $>.50$ and accounted for 11% of the variance. This factor is called "attachment to environment" and involves activities that encourage student-faculty engagement inside and outside of the

classroom. Five items had loadings $>.50$ on the third factor. The third factor is called “outside barriers” and accounts for 6% of the total variance. This factor captures a dimension of reasons for withdrawal or reasons that students did not persist. The fourth factor is called “use of campus resources” and involved items related to use of campus resources. This factor had five items with loadings $>.50$. The factor accounted for 5% of the total variance. The fifth factor had two items with loadings $>.50$ and accounted for 4% of the variance. This factor is called “participation in campus events” and relates to students’ out-of-class experiences with faculty and students. The sixth factor is called “commitment to complete” because it consisted of items related to commitment and obligations to completion. Three items had loadings $>.50$ and accounted for 3% of the variance. The seventh factor had one item with a loading $>.50$ and accounted for 3% of the variance. This factor is called “use of counseling services” because it involved items related to encouragement of student use of campus counseling resources. Although the last three factors accounted for less than 11% of the total variance (i.e., each was $<5\%$), the components were well-defined, with clear-cut item markings of loadings $>.50$ and as high as $.70$. Other analyses supportive of the factor analysis include the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett’s test of sphericity.

The new variable “academic engagement” included nine items with an alpha level of $.85$. Attachment to environment contained five items with an alpha level of $.86$. Use of campus resources consisted of five items with an alpha level of $.74$. The next scale, participation in campus events, consisted of two items with an alpha level of $.85$. Use of counseling services had one item. Commitment to complete included three items with an alpha level of $.38$. Outside barriers consisted of 5 items with an alpha level of $.84$. The

researcher noted that the alpha level of commitment to complete is extremely low, but as the construct was important to the study, the researcher decided to retain the items for the survey (refer to Appendix M for details regarding rotated factor matrix of the Student Engagement Survey).

Internal Consistency Reliability of the Instrument

The reliability of the instrument was examined by performing a Cronbach's alpha, as noted below. The specific aims were to evaluate the internal consistency and stability of the student engagement scale. Cronbach's alpha internal consistency coefficients were calculated for each subscale. Reliability ranged from .38 to .86 on both the totals and the subscales for the Student Engagement Survey.

Cronbach (1951) noted that acceptable alpha values range from .70 to .95. A value less than .60 can signify poor interrelatedness between items or constructs. Each analysis revealed sufficient results, with the exception of commitment to complete and use of counseling services.

Table 5

Cronbach's Alpha for the Student Engagement Scale's Observed Data (N = 252)

Factor	Items	Alpha (standardized)
Total	1-30	.85 (.89)
1. Academic engagement	11, 12, 13, 14, 15, 16, 17, 18, 19	.86 (.92)
2. Attachment to environment	20, 21, 22, 23, 24	.86 (.86)
3. Outside barriers	6, 7, 8, 9, 10	.84 (.83)
4. Use of campus resources	31, 32, 33, 34, 35	.74 (.74)
5. Participation in campus events	25, 26	.85 (.72)
6. Commitment to complete	27, 28, 29	.38 (.54)
7. Use of counseling services	36	.51 (.50)

Data Analysis Procedures

A series of 2 x 2 multivariate analyses of variance were performed using the independent variables of attendance to first-year seminar, race, age, and enrollment status, in addition to the dependent variables measured by the student engagement scale: academic engagement, attachment to environment, outside barriers, use of campus resources, participation in campus events, commitment to complete, and use of counseling services (see appendix N for summary of statistical analyses to be used in the study). Using these analyses, the hypotheses for the impact of the first-year seminar on the variables measured by the student engagement scale were tested. The results are presented in Chapter 4.

CHAPTER IV

RESULTS

The purpose of the study was to test whether participating in a first-year seminar course would promote greater academic engagement, attachment to the environment, use of campus resources including the counseling center, and participation in campus events, as well as participants' commitment to complete their degree despite outside barriers when compared to students who do not enroll in a first-year seminar.

Over 45% of student participants indicated that they were satisfied or somewhat satisfied with the course at JCTC. Only five study participants indicated that they were very dissatisfied with the course at JCTC. Fifty-five percent were neither satisfied nor dissatisfied with the seminar. The study data did not follow the data trend indicating that, in fall 2013, over 88% of students who completed the first-year seminar at JCTC were very satisfied or somewhat satisfied with the course (Achieving the Dream Data, 2014).

Test for Relationship of Attendance and Demographics

The relationship of the demographics with attendance to the first-year seminar was examined using crosstabs (see Table 6). The crosstabs were run, and the results are reported in the significance column. There were no significant differences between men and women who attended an FYS. Younger students (18-25) were more likely to enroll in an FYS than the older cohort of students. Full-time students were significantly more likely to attend an FYS than part-time students. African-American students were more likely to enroll in an FYS than Caucasian students.

Table 6

Cross-Tabulation of Demographics with Attendance to First-Year Seminar (N = 252)

Attendance to FYS	Gender		χ^2	<i>p</i>
	Female	Male		
Yes	70 (72)	74 (72)	0.25	.61
No	56 (54)	52 (54)		
	Race			
	Caucasian	African American		
Yes	84 (91)	60 (52)	3.85**	.05
No	76 (88)	32 (39)		
	Age			
	18-25	>25		
Yes	90 (82)	54 (61)	3.93**	.05
No	54 (61)	54 (46)		
	Enrollment status			
	Full time	Part time		
Yes	112 (99)	32 (44)	11.98**	.00
No	62 (74)	46 (33)		

Note. ** indicates that $p \leq .05$. Expected values are in parentheses.

Testing of Assumptions

Assumptions

Testing the assumptions of MANOVA (multivariate analysis of variance) was necessary to assess the appropriateness of using MANOVA for the statistical analysis of the data. MANOVA shares the same assumptions as ANOVA and ANCOVA. MANOVA assumptions include normality, independence, homogeneity of variance, linearity, and homogeneity of the regression hyperplanes. The assumption of normality was confirmed and upheld by examining the skewness and kurtosis of the dependent variable. The assumption of the independence of scores was upheld due to the study's design. Each participant completed one survey instrument, therefore scores from one

participant were in no way related to those of another participant. Box's test of equality of covariance matrices tests the assumption of homogeneity of variance. Box's test is a diagnostic statistic that tests the null hypothesis that the variance is homogeneous or equal across all cells. The homogeneity of variance test requires no statistically significant results. If the effect is significant then the assumption of homogeneity of variance has been violated and the assumption is not tenable.

The results of Box's test were statistically significant (Box's $M [28, 170714] = 87, 48, p = .00$). It is not desirable for these results to be significant as this indicates that there are differences in the covariance matrices of the dependent variables, which violates the assumption of equality of covariance matrices. However, this test is very sensitive and, despite detecting differences between the variance-covariance matrices, the F values are not necessarily invalid (SPSS).

Another assumption of MANOVA is linearity: MANOVA assumes that there are linear relationships among all pairs of dependent variables, all pairs of covariates, and all dependent variable-covariate pairs in each cell. Therefore, when the relationship deviates from linearity, the power of the analysis is compromised. The homogeneity of regression hyperplanes assumption assumes that the relationship between the covariate and the dependent variable is the same for all combinations of the factors. If the interaction is found to be statistically significant, the assumption is violated. When the assumption is violated, the researcher cannot interpret the relationship between the factors and the dependent variable (the main effects) because the interpretation changes when the values of the covariates differ. If the variables in the study are found not significant, the assumption of homogeneity of regression hyperplanes is upheld.

A preliminary analysis evaluating the homogeneity of regression hyperplanes indicated that the relationship between the covariates and the dependent variables in the study did not differ significantly as a function of the independent variable. The assumption was thus upheld.

Homogeneity of variances assumes that the dependent variables exhibit equal levels of variance across the range of predictor variables. Homoscedasticity can be examined graphically or by means of a number of statistical tests. In multivariate designs with multiple dependent measures, the homogeneity of variances assumption described earlier applies. However, when there are multiple dependent variables, it is also required that their intercorrelations (covariances) are homogeneous across the cells of the design. There are various specific tests of this assumption.

Another of this study's assumptions is Levene's test of equality of error variances. This test examines the assumption that the variance of each dependent variable is the same as the variance of all the other dependent variables. Levene's test performs an analysis of variance on the differences between each case of the mean of that variable. In this study, Levene's test was significant for the scales of outside barriers ($F[1] = 6.38, 65, p = .01$) and use of counseling services ($F[1] = 49, 65, p = .00$], therefore the results of these scales should be interpreted with caution—particularly use of counseling services given its large F .

The assumptions of linearity and homogeneity of regression hyperplanes need to be satisfied or upheld for MANOVA to be appropriate to use to answer research questions and hypotheses, or another statistical analysis would be needed. Both were upheld and satisfied for the study.

Results

Since there was a significant difference between first-year seminar completers and non-completers for race, age, and enrollment status, 2 x 2 MANOVAS were run to test for possible interaction effects. Since gender was not significant, it was not necessary to run FYS x gender.

The Student Engagement Survey (SES) scales were subjected to a 2 (FYS attendance versus non-attendance) x 2 (Caucasian versus African American) MANOVA in order to test the relationship between FYS and race. The scales were then explored using a 2 x 2 MANOVA with FYS and age (18-24 versus >25). Lastly, a 2 x 2 MANOVA was conducted with FYS and enrollment status (full time versus part time).

Race

The interaction did not reach statistical significance (Wilks' lambda [Λ] = .967, $F[7, 242] = 1.16, p > .05$). Results of the MANOVA for FYS and race showed that the main effect of FYS was statistically significant ($\Lambda = .688, F(7, 242) = 15.693, p < .05$). The main effect for race was statistically significant ($\Lambda = .931, F[7, 242] = 2.55, p < .05$).

Age

The interaction did not reach statistical significance ($\Lambda = .946, F[7, 242] = 1.98, p > .05$). Results of the MANOVA for FYS and age showed that the main effect of FYS was statistically significant ($\Lambda = .686, F[7, 242] = 15.789, p < .05$). The main effect for age was not statistically significant ($\Lambda = .987, F[7, 242] = .468, p > .05$).

Enrollment Status

The interaction did not reach statistical significance ($\Lambda = .968, F[7, 242] = 1.14, p > .05$). Results of the MANOVA for FYS and enrollment status showed that the main

effect of FYS was statistically significant ($\Lambda = .769$, $F[7, 242] = 10.399$, $p < .05$). The main effect for enrollment status was statistically significant ($\Lambda = .943$, $F[7, 242] = 2.100$, $p < .05$).

Follow-Up ANOVAS

The results of follow-up ANOVAs showed that no scale contributed to the significant results regarding race and age. In regard to enrollment status, follow-up ANOVAS found the following scale of outside barriers to be statistically significant: $F(1, 268) = 7.524$, $p < .05$. Non-seminar attendees experienced fewer outside barriers than students who completed the seminar. Both FYS and non-FYS students who attended part time experienced fewer barriers than full-time students.

Results of Research Questions

Scores used for the 2 x 2 MANOVA and follow-up ANOVAs for race are presented in Table 7.

Table 7

Scales of Student Engagement Survey: Mean Scores and Standard Deviations for Race/Ethnic Group by Attendance to First-Year Seminar

Key variable	FYS mean (SD)	Non-FYS mean (SD)
Academic engagement		
Caucasian	22.5 (6.2)	25.4 (6.2)
African American	20.3 (6.5)	27.8 (5.9)
Attachment to environment		
Caucasian	12.9 (4.0)	15.8 (4.9)
African American	10.8 (3.9)	16.0 (5.9)
Outside barriers		
Caucasian	16.7 (5.1)	14.5 (5.8)
African American	15.6 (5.4)	13.0 (5.9)

Use of campus resources		
Caucasian	10.4 (2.2)	12.6 (2.3)
African American	9.1 (2.2)	12.6 (2.3)
Participation in campus events		
Caucasian	7.2 (2.6)	8.3 (2.0)
African American	6.2 (2.3)	8.5 (1.5)
Commitment to complete		
Caucasian	4.6 (1.4)	5.0 (2.2)
African American	4.9 (1.5)	5.6 (2.3)
Use of counseling services		
Caucasian	7.3 (2.6)	5.6 (2.3)
African American	6.3 (2.3)	5.0 (2.2)

Note. For all scales, lower means represent more of the construct of each variable by the groups that attended or did not attend first-year seminars with the exception of outside barriers.

Scores used for the 2 x 2 MANOVA and follow-up ANOVAs for age are presented in Table 8. As noted in Table 8, both age groups appeared to benefit from a FYS. Mean scores from older students who attended a FYS suggested greater academic engagement, attachment to environment, use of campus resources, and commitment to complete, as well as more participation in campus events than both younger students who attended a first-year seminar and those who did not attend.

Table 8

Scales of Student Engagement Survey: Mean Scores and Standard Deviations for Age Group by Attendance to First-Year Seminar

Key variable	FYS mean (SD)	Non-FYS mean (SD)
Academic engagement		
18-25	21.8 (6.2)	25.4 (6.6)
>25	20.5 (5.2)	27.0 (5.9)
Attachment to environment		
18-25	12.5 (3.8)	15.1 (5.1)
>25	16.7 (5.7)	13.2 (5.8)
Outside barriers		
18-25	16.0 (5.1)	14.9 (5.8)
>25	16.7 (5.7)	13.2 (5.8)

Use of campus resources		
18-25	9.9 (2.3)	14.9 (5.8)
>25	9.6 (2.2)	13.2 (5.8)
Participation in campus events		
18-25	7.2 (2.4)	8.1 (2.4)
>25	6.2 (2.6)	8.6 (1.5)
Commitment to complete		
18-25	4.8 (1.4)	5.4 (2.6)
>25	4.5 (1.5)	5.0 (1.9)
Use of counseling services		
18-25	7.2 (2.4)	5.4 (2.6)
>25	6.2 (2.6)	5.0 (1.9)

Note. For all scales, lower means represent more of the construct of each variable by the groups that attended or did not attend first-year seminars with the exception of outside barriers.

Scores used for the 2 x 2 MANOVA and follow-up ANOVAs for enrollment status are presented in Table 9. As noted in Table 9, both full-time and part-time students appeared to benefit from a FYS. The mean scores of full-time students who attended a FYS demonstrated greater academic engagement, attachment to environment, and use of campus resources, as well as more participation in campus events than both younger students who attended a FYS and those who did not attend.

Table 9

Scales of Student Engagement Survey: Mean Scores and Standard Deviations for Enrollment Group by Attendance to First-Year Seminar

Key variable	FYS mean (<i>SD</i>)	Non-FYS mean (<i>SD</i>)
Academic engagement		
Full time	21.0 (6.0)	26.0 (6.2)
Part time	22.5 (5.7)	26.5 (6.4)
Attachment to environment		
Full time	11.8 (4.0)	15.4 (5.3)
Part time	12.8 (4.3)	16.5 (5.1)

Outside barriers		
Full time	16.7 (5.4)	15.1 (6.0)
Part time	15.0 (4.8)	12.7 (5.4)
Use of campus resources		
Full time	9.6 (2.2)	12.8 (2.3)
Part time	10.8 (2.5)	12.4 (2.5)
Participation in campus events		
Full time	6.7 (2.6)	8.2 (2.0)
Part time	7.2 (2.4)	8.6 (1.7)
Commitment to complete		
Full time	4.8 (1.5)	5.3 (2.2)
Part time	4.4 (1.3)	5.1 (2.4)
Use of counseling services		
Full time	6.8 (2.6)	5.2 (2.3)
Part time	7.5 (2.4)	4.7 (1.4)

Note. For all scales, lower means represent more of the construct of each variable by the groups that attended or did not attend first-year seminars with the exception of outside barriers.

Results for Hypotheses

The hypothesis that students who complete a first-year seminar will exhibit higher ($p < .05$) academic engagement on the Student Engagement Survey compared to those who do not complete the seminar was tested. The hypothesis was accepted and retained.

The hypothesis that students who complete a first-year seminar will exhibit greater ($p < .05$) attachment to the environment on the Student Engagement Survey compared to those who do not complete the seminar was tested. The hypothesis was accepted and retained.

The hypothesis that students who complete a first-year seminar will display greater ($p < .05$) commitment to complete the degree compared to those who do not complete the seminar was tested. The hypothesis was accepted and retained.

The hypothesis that students who complete a first-year seminar will attend significantly more ($p < .05$) campus events than those who do not complete the seminar was tested. The hypothesis was accepted and retained.

The hypothesis that students who complete a first-year seminar will use significantly more campus resources ($p < .05$) than those who do not complete the seminar was tested. The hypothesis was accepted and retained.

The hypothesis that students who complete a first-year seminar will make more ($p < .05$) use of the counseling center compared to those who do not complete the seminar was tested. The hypothesis was accepted and retained.

The hypothesis that students who complete a first-year seminar will report fewer outside barriers ($p < .05$) on the Student Engagement Survey compared to those who do not complete the seminar was tested. The hypothesis was accepted and retained. Students who completed a first-year seminar exhibited more barriers ($p < .05$) on the Student Engagement Survey compared to those who did not complete a seminar.

Effect Size η^2

Partial eta squared is an estimation of the effect size or measure of magnitude of a treatment effect. It indicates how much of the total variance is explained by the main effect or interactions. In this case, the effect size associated with the scales of the student engagement scale are noted in Table 10. Cohen (1977) defines eta squared as “small, $d = .1$,” “medium, $d = .6$,” and “large, $d = .14$.” There is a small effect size difference between the groups with the exception of outside barriers. Eta squared complement traditional significance tests and they provide researcher with additional evidence for making conclusions about the practical significance of an analysis.

Table 10

Multivariate Analysis of Student Engagement Scales by Attendance to First-Year Seminar: Effect Size and Observed Power

Scale	Mean (SD)	Mean square	<i>F</i> (df)	<i>p</i>	η^2
Academic engagement		1510.0	41.1 (1, 246)*	.00	.14
Attended FYS (<i>n</i> = 144)	21.3 (5.9)				
Did not attend (<i>n</i> = 108)	26.2 (6.2)				
Attachment to environment		946.70	45.3 (1, 246)*	.00	.15
Attended FYS (<i>n</i> = 144)	12.0 (4.0)				
Did not attend (<i>n</i> = 108)	15.9 (5.2)				
Outside barriers		310.3	10.1 (1, 246)*	.00	.04
Attended FYS (<i>n</i> = 144)	16.3 (5.3)				
Did not attend (<i>n</i> = 108)	14.2 (5.9)				
Use of campus resources		466.1	85.6 (1, 246)*	.00	.25
Attended FYS (<i>n</i> = 144)	9.8 (2.3)				
Did not attend (<i>n</i> = 108)	12.6 (2.3)				
Participation in campus events		161.5	31.6 (1, 246)*	.00	.11
Attended FYS (<i>n</i> = 144)	6.8 (2.6)				
Did not attend (<i>n</i> = 108)	8.3 (1.9)				
Commitment to complete		16.8	5.0 (1, 246)*	.02	.02
Attended FYS (<i>n</i> = 144)	4.7 (1.4)				
Did not attend (<i>n</i> = 108)	5.2 (2.3)				
Use of counseling services		1.5	4.3 (1, 246)*	.04	.02
Attended FYS (<i>n</i> = 144)	3.8 (1.5)				
Did not attend (<i>n</i> = 108)	4.2 (1.3)				

Note. For all scales, lower means represent more of the construct each variable by the groups that attended or did not attend first-year seminars with the exception of outside barriers.

Summary

This chapter included the detailed results of the demographic and inferential statistical analyses for the first-year students at Jefferson Community and Technical College (JCTC). Instrument reliability was demonstrated through construct validity and through internal consistency reliability or Cronbach's alpha, which ensures the items are homogeneous or all measuring the same construct (Cronbach, 1951). Cross tabulations of frequencies were run to see if a relationship existed between the demographics and

attending a first-year seminar (FYS). There were no significant differences between men and women who attended an FYS. Younger students (18-25) were more likely to enroll in an FYS than the older cohort of students. Full-time students were significantly more likely to attend an FYS than part-time students. The following chapter will examine the findings of the seven research questions with increased emphasis on discussion of those findings, limitations of the study, and future research recommendations.

CHAPTER V

DISCUSSION

This chapter summarizes the findings of the study's seven research questions and hypotheses and attempts to synthesize how the results of this study contribute to first-year seminar, student engagement, and persistence literature. A brief summary of the theoretical framework for the study is provided, followed by opportunities for future research, limitations of the study, and an exploration of implications. The chapter culminates with a conclusion that will provide empirical evidence about the effectiveness of first-year seminars and student success in the community college population.

Student attrition is a significant problem for institutions of higher learning to approach, and is an especially severe problem for community colleges. Based on this study's results, community colleges have the opportunity to improve student success and persistence by offering first-year seminars that may ameliorate attrition, improve retention, and encourage completion. Three theoretical models contributed to the frameworks used in this study: Tinto's (1993) student integration model, Bean and Metzner's (1985) student attrition model, and Braxton, Hirschy, and McClendon's (2004) theory of student departure in commuter colleges and universities. An extensive review of the literature examined the first-year seminar's effectiveness and the impact the seminar has on a variety of student outcomes including academic engagement, social integration and attachment to environment, student-faculty interaction, use of campus resources, and obstacles to completion. Particular effort was given to examining the first-

year seminar's effectiveness in the community college population. This research study centered on one urban community college in the Louisville, Kentucky, area. This study employed quantitative analyses to compare student responses to survey questions in order to assess the differences between students who participated in a first-year seminar (treatment) and students who did not participate in a first-year seminar (comparison group) at Jefferson Community and Technical College (JCTC). A convenience sample of 252 students completed the locally developed Student Engagement Survey, and self-reported demographic questions were used to extract information on gender, age, race/ethnicity, and current enrollment status. The researcher employed a non-experimental/quasi-experimental research design using descriptive statistics with frequencies and cross tabulation to provide a profile of the population participating in the study.

Over 45% of students indicated that they were very satisfied or somewhat satisfied with the course at JCTC. Only five study participants (1.7%) indicated that they were very dissatisfied with the course. Fifty-five percent of students were neither satisfied nor dissatisfied with the seminar. The study data tended not to follow the college data trend indicating that, in fall 2013, over 88% of students who completed the first-year seminar course at JCTC were very satisfied or somewhat satisfied with the course (Achieving the Dream Data, 2014). This widespread difference in fall and spring satisfaction levels could be attributable to motivational factors instead of the actual course. Perhaps the fall cohort of students could have been motivated to enroll and complete the course, while the spring cohort did not share the same enthusiasm. Self-selection bias could have influenced the high satisfaction levels for the fall because the

college was undertaking a new initiative and wanted to emphasize the seminar's effectiveness. The fall sample may have only included FYS sections populated by students who wanted to enroll in and complete the course, while the spring sample may have included students who were not as motivated to enroll in the course and did not see the value of taking the course.

Inferential statistics were employed to test the study's seven hypotheses. The hypotheses developed for this study emerged from its conceptual framework and literature review. The results and a discussion of the statistical analysis for each hypothesis are presented in this chapter. The analyses tested the hypotheses for statistical significance at a .05 level of probability.

Discussion of Research Findings

Hypothesis one stated that students who completed a first-year seminar would exhibit higher academic engagement on the Student Engagement Survey compared to those who did not complete the seminar; the study's findings support the directional hypothesis. Most studies cited in the literature found a significant relationship between academic integration and academic engagement, and results support the assertion by Tinto and other theorists in the literature. This study corroborated previous studies by (Barefoot, 1993; Bers & Smith, 1991) which noted first-year seminars foster engagement by helping students engage more frequently with faculty, participate in more active and collaborative learning activities, and develop better study habits that lead to higher grades. According to the study's findings on engagement, 66% of seminar course respondents indicated asking questions in class or contributing to class compared to 27% of non-seminar respondents. Seventy-five percent of seminar course respondents

indicated that they worked with students on projects during class versus 33% who did not take the seminar course. Eighty-five percent of seminar participants stated that they engaged in classroom discussions with their instructors with only 25% of non-seminar participants reporting that they have engaged in classroom discussions with their instructors. Over 90% of respondents who completed the seminar course responded that they worked with classmates outside of class to prepare assignments or projects compared to 20% of non-seminar respondents.

Academic engagement is very important in the community college setting because students spend less time on campus, and that time is spent in the classroom. First-year seminar faculty can increase faculty-student interaction by requiring class assignments that encourage such interaction. Academic engagement is cultivated by augmenting learner-centered strategies that empower students to take more active and responsible roles in the learning process.

Hypothesis two stated that students who completed a first-year seminar would report greater attachment to the environment on the Student Engagement Survey compared to those who did not complete the seminar; the study's findings support the directional hypothesis. It is evident from the findings of this study that it is important to establish connections with peers early on in the first year of college. Community colleges offer fewer opportunities for social integration and attachment to the environment because students do not live on campus and they lack the time to participate in such activities as clubs that would facilitate social integration and attachment. This study's findings corroborate the results of other studies (Braxton & Hirschy, 2005), confirming that active-learning techniques in first-year seminars may foster peer relationships, which

contributes to attachment and social integration. Seventy-four percent of seminar attendee respondents felt a sense of belonging compared to 22% of students who did not complete the course. Eighty-one percent of course participants interacted with students outside of class, and 69% felt encouraged to spend time studying. Forty percent of non-seminar participants interacted with students outside of class and less than 20% felt encouraged to spend time studying. Eighty-three percent of course participants received instructor assistance that helped them cope with nonacademic responsibilities. Thirty-three percent of non-seminar participants received instructor assistance that helped them cope with nonacademic responsibilities. Over 76% of seminar participants developed close relationships with other students compared to 41% of non-seminar participants. The first-year experience course promotes academic engagement and attachment to the environment, and if students become more integrated and satisfied with their college experience they are more likely to succeed. The results of this study are consistent with the findings of others (Fidler, 1991; Keup & Barefoot, 2005; Porter & Swing, 2006) that noted more students withdraw because of social adjustment and attachment issues than because of academic reasons. Its results support literature suggesting that student-faculty contact and attachment to the environment outside the classroom is strongly correlated with student retention (Belcheir, 2003; Cross, 2002; Pascarella & Terenzini, 2005).

Hypothesis three asserted that students who completed a first-year seminar would display greater commitment to complete the degree on the Student Engagement Survey compared to those who did not complete the seminar; the study's findings support the directional hypothesis. In the present study, 56% of seminar attendees were concerned about the ability to pay for their education versus 23% of non-seminar respondents. Over

65% of seminar participants indicated that it was important for them to graduate from college. Less than 27% of non-seminar participants indicated that it was important to graduate from college. Sixty-three percent of course participants noted that they were committed to completing a certificate or degree versus 37% of non-seminar respondents. This study's findings were similar to the studies (Bailey & Alfonso, 2005), confirming that students are committed to completing a degree. Additionally, it reaffirmed the work of Skipper & Argo, 2003 which noted that students intend to complete a degree.

Hypothesis four stated that students who completed a first-year seminar would report higher attendance to campus events on the Student Engagement Survey compared to those who did not complete the seminar. The study's findings support the directional hypothesis. In the present study, 85% of seminar attendees attended campus events, and 89% participated in campus-sponsored organizations and/or clubs. In the non-seminar group, 43% of students attended campus events and 46% participated in campus-sponsored organizations and/or clubs. The results of this study thus support another of the literature's findings: social integration is achieved through informal student and peer interactions, extracurricular activities, and student associations. Students who are more socially integrated or involved in campus life are more likely to persist which confirmed the results found by Borlum & Kubala (2000) and Burd (2004) in their respective studies.

Hypothesis five stated that students who completed a first-year seminar would report greater use of campus resources on the Student Engagement Survey compared to those who did not complete the seminar; the study's findings support the directional hypothesis. In the present study, 88% of seminar participants respondents noted that they

have used CREW center services (i.e. career services that assist students with resume writing and job preparation) at least 1 to 4 or more times at the college compared to only 53% of non-seminar participants. Overall, 77% of course participants indicated that they have used tutoring at least 1 to 4 or more times compared to less than 25% of non-seminar participants. Seventy-seven percent of course respondents have used the writing center at least 1 to 4 or more times compared to 49% of non-seminar respondents. Similarly, 79% of seminar participants have used the math lab at least 1 to 4 or more times compared to 23% of non-seminar participants. Over 78% seminar respondents have used the campus library at least 1 to 4 or more times compared to 33% of non-seminar respondents. This study validates previous research that showed students who were made aware of campus resources via the seminar course reported that the seminar made them aware of resources available to help them succeed in college (Ewell, 2001). This study validated previous studies (Barefoot, 1993a; Cuseo, 2003; Fidler & Fidler, 1991) that found students who complete the first-year experience course used college support services more than students who did not take the course, resulting in higher retention.

Hypothesis six stated that students who completed a first-year seminar would report greater use of the counseling center on the Student Engagement Survey compared to those who did not complete the seminar; the study's findings supported the directional hypothesis. Overall, 75% of first-year seminar students used counseling center services compared to 12% of non-seminar students. Prior research noted by Turner & Berry, 2000 noted that without the course such students would have never known services existed to help them, especially services such as the counseling centers. Also, this was confirmed in the Purnell & Blank, 2004 study.

Hypothesis seven postulated that students who completed a first-year seminar would report fewer outside barriers on the Student Engagement Survey compared to those who did not complete the seminar. The study's findings support the directional hypothesis. Significant barriers to persistence include working a full- or part-time job, caring for dependents, being academically unprepared for school, and financial and personal issues. All of these barriers were included in this study, and students confirmed that all could be significant impediments to students' intention to persist. Overall, 50% of seminar course respondents reported that a full-time or a part-time job could cause one to withdraw from college compared to 90% of non-seminar respondents which reported that a full-time or a part-time job could cause one to withdraw from college. Over 43% of course participants indicated that dependents would very likely cause them to withdraw from college compared to 76% of non-course participants that indicated that dependents would very likely cause them to withdraw from college. Forty-five percent of seminar attendees noted that being academically unprepared would cause them to withdraw from college compared to 58% of non-seminar attendees . Almost half of the study sample (43%) indicated that financial aid was important for them to continue at JCTC. According to 49% of the course respondents, personal issues would likely or somewhat likely be a reason for withdrawal compared to 54% of non-seminar respondents. It is interesting to note that despite all of these potential barriers to persistence, 90% of course participants reported that they intended to persist to fall 2014. Similar studies from Schnell, Louis, & Doetkott (2003) and Napoli & Wortman (1998) noted similar findings.

Demographic Data Findings

This demographic data collected from this study's sample corroborated community college demographic trends regarding gender identity, hours worked per week, racial/ethnic composition, and students' need for financial aid to continue their educational pursuits. Additionally, it was similar to JCTC's gender-identity data (58% female, 42% male). This study's findings were inconsistent with JCTC's student profile, according to which 34.5% of students are attending full time and 65.5% part time, and inconsistent with broader community college enrollment trends, according to which 61% of students attend part time.

Limitations of the Study

This study had several limitations. First, this study and previous first-year seminar research studies tend to rely upon single-institution studies, a tendency that significantly reduces the generalizability and applicability of research findings to other institutions. Caution should therefore be taken in generalizing this study's results to other institutions and to specific types of populations. Another limitation is that students were not randomly assigned to treatment and control groups. This lack of random assignment to groups could make this sample of students unrepresentative of the full population of first-year seminar students. It is also possible that a casual relationship exists between variables—a relationship that could be the result of individual differences in the responses of the participants or of error associated with the method by which they were collected. Due to its lack of random assignment, this study does not necessarily control for self-selection bias, or that positive outcomes resulting from course participation are

possibly attributable to highly motivated students being especially likely to enroll in a first-year seminar rather than course itself.

A quasi-experimental design makes it harder to rule out confounders and interactions, which can challenge the internal validity of the study. The internal threats to this design include situations in which a study participant's response may be influenced by external or internal factors other than the experimental intervention. These factors include selection interaction and additive effects with selection. Selection refers to the fact that individuals are not randomly assigned to groups, and the two groups are thus not likely to be equivalent before the intervention. These preexisting differences rather than the treatment may account for group differences in the outcome at the end of the experiment (Carmines & Zeller, 1979; Vogt, 1999). The additive effects with selection occur because the two groups may have different experiences and may mature at different rates. The use of a nonrandom sample posed a threat to the external validity of the study, its generalizability to other settings, and the possibility of drawing inferences about the entire population. The cross-sectional nature of the current data suggests that the interpretation of results should be limited to the groups examined at the time of this research.

The instrument was a limitation to the study. Locally developed instruments lack precise validity and reliability. Although the researcher conducted exploratory factor analyses to establish validity and used Cronbach's alpha to establish the reliability of the instrument, more intensive testing is necessary before the instrument could be proven valid and reliable for student engagement measures. Given the complexity of the constructs they assess, some of the subscales would benefit from additional items. Some

of the scales (outside barriers, use of counseling services) only have one or two items. The scales' reliability and validity would improve with the addition of several items. Future research could test new items by examining relationships with current items comprising the scales.

The instrument's development process and scoring lack refinement. Another instrument limitation is the different loadings obtained when comparing the varimax and oblique rotations. This finding highlights the need to further test the instrument to increase the specificity of the instrument in order to identify the constructs it is proposed to measure. Post hoc analysis of the instrument resulted in revision of the research questions to better reflect the inquiry.

Another limitation of the study is that it approached the impact of the first-year seminar on barriers that affect intention to persist, and it does not actually measure the outcome of actual persistence. Follow-up with the sample would need to be conducted in order to see if they actually persisted until graduation.

One of the most important limitations to the study was the fact a pilot study was not conducted prior to full-scale implementation of the study. The researcher intended to administer a pilot test to modify the instrument, but time constraints resulted in no changes being made and all data being analyzed together. A pilot study is valuable to eliminate unclear items in a questionnaire and refine the survey instrument. Additionally, a pilot could have ensured survey instructions were clear and reviewed the survey process to ensure reliability and validity of the survey instrument. The main advantage of a pilot is that it provides warnings about where the main research project might fail.

The last limitation is the fact that the researcher failed to reach the anticipated sample size for the control group. Failure to reach the desired sample size can result in a Type I or Type II error. The lower the power, the greater chance of a Type II error. With a larger sample size, perhaps there would have been more interactions that would have been revealed and given more power to the study.

Implications for Practice

This study has implications for community college stakeholders and the academic industry. Three theoretical frameworks supported this study. Tinto's (1993) model indicates that academic and social integration are the key elements to retaining students and that both are influenced by factors such as faculty and peer interactions. While there is support for this model, it should be noted that the model was developed for the traditional student population and there is a lack of evidence supporting its relevance for the community college population.

Bean and Metzner's (1985) theory of adult-student persistence and Braxton, Hirschy, and McClendon's (2004) refined model were most emphasized in this research study. The findings from the current study suggest support for Bean and Metzner's theory that older commuter students seek support from family and friends (external environment). This would be evident in the attachment to environment construct. The institution and its faculty should design classroom activities like those of first-year seminars—activities that encourage and build peer interactions among students in the class. These interactions can carry over outside the classroom to serve as an additional support network. Instructors need to remind students that the seminar is much more than a student-success course—it is a life course.

This research study at JCTC will make a contribution to the literature on first-year seminars and persistence by demonstrating that first-year seminars are effective for all cohorts. The study is relevant to stakeholders at JCTC because it encourages effective collaboration between student affairs and academic affairs in order to help practitioners develop outcomes for the first-year seminar. These courses are foundations or gateways that support student development during the first year in order to increase first-year students' success.

Some of the literature makes policy recommendations relevant to the recruitment and retention of racially diverse groups. This study can contribute to these sorts of policy recommendations because its sample was racially diverse. Implementing a special section of the first-year seminar focused on issues that are frequently encountered by this population could be another implication for JCTC.

The study yielded results concerning the effectiveness of first-year seminars and how to improve them for future benefits, and these results could be of value to administrators at JCTC. There is not enough conclusive evidence to recommend the course. Further study is warranted before administrators recommend that the course be made mandatory for all first-time freshmen at JCTC.

One of the most noted implications included the fact that over 50% of students were neither satisfied nor dissatisfied with the course. This finding is contradictory with most of the literature on first-year seminar effectiveness, and the neutrality it represents could warrant a qualitative follow-up to determine why many of the students had changed their perception of the course between fall 2013 and spring 2014. Administrators need to ascertain whether there were demographic differences between the students who took the

course in the fall and the students who took the course in the spring. Such differences (gender, race, etc.) could have an impact on survey effectiveness.

Another possible reason for the differences in survey results is that different evaluation instruments were used to gather those results. In the present study, the researcher used a locally developed survey to ascertain the effectiveness of the seminar. Locally developed instruments lack precise reliability and validity. The researcher was not aware what survey instrument was used to gather the fall survey results, therefore this could have led to differences in survey results.

The researcher examined, the third survey question, “I have taken the First Year Seminar at JCTC and my level of satisfaction was: 1. Very Satisfied, 2: Somewhat Satisfied, 3: Neither Satisfied nor Dissatisfied, 4: Somewhat Dissatisfied, 5: Very Dissatisfied,” and noted that the question may have confused respondents. Many students may have thought that the question was referring to a previous semester, not the current one. This could have led students to mark the neutral response. More students might have responded if the question was reworded.

Recommendations for Future Research

Bearing in mind the analysis of the data and limitations in this study, several recommendations for future research grew out of it. A follow-up research study on the two groups examined in this study is warranted to see how the long-term effects of the first-year seminar impact actual persistence and graduation rates, not merely the intent to persist and barriers to withdrawal. Pascarella and Terenzini (2005) suggested that a longitudinal study design is needed to accurately assess the effects of a program aimed at reducing retention. A longitudinal study would make a great contribution to the

community college persistence literature on student engagement. Additionally, it would be prudent to combine and employ a mixed-methods/qualitative approach in such a longitudinal study—a study that could help the college understand if the first-year seminar has an impact on students' major of choice.

A future pre-/posttest design is needed to assess and measure the onset and completion of an intervention. A pre-/posttest design involves administering an assessment instrument to the study participants, an instrument that could be used as a baseline (pretest) to which their posttest can be compared. A study that can make pre- and postcollege comparisons would help college administrators understand how interventions affect student outcomes (e.g., student-faculty interactions, academic and social integration, and persistence).

This study could serve as an impetus for future research opportunities at multicampus institutions in the Kentucky Community and Technical College System (KCTCS). JCTC is the only college in KCTCS that is participating in the Achieving the Dream (AtD) initiative. The results of this study will add to the body of first-year seminar research being conducted at the college at this time. This research will be the catalyst for other smaller campuses to examine the students who enter their colleges with a greater risk of academic failure because they are academically unprepared. The current study could be replicated at other KCTCS campuses.

The current study lends support to the idea of creating future studies that build on current AtD efforts and conduct ex-post facto (i.e., causal-comparative) research. A causal-comparative research study could ascertain whether students who do not enter a program of study within one year of enrollment in college are less likely to enter a

program and complete a credential. The study could employ an experimental design in which students are assigned to randomly selected groups (experimental and treatment groups) in order to compare student outcomes. One of the sections could combine advising with the first-year seminar. The study could compare the newly advisor-enhanced seminar with a non-advisor-enhanced section.

Perhaps there could be a qualitative aspect (e.g., interviews, focus groups) including in future studies that can provide insights regarding instructor characteristics, pedagogical methods, and subject matter. These outcomes were not examined in this study and warrant consideration in future studies. Barefoot and Fidler (1996), Cuseo (1993), and Gardner (1986) have all noted that a study examining the impact of the first-year seminar on instructor training and faculty development would provide institutions with greater systemic institutional outcomes, which could have significant and widespread results for both community colleges and four-year institutions of higher learning.

First-year seminars are offered on many campuses, but colleges should offer an array of courses that are grounded in disciplinary content. Moreover, students could be encouraged to enroll in a major-specific disciplinary section and follow this cohort throughout their collegiate career all the way to graduation. This section could be designed for the nontraditional older students who dominate the community college population. This current study offers a benchmark for emulation and replication for other two- and four-year colleges and universities.

Another recommendation stems from the findings to the study, fifty-five percent of students were neither satisfied nor dissatisfied with the seminar. This large neutral

response implies that the college should take a look at whether the course should be mandatory or strongly recommended to the students at the college. Colleges should look at the benefits and if the benefits outweigh the current conclusions in the study. College administrators should look at the data from a taxpayer, stakeholder and parent perspective.

Conclusion

Student attrition has been a focus of college administrators for many years and will remain a critical concern for higher education. Exploring ways to combat attrition is paramount for institutions, and especially for community colleges given that they experience the greatest attrition rates. One of the most effective ways to reduce attrition is to execute first-year initiatives such as first-year seminar courses. Research studies assert that first-year seminars have been proven to successfully reduce attrition rates, increase usage of campus resources, increase academic and social integration, and so on.

The current study contributes to the community college literature on the first-year seminar and its impact on student engagement. This study is extremely important because there is less student attrition research conducted at two-year colleges than their four-year counterparts, and few retention models consider or are relevant to nontraditional commuter students.

Additionally, this study helps fill the gap in community college research on persistence and first-year seminars. One way that it adds to community college research is in that the study did not follow such demographic characteristics as age, enrollment status, highest academic and educational goal, and first-generation status. Community college research noted that the average age for a community college student is 28 with

over 30% of students over the age of 40. The present study saw a surge of more traditional students between 18 and 24 years of age and fewer students over age 25. The researcher infers that this age difference in the JCTC study could be attributed to the fact that most nontraditional students return to JCTC to complete certificate classes that do not require the first-year seminar class. According to the enrollment-status trend for community colleges, over 61% of students attend on a part-time basis. Over 64% of students in this study's sample attended on a full-time basis. The researcher suggests that two compelling rationales for this surge in full-time enrollment could be (a) new financial-aid regulations and (b) the desire of students to finish their program of study in an expedited manner in order to reenter the workforce.

Other differences between this study's sample and the broader community college population included the percentage of first-generation students and students' highest academic and educational goals. According to the community college research, over 42% of community college students are first-generation college students. In the present study, only 31% of students noted they were the first person in the family to go to college, compared to 68% who indicated they were not the first. JCTC is experiencing an increase in families attending college together due to the economy and its educational implications for securing a future career. More individuals are losing their jobs, and the need to return to the collegiate environment for retraining is becoming prevalent. Hughey (2012) noted that the future will require a deluge of highly skilled workers, and education is still the only reliable route to becoming highly skilled. Another interesting statistic in the current study is that 64% of seminar participants noted they are interested in pursuing a

bachelor's degree. This is contrary to community college research stating that most community college students are interested in securing a certificate, diploma, or degree.

This information is beneficial to the institution in terms of evaluating the success of the first-year seminar. The overarching findings of the study included that—after controlling for age, gender, ethnicity, and enrollment status—the effects of attending a first-year seminar on the dependent variables were statistically significant for all research questions. African Americans who attended a first-year seminar demonstrated greater academic engagement, attachment to environment, use of campus resources, and participation in campus events than both Caucasians who attended a first-year seminar and those who did not attend. Both age groups appeared to benefit from the first-year seminar. Older students who attended a first-year seminar demonstrated greater academic engagement, attachment to environment, use of campus resources, commitment to complete, and participation in campus events than both younger students who attended a first-year seminar and those who did not attend. Both full-time and part-time students appeared to benefit from the first-year seminar. Full-time students who attended a first-year seminar demonstrated greater academic engagement, attachment to environment, use of campus resources, and participation in campus events than both part-time students that attended a first-year seminar and those who did not attend.

First-year seminars have empirical significance and are beneficial for all institutions of higher learning, especially two-year colleges. Not only do they have empirical significance; they also have practical significance because individuals who attend a first-year seminar will gain something positive from the experience. This study's findings will be relevant to administrators at JCTC, offering implications for both policy

and effective professional practice. These findings will allow an institution to determine which students are at risk and to target interventions in order to improve first-year persistence. Developing and fostering institutional support for persistence initiatives often requires a cultural shift if students are to feel adequately supported by the institution. Getting students connected to the institution fosters forms of engagement including academic integration, social integration, and commitment to complete. Appendices K and L contain steps for developing the Student Engagement Survey and scoring the instrument.

REFERENCES

- ACT Faces of the Future Survey. (2012). Jefferson Community and Technical College data.
- ACT, Inc. (2012). National collegiate retention and persistence to degree rates. Retrieved from http://www.act.org/research/policymakers/pdf/retain_2012.pdf
- American Association of Community Colleges (AACC). 2006. *Community colleges: Fast facts*. Retrieved August 22, 2013 from American Association of Community Colleges WebSite: AboutCommunityColleges/Fast_Facts.htm.
- Andreu, M. L. (2002). Developing and implementing local-level retention studies: A challenge for community college institutional researchers. *Journal of Research and Practice*, 26(4), 333-344. doi:10.1080/106689202753546475
- Arbuckle, J. L. (2009). *Amos 18 user's guide*. Chicago, IL: SPSS Inc.
- Attewell, P., Lavin, D., Domina, T., & Levey, T. (2006). New evidence on college remediation. *Journal of Higher Education*, 77(5), 886-924.
- Ayers, D. F. (2002). Mission priorities of community colleges in the southern United States. *Community College Review*, 30(3), 11-30.
doi:10.1177/009155210203000302
- Bailey, T. (2009). Challenge and opportunity: Rethinking the role and function of developmental education in community college. *New Directions for Community Colleges*, 145, 11-30. doi:10.1002/cc.352

- Bailey, T., & Alfonso, M. (2005, January). *Paths to persistence: An analysis of research on program effectiveness at community colleges*. Indianapolis, IN: Lumina Foundation for Education. Retrieved from <http://ccrc.tc.columbia.edu/publications/paths-to-persistence.html>
- Bailey, T., Calcagno, J. C., Jenkins, D., Leinbach, T., & Kienzl, G. (2006). Is student-right-to-know all you should know? An analysis of community college graduation rates. *Research in Higher Education*, 47(5), 491-519. doi:10.1007/s11162-005-9005-0
- Bailey, T., Jenkins, D., & Leinbach, T. (2005, January). *What we know about community college low-income and minority student outcomes: Descriptive statistics from national surveys* [Report]. New York, NY: Community College Research Center. Retrieved from <http://eric.ed.gov/?id=ED484354>
- Banta, T. W. (1999). *Assessment in community colleges: Setting the standard for higher education?* Boulder, CO: National Center for Higher Education Management Systems.
- Barefoot, B. O. (Ed.). (1993a). *Exploring the evidence: Reporting outcomes of freshman seminars* (Monograph No. 11) [Report]. Columbia, SC: University of South Carolina National Resource Center for the Freshman Year Experience.
- Barefoot, B. O. (1993b). *Model programs: Achieving essential objectives*. Paper presented at the Freshman Year Experience Resource Seminar, Irvine, CA.
- Barefoot, B. O. (2000). The first-year experience: Are we making it any better? *About Campus*, 4(6), 12-18.

- Barefoot, B. O. (2004). Higher education's revolving door: Confronting the problem of student drop out in US colleges and universities. *Open Learning*, 19(1), 9-18.
doi:10.1080/0268051042000177818
- Barefoot, B. O. (Ed.). (2008). *The first year and beyond: Rethinking the challenge of collegiate transition*. *New Directions for Higher Education*, 144.
- Barefoot, B. O., & Fidler, P. P. (1996). *The 1994 national survey of freshman seminar programs: Continuing innovations in the collegiate curriculum*. (Monograph No. 20) [Report]. Columbia, SC: University of South Carolina, National Resource Center for the Freshman Year Experience and Students in Transition. Retrieved from <http://eric.ed.gov/?id=ED393386>
- Barefoot, B. O., & Fidler, P. P. (2006). Developing academic competency in the first year of college. In B. O. Barefoot, J. N. Gardner, et al., *Achieving and sustaining institutional excellence for the first year of college*. San Francisco, CA: Jossey-Bass.
- Barefoot, B. O., Gardner, J. N., Cutright, M., Morris, L. V., Schroeder, C. C., Schwartz, S. W., ... Swing, R. L. (2005). *Achieving and sustaining institutional excellence for the first year of college*. San Francisco, CA: Jossey-Bass.
- Barefoot, B.O., Gardner, J. N., Cutright, M., Morris, L. V., Schroeder, C. C., Schwartz, S. W., et al. (2005). *Achieving and sustaining institutional excellence for the first year of college* (1st ed). San Francisco, CA: Jossey-Bass.
- Barefoot, B. O., Warnock, C. L., Dickinson, M. P., Richardson, S. E., & Roberts, M. R. (Eds.). (1998). *Exploring the evidence: Reporting outcomes of first-year seminars* (Vol. 2, Monograph No. 25). Columbia, SC: University of South Carolina

- National Resource Center for the First-Year Experience and Students in Transition. Retrieved from <http://eric.ed.gov/?id=ED433742>
- Beal, P. E., & Noel, L. (1980). *What works in student retention*. Iowa City, IA: American College Testing Program and the National Center for Higher Education Management Systems.
- Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research*, 55(4), 485-540.
- Belcheir, M. J. (2003). *Active learning in and out of the classroom: Results from the National Survey of Student Engagement*. Chicago, IL: University of Chicago Press.
- Berger, J. B., & Lyon, S. C. (2005). Past to present: A historical look at retention. In A. Seidman (Ed.), *College student retention: Formula for student success* (pp. 1-30). Westport, CT: American Council on Education and Praeger.
- Bers, T. H., & Smith, K. E. (1991). Persistence of community college students: The influence of student intent and academic and social integration. *Research in Higher Education*, 32(5), 539-556.
- Bettinger, E. P., & Long, B. T. (2009). Addressing the needs of under-prepared students in higher education: Does college remediation work? *Journal of Human Resources*, 44(3), 736-771. doi:10.1353/jhr.2009.0033
- Bishop, J. B., & Brenneman, K. A. (1986). An initial assessment of a counseling center's role in retention. *Journal of College Student Personnel*, 27, 461-462.

- Borglum, K., & Kubala, T. (2000). Academic and social integration of community college students: A case study. *Community College Journal of Research and Practice*, 24(7), 567-576. doi:10.1080/10668920050139712
- Boudreau, C. A., & Kromrey, J. D. (1994). A longitudinal study of the retention and academic performance of participants in freshman orientation course. *Journal of College Student Development*, 35, 444-449.
- Boylan, H. R. (2002). *What works: Research-based best practices in developmental education*. Boone, NC: Appalachian State University, Continuous Quality Improvement Network, and the National Center for Developmental Education.
- Bradburn, E. M. (2002). *Short-term enrollment in postsecondary education: Student background and institutional differences in reasons for early departure, 1996-1998* [Report]. Washington, DC: National Center for Education Statistics and U.S. Department of Education.
- Braxton, J. M. (Ed.). (2000). *Reworking the student departure puzzle*. Nashville, TN: Vanderbilt University Press.
- Braxton, J. M. (2001). Introduction to Special Issue: Using theory and research to improve college student retention. *Journal of College Student Retention: Research, Theory & Practice*, 3(1), 1-2. doi:10.2190/27Q6-Q1KN-594C-9QD7
- Braxton, J. M., & Hirschy, A. S. (2005). Theoretical developments in the study of college student departure. In A. Seidman (Ed.), *College student retention: Formula for student success* (pp. 61-87). Westport, CT: American Council on Education and Praeger.

- Braxton, J. M., Hirschy, A. S., & McClendon, S. A. (2004). *Understanding and reducing college student departure* (ASHE-ERIC Higher Education Report, Vol. 30, No. 3). San Francisco, CA: Jossey-Bass.
- Braxton, J. M., & McClendon, S. A. (2001). The fostering of social integration and retention through institutional practice. *Journal of College Student Retention: Research, Theory & Practice*, 3(1), 57-71. doi:10.2190/RGXJ-U08C-06VB-JK7D
- Braxton, J. M., Milem, J. F., & Sullivan, A. S. (2000). The influence of active learning on the college student departure process: Toward a revision of Tinto's theory. *The Journal of Higher Education*, 71(5), 569-590. doi:10.2307/2649260
- Braxton, J. M., Sullivan, A. S., & Johnson, R. M. (1997). Appraising Tinto's theory of college student departure. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research Vol. 12* (pp. 107-164). Bronx, NY: Agathon.
- Burd, S. (2004, April 2). Graduation rates called a poor measure of colleges. *The Chronicle of Higher Education*, p. A1. Retrieved from <http://chronicle.com/article/Graduation-Rates-Called-a-Poor/14353/>
- Burke, N., Goff, R., Ibrahim, G., & Lamont, L. (2005). Action plan for high attrition rates in a community college. Retrieved March 1, 2014 from <https://www.msu.edu>.
- Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research*. Chicago, IL: Rand McNally.
- Carducci, R. (2006). Assessment in community colleges. *Community College Journal of Research and Practice*, 30(1), 75-80. doi:10.1080/10668920500322525

- Carey, K. (2005, January). Choosing to improve: Voices from colleges and universities with better graduation rates [Report]. *The Education Trust*. Retrieved from <http://www.sdbor.edu/services/studentaffairs/documents/ChoosingtoImprove.pdf>
- Carmines, E. G., & Zeller, R. A. (1979). *Reliability and validity assessment*. Thousand Oaks, CA: SAGE Publications.
- Chang, J. (2002). *Student involvement in the community college: A look at the diversity and value of student activities and programs* [Report]. Retrieved from <http://eric.ed.gov/?id=ED470922>
- Chickering, A. W. (2000). Creating community within individual courses. *New Directions for Higher Education*, 2000(109), 23-32. doi:10.1002/he.10903
- Choy, S. P., & Premo, M. D. (1995). *Profile of older undergraduates: 1989-90* [Report]. Washington, DC: National Center for Education Statistics and U.S Department of Education. Retrieved from <http://nces.ed.gov/pubs95/95167.pdf>
- Cofer, J., & Somers, P. (2000). Within-year persistence of students at two-year colleges. *Community College Journal of Research and Practice*, 24(10), 785-807. doi: 10.1080/10668920050179808
- Cofer, J., & Somers, P. (2001). What influences student persistence at two-year colleges? *Community College Review*, 29(3), 56-76.
- Cohen, A. M., & Brawer, F. B. (2003). *The American community college* (4th ed.). San Francisco, CA: Jossey-Bass.
- Cohen, J. (1977). *Statistical power analysis for the behavioral sciences* (Revised ed.). New York: NY: Academic Press.

- Coley, R. J. (2000). *The American community college turns 100: A look at its students, programs, and prospects* [Report]. Educational Testing Service. Retrieved from https://www.ets.org/research/policy_research_reports/publications/report/2000/cgpr
- Community College Research Center (2006). Research statistics. Retrieved January 2, 2014 from <http://ccrc.org>.
- Community College Survey of Student Engagement. (2009). *Engaging students, challenging the odds: 2009 findings of the community college survey of student engagement*. Austin, TX: Community College Leadership Program, The University of Texas at Austin.
- Comrey, A. L., & Lee, H. B. (1992). *A first course in factor analysis* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation: Design & analysis issues for field settings*. Boston, MA: Houghton Mifflin.
- Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation*, 10(7). Retrieved from <http://pareonline.net/genpare.asp?wh=0&abt=10>
- Creamer, E. G., & Scott, D. W. (2000). Assessing individual advisor effectiveness. In V. N. Gordon, W. R. Habley, & Associates, *Academic advising: A comprehensive handbook* (1st ed., pp. 339-348). San Francisco, CA: Jossey-Bass.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: SAGE Publications.

- Crockett, D. S. (1978). Academic advising: A cornerstone of student retention. In L. Noel (Ed.), *Reducing the dropout rate*. San Francisco, CA: Jossey-Bass.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.
- Cross, K. P. (2002). *The role of class discussion in the learning-centered classroom*. (The Cross Papers, No. 6). Phoenix, AZ: League for Innovation in the Community College. Retrieved from <http://eric.ed.gov/?id=ED466265>
- Cuseo, J. B. (n.d.). *Assessment of the first-year experience: Six significant questions*. Retrieved from <http://sc.edu/fye/resources/assessment/pdf/Cuseos6Qs-web.pdf>.
- Cuseo, J. B. (1991). *The freshman orientation seminar: A research-based rationale for its value, delivery, and content*. (Monograph No. 4). Columbia, SC: University of South Carolina National Resource Center for the Freshman Year Experience.
- Cuseo, J. B. (1993). *Solid foundations: Building success for first-year seminars through instructor training and development*. Columbia, SC: University of South Carolina National Resource Center for The First-Year Experience and Students in Transition.
- Cuseo, J. B. (2003). Comprehensive academic support for students during the first year of college. In G. Kramer, *Student academic services: An integrated approach* (pp. 271-310). San Francisco, CA: Jossey-Bass.
- Cuseo, J. B. (2009). The empirical case for the first-year seminar: Course impact on student retention and academic achievement. *E-SOURCE for College Transitions*, 6(6), 5-7. Retrieved from <http://tech.sa.sc.edu/fye/esource/web/archives.php>

- Cuseo, J. B., & Barefoot, B. O. (1996). A natural marriage: The extended orientation seminar and the community college. In J. N. Hankin (Ed.), *The community college: Opportunity and access for America's first-year students* (Monograph No. 19, pp. 59-68). Columbia, SC: University of South Carolina National Resource Center for the Freshman Year Experience and Students in Transition.
- Daniel, L. G. (1989). Comparisons of exploratory and confirmatory factor analysis. *Measurement and Evaluation in Counseling and Development*, 25, 134-138.
- Davig, W. B., & Spain, J. W. (2004). Impact on freshmen retention of orientation course content: Proposed persistence model. *Journal of College Student Retention*, 5(3), 305-323. doi:10.2190/V6B4-PQAW-TTV0-CJCU
- Davis, B. O. (1992). Freshman seminar: A broad spectrum of effectiveness. *Journal of The Freshman Year Experience*, 4(1), 79-94.
- Day, J. C., & Newburger, E. C. (2002). *The big payoff: Educational attainment and synthetic estimates of work-life earnings* (Current Population Reports, Special Studies, P23-210). Washington, DC: Commerce Dept. Retrieved from <http://www.census.gov/prod/2002pubs/p23-210.pdf>
- Derby, D. C., & Smith, T. (2004). An orientation course and community college retention. *Community College Journal of Research and Practice*, 28(9), 763-773. doi:10.1080/10668920390254771
- DiStefano, C., Zhu, M., & Mindrila, D. (2009). Understanding and using factor scores: Considerations for the applied researcher. *Practical Assessment, Research & Evaluation*, 14(20).

- Dooris, M. J., & Blood, I. M. (2001). Implementing and assessing first-year seminars. *Assessment Update*, 13(4), 1-2.
- Drake, R. W. (1966). *Review of the literature for freshman orientation practices in the U.S.* Fort Collins, CO: U.S. Department of Health, Education & Welfare.
Retrieved from <http://eric.ed.gov/?id=ED030920>
- Dwyer, J. O. (1989). A historical look at the freshman year experience. In M. L. Upcraft, J. N. Gardner, & Associates, *The freshman year experience: Helping students survive and succeed in college* (pp. 25-39). San Francisco, CA: Jossey-Bass.
- Elkins, S. A., Braxton, J. M., & James, G. W. (2000). Tinto's separation stage and its influence on first-semester college student persistence. *Research in Higher Education*, 41(2), 251-268.
- Elsner, P. A. (2002). Toward learning from engagement. *Community College Journal*, 72(5), 16-21.
- Engstrom, C. M., & Tinto, V. (2000). Developing partnerships with academic affairs to enhance student learning. In M.J. Barr, M. K. Desler, & Associates (Eds.), *The handbook of student affairs administration* (2nd ed., pp. 425-452). San Francisco, CA: Jossey-Bass.
- Ewell, P. (2001). Observations on assessing the first-year experience. In R. L. Swing (Ed.), *Proving and improving: Strategies for assessing the first college year* (Monograph No. 33, pp. 3-6). Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- FAFSA data, Jefferson Community and Technical College, Academic Year 2012-2013.

- Farabaugh-Dorkins, C. (1991). *Beginning to understand why older students drop out of college: A path analytic test of the Bean/Metzner model of nontraditional student attrition*. Washington, DC: Association for Institutional Research.
- Fidler, P. P. (1991). Relationship of freshman orientation seminars to sophomore return rates. *Journal of the Freshman Year Experience*, 3(1), 7-38.
- Fidler, P. P., & Fidler, D. S. (1991). *First national survey on freshman seminar programs: Findings, conclusions, and recommendations* (Monograph No. 6). Columbia, SC: University of South Carolina National Resource Center for The Freshman Year Experience. Retrieved from <http://eric.ed.gov/?id=ED343519>
- Fidler, P. P., & Hunter, M. S. (1989). How seminars enhance student success. In M. L. Upcraft, J. N. Gardner, & Associates, *The freshman year experience: Helping students survive and succeed in college* (pp. 216-237). San Francisco, CA: Jossey-Bass.
- Fidler, P. P., & Shanley, M. G. (1993, February). *Evaluation results of University 101*. Presentation made at the annual conference of The Freshman Year Experience, Columbia, South Carolina.
- Fike, D. S., & Fike, R. (2008). Predictors of first-year student retention in the community college. *Community College Review*, 36(2), 68-88.
doi:10.1177/0091552108320222
- Frost, S. H. (1991). *Academic advising for student success: A system of shared responsibility* (ASHE-ERIC Higher Education Report No. 3). Washington, DC: The George Washington University, School of Education and Human Development.

- Gahagan, J. S. (2002). A historical and theoretical framework for the first-year seminar. In National Resource Center for The First-Year Experience and Students in Transition, *The 2000 national survey of first-year seminar programs: Continuing innovations in the collegiate curriculum* (Monograph No. 35). Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Gardner, J. N. (1980). *University 101: A concept for improving teaching and learning*. Columbia, SC: University of South Carolina.
- Gardner, J. N. (1986). The freshman year experience. *College & University*, 61, 261-274.
- Gardner, J. N. (1989). Starting a freshman seminar program. In M. L. Upcraft, J. N. Gardner, & Associates, *The freshman year experience: Helping students survive and succeed in college* (pp. 238-249). San Francisco, CA: Jossey-Bass.
- Gardner, J. N. (1990). *Guidelines for evaluating the freshman year experience*. Columbia, SC: National Center for the Study of the Freshman Year Experience, The University of South Carolina.
- Gardner, J. N. (1992). *Freshman seminar instructor training: Guidelines for design and implementation*. Columbia, SC: University of South Carolina National Resource Center for The Freshman Year Experience.
- Gardner, J. N., Barefoot, B. O., & Swing, R. L. (2001). *Guidelines for evaluating the first-year experience at four-year colleges* (2nd ed.). Columbia, SC: University of South Carolina National Resource Center for The First-Year Experience and Students in Transition.

- Gardner, J. N., & Hansen, D. A. (1993). Perspectives on the future of orientation. In M. L. Upcraft, R. H. Mullendore, B. O. Barefoot, & D. S. Fidler (Eds.), *Designing successful transitions: A guide for orientating students to college* (Monograph No. 13, pp. 183-194). Columbia, SC: National Resource Center for The Freshman Year Experience, University of South Carolina.
- Gardner, J. N., & Jewler, A. J. (2003). *Your college experience: Strategies for success* (5th ed.). Belmont, CA: Wadsworth.
- Gardner, J. N., Siegel, M. J., & Cutright, M. (2001, Fall). Focusing on the first-year student. *AGB Priorities*, 7.
- Gardner, J. N., Upcraft, M. L., & Barefoot, B. O. (2005). Conclusion: Principles of good practice for the first college year and summary of recommendations. In M. L. Upcraft, J. N. Gardner, B. O. Barefoot, & Associates, *Challenging and supporting the first-year student: A handbook for improving the first year of college* (pp. 515-524). San Francisco, CA: Jossey-Bass.
- Goodman, K., & Pascarella, E. T. (2006). First-year seminars increase persistence and retention: A summary of the evidence from *How College Affects Students*. *Peer Review*, 8(3), 26.
- Gordon, V. N., & Grites, T. J. (1984). The freshman seminar course: Helping students succeed. *Journal of College Student Personnel*, 25(4), 315-320.
- Gordon, V. N., & Habley, W. R. (2000). *Academic advising: A comprehensive handbook* (1st ed.). San Francisco, CA: Jossey-Bass.

- Gordon, V. P. (1989). Origins and purposes of the freshman seminar. In M. L. Upcraft, J. N. Gardner, & Associates, *The freshman year experience: Helping students survive and succeed in college* (pp. 183-198). San Francisco, CA: Jossey-Bass.
- Gorsuch, R. L. (1983). *Factor analysis* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Grayson, J. P., & Grayson, K. (2003). *Research on retention and attrition*. Montreal, Canada: The Canada Millennium Scholarship Foundation.
- Habley, W. R. (2000). Current practices in academic advising. In V. N. Gordon & W. R. Habley, *Academic advising: A comprehensive handbook* (1st ed., pp. 35-43). San Francisco, CA: Jossey-Bass.
- Habley, W. R. (2004). *The status of academic advising: Findings from the ACT sixth national survey* (Monograph No. 10). Manhattan, KS: NACADA.
- Habley, W. R., & McClanahan, R. (2004). *What works in student retention? Two-year public colleges*. Iowa City, IA: ACT. Retrieved from <http://www.act.org/research/policymakers/pdf/droptables/TwoYearPublic.pdf>
- Hagedorn, L. S., Maxwell, W., Rodriguez, P., Hocesvar, D., & Fillpot, J. (2000). Peer and student-faculty relations in community colleges. *Community College Journal of Research and Practice*, 24(7), 587-598. doi:10.1080/10668920050139730
- Hair, J. F., Black, B., Babin, B., Anderson, R. E., & Tatum, R. L. (2006). *Multivariate Data Analysis* (6th ed.). Upper Saddle River, NJ: Pearson.
- Hall, N. D. (1997). *Variables that enhance the persistence of older female graduate students* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses database.

- Hampton, B. (2004). Developing partnerships between faculty and professional advisors. *The Mentor: An Academic Advising Journal*, 6. Retrieved from <http://dus.psu.edu/mentor/old/articles/040324bh.htm>
- Harrington, J. S. (1993). Why they stay: a study on the persistence of reentry women. *Initiatives*, 55(4), 17-24.
- Helmer, J. (2005). First year experience 101: Basics about the FYE program and why we're doing it. *First Year Experience Newsletter*.
- Hieman, G. W. (2001). *Research methods in psychology* (3rd ed.). New York, NY: Houghton Mifflin.
- Higbee, J. L., Arendale, D. R., & Lundell, D. B. (2005). Using theory and research to improve access and retention in developmental education. *New Directions for Community Colleges*, 2005(129), 5-15. doi:10.1002/cc.181
- Hinkle, D. E., Wiersma, W., & Jurs, S. G. (2002). *Applied statistics for the behavioral sciences* (5th ed.). Independence, KY: Cengage Learning.
- Hoachlander, G., Sikora, A. C., & Horn, L. (2003). *Community college students: Goals, academic preparation, and outcomes* [Report]. Washington, DC: National Center for Education Statistics. Retrieved from <http://nces.ed.gov/pubs2003/2003164.pdf>
- Hossler, D., Ziskin, M., & Gross, J. P. K. (2009). Getting serious about institutional performance in student retention: Research-based lessons on effective policies and practices. *About Campus*, 13(6), 2-11. doi:10.1002/abc.271
- Howell, D. C. (2007). *Statistical methods in psychology* (6th ed.). Belmont, CA: Wadsworth.

- Hunter, M. S., & Linder, C. W. (2005). First-year seminars. In M. L. Upcraft, J. N. Gardner, B. O. Barefoot, & Associates, *Challenging & supporting the first-year student: A handbook for improving the first year of college* (pp. 275-291). San Francisco, CA: Jossey-Bass.
- Hunter, M. S., Skipper, T. L., & Linder, C. W. (2003). The first-year seminar: Continuing support for new student transitions. In J. A. Ward-Roof & C. Hatch (Eds.), *Designing successful transitions: A guide for orienting students to college* (Monograph No. 13, 2nd ed., pp. 149-164). Columbia, SC: University of South Carolina National Resource Center for the First-Year Experience and Students in Transition.
- Hyers, A. D., & Joslin, M. N. (1998). The first-year seminar as a predictor of academic achievement and persistence. *Journal of the Freshman Year Experience & Students in Transition*, 10(1), 7-30.
- Ishler, J. L. C. (2005). Today's first-year students. In M. L. Upcraft, J. N. Gardner, B. O. Barefoot, & Associates, *Challenging and supporting the first-year student: A handbook for improving the first year of college* (pp. 15-26). San Francisco, CA: Jossey-Bass.
- Jacoby, B. (2000). Involving commuter students in learning: Moving from rhetoric to reality. *New Directions for Higher Education*, 2000(109), 81-87.
- Jefferson Community and Technical College Dashboard. Reports Generated 12/15/2013
- Jewler, A. J. (1989). Elements of an effective seminar: The University 101 program. In M. L. Upcraft, J. N. Gardner, & Associates, *The freshman year experience:*

- Helping students survive and succeed in college* (pp. 198-215). San Francisco, CA: Jossey-Bass.
- Jordan, P. (2000). Advising college students in the 21st century. *NACADA Journal*, 20(2), 21-30.
- Kaiser, H. F. (1968). A measure of the average intercorrelation. *Educational and Psychological Measurement*, 28(2), 245-247. doi:10.1177/001316446802800203
- Kane, T. J., & Rouse, C. E. (1995). Labor-market returns to two- and four-year college. *American Economic Review*, 85(3), 600-614.
- Karp, M. M., Hughes, K. L., & O’Gara, L. (2008). An exploration of Tinto’s integration framework for community college students (Working Paper No. 12.) New York, NY: Community College Research Center. Retrieved from <http://ccrc.tc.columbia.edu/publications/tinto-integration-framework.html>
- Kentucky Council on Postsecondary Education (2013). *Double the numbers: Kentucky’s plan to increase college graduates*. Frankfort, KY: Council for Postsecondary Education.
- Keup, J. R., & Barefoot, B. O. (2005). Learning how to be a successful student: Exploring the impact of first-year seminars on student outcomes. *Journal of the First-Year Experience & Students in Transition*, 17(1), 11-47.
- Keup, J. R., & Petschauer, J. W. (2011). *The first-Year seminar: Designing, implementing, and assessing courses to support student learning and success* (Vol. 1). Columbia, SC: University of South Carolina National Resource Center for The First-Year Experience and Students in Transition.

- Kezar, A., & Kinzie, J. (2006). Examining the ways institutions create student engagement: The role of mission. *Journal of College Student Development*, 47(2), 149-172.
- Kim, J., & Mueller, C. W. (1978). *Introduction to factor analysis: What it is and how to do it*. Newbury Park, CA: SAGE Publications.
- King, M. C., & Kerr, T. J. (1995). Organizing and delivering academic advising for first-year students. In M. L. Upcraft & G. L. Kramer (Eds.), *First-year academic advising: Patterns in the present, pathways to the future* (Monograph No. 18, pp. 35-43). Columbia, SC: National Resource Center for the Freshman Year Experience & Students in Transition, University of South Carolina.
- Kornstein, B. (2007). *The impact of higher education on the expected work-life earnings of Kentucky workers*. Louisville, KY: Urban Studies Institute, University of Louisville. Retrieved from <http://usi.louisville.edu/images/Publications/kentucky%20educ%20returns.pdf>
- Kuh, G. D. (2003). What we're learning about student engagement from NSSE: Benchmarks for effective educational practices. *Change*, 35(2), 24-32.
doi:10.1080/00091380309604090
- Kuh, G. D. (2005). Student engagement in the first year of college. In M. L. Upcraft, J. N. Gardner, B. O. Barefoot, & Associates, *Challenging and supporting the first year student: A handbook for improving the first year of college* (pp. 86-107). San Francisco, CA: Jossey-Bass.

- Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Washington, DC: Association of American Colleges and Universities.
- Kuh, G. D., Kinzie, J., Schuh, J. H., Whitt, E. J., & Associates. (2005). *Student success in college: Creating conditions that matter*. San Francisco, CA: Jossey-Bass.
- Lang, D. J. (2007). The impact of a first-year experience course on the academic performance, persistence, and graduation rates of first-semester college students at a public research university. *Journal of the First-Year Experience & Students in Transition*, 19(1), 9-25.
- Lang, M., & Ford, C. A. (Eds.). (1988). *Black student retention in higher education*. Springfield, IL: Charles C. Thomas.
- Levin, H. M., & Calcagno, J. C. (2008). Remediation in the community college: An evaluator's perspective, *Community College Review*, 35(3), 181-207.
doi:10.1177/0091552107310118
- Levin, J. S. (2000). The revised institution: The community college mission at the end of the twentieth century. *Community College Review*, 28(2), 1-25.
doi:10.1177/009155210002800201
- Liu, E., & Liu, R. (1999). An application of Tinto's model at a commuter campus. *Education*, 119(3), 537-541.
- Lundberg, R. (2002). Community colleges in the United States [Special issue]. *U.S. Society & Values*, 7(1).

- Maisto, A. A., & Tammi, M. W. (1991). The effect of a content-based freshman seminar on academic and social integration. *Journal of The Freshman Year Experience*, 3(2), 29-47.
- Major, H., & Taylor, D. (2003). Teaching for learning: Design and delivery of community college courses. *Community College Enterprise*, 9(1), 63-77.
- Mamrick, M. (2005). The first-year seminar: An historical perspective. In B. F. Tobolowsky, *The 2003 national survey on first-year seminars: Continuing innovations in the collegiate curriculum* (Monograph No. 41). Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience & Students in Transition. Retrieved from <http://eric.ed.gov/?id=ED503171>
- Marcotte, D. E., Bailey, T., Borkoski, C., & Kienzl, G. S. (2005). The returns of a community college education: Evidence from the National Education Longitudinal Survey. *Educational Evaluation and Policy Analysis*, 27(2), 157-175. doi:10.3102/01623737027002157
- Matus-Grossman, L., & Gooden, S. (2002). *Opening doors: Students' perspectives on juggling work, family, and college*. New York, NY: Manpower Demonstration Research Corporation.
- McArthur, R. C. (2005). Faculty-based advising: An important factor in community college retention. *Community College Review*, 32(4), 1-18.
doi:10.1177/009155210503200402
- McCabe, R. H. (2000). *No one to waste: A report to public decision-makers and community college leaders*. Lanham, MD: Rowman & Littlefield.

- McCarthy, M., & Kuh, G. D. (2006). Are students ready for college? What student engagement data say. *Phi Delta Kappan*, 87(9), 664-669.
doi:10.1177/003172170608700909
- McClenney, K. M., McClenney, B. N., & Peterson, G. F. (2007). A culture of evidence: What is it? Do we have one? *Planning for Higher Education*, 35(3), 26-33.
- McClure, A. I., Atkinson, M. P., & Wills, J. B. (2008). Transferring teaching skills: Faculty development effects from a first-year inquiry program. *Journal of The First-Year Experience & Students in Transition*, 20(1), 31-52.
- McCormick, A. C., Geis, S., & Vergun, R. (1995). *Profile of part-time undergraduates in postsecondary education: 1989-90* [Report]. Washington, DC: U.S. Department of Education Office of Educational Research and Improvement, National Center for Education Statistics.
- McGrath, D., & Spear, M. B. (1991). *The academic crisis of the community college*. Albany, NY: SUNY Press.
- McIntosh, M. F., & Rouse, C. E. (2009, February). *The other college: Retention and completion rates among two-year college students*. Washington, DC: Center for American Progress.
- Mercer, D. L. (1993). Older coeds: Predicting who will stay this time. *Journal of Research and Development in Education*, 26(3), 153-163.
- Miller, J. W., Janz, J. C., & Chen, C. (2007). The retention impact of a first-year seminar on students with varying pre-college academic performance. *Journal of The First-Year Experience & Students in Transition*, 19(1), 47-62.

- Mohammadi, J. (1996). Exploring retention and attrition in a two-year public community college. *VCCA Journal*, 10(1), 39-50.
- Morante, E. A. (2003). Assessing student services and academic support services. *iJournal: Insight into Student Services*, 4, 1-9.
- Morest, V. S. (2006). Double vision: How the attempt to balance multiple missions is shaping the future of the community college. In T. Bailey & V. S. Morest (Eds.), *Defending the community college equity agenda* (pp. 28-50). Baltimore, MD: Johns Hopkins University Press.
- Murphy, K. R., Myers, B., & Wolach, A. (2008). *Statistical power analysis: A simple and general model for traditional and modern hypothesis tests* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Napoli, A. R., & Wortman, P. M. (1998). Psychosocial factors related to retention and early departure of two-year community college students. *Research in Higher Education*, 39(4), 419-455. doi:10.1023/A:1018789320129
- National Center for Education Statistics. (2004). *Digest of education statistics 2003*. Washington, DC: National Center for Education Statistics, U.S. Department of Education. Retrieved from <http://nces.ed.gov/pubs2005/2005025.pdf>
- National Center for Education Statistics. (2013). *Digest of education statistics*. Retrieved http://nces.ed.gov/programs/digest/2013menu_tables.asp
- Nealy, M. J. (2008, March 24). New study looks at retention in community colleges. *Diverse Issues in Higher Education*, n.p. Retrieved from <http://diverseeducation.com/article/10891>.

- Nora, A. (2000). *Reexamining the community college mission* (Issues Paper No.2). Washington, DC: American Association of Community Colleges.
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York, NY: McGraw-Hill.
- Obama, B. (2009a, July 12). Rebuilding something better. *The Washington Post*, n.p. Retrieved from <http://www.washingtonpost.com/wp-dyn/content/article/2009/07/11/AR2009071100647.html>
- Obama, B. (2009b, July 14). Remarks by the president on the American Graduation Initiative. Address given at Macomb Community College, Warren, MI. Retrieved from http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-on-the-American-Graduation-Initiative-in-Warren-MI
- O'Bannion, T. (1997). *A learning college movement for the 21st century* (The American Community College Association and the American Council on Education Series on Higher Education). Washington, DC: Oryx Press.
- O'Gara, L., Karp, M. M., & Hughes, K. L. (2009). Student success courses in the community college: An exploratory study of student perspectives. *Community College Review*, 36(3), 195-218. doi:10.1177/0091552108327186
- O'Toole, D. M., Stratton, L. S., & Wetzel, J. N. (2003). A longitudinal analysis of the frequency of part-time enrollment and the persistence of students who enroll part time. *Research in Higher Education*, 44(5), 519-537. doi:10.1023/A:1025491208661
- Padgett, R. D., & Keup, J. R. (2011). *The 2009 national survey of first-year seminars: Ongoing efforts to support students in transition*. Columbia, SC: University of

South Carolina National Resource Center for The First-Year Experience and Students in Transition.

Pagano, R. R. (2001). *Understanding statistics in the behavioral sciences* (6th ed.).

Belmont, CA: Wadsworth.

Pascarella, E. T. (1997). It's time we started paying attention to community college students. *About Campus*, 1(6), 14-17.

Pascarella, E. T., Smart, J. C., & Ethington, C. A. (1986). Long-term persistence of two-year college students. *Research in Higher Education*, 24(1), 47-71.

doi:10.1007/BF00973742

Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students: Findings and insights from twenty years of research*. San Francisco, CA: Jossey-Bass.

Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco, CA: Jossey-Bass.

Pascarella, E. T., Terenzini, P. T., & Bliming, G. (1999). Student's out-of-class experiences and their influence on learning and cognitive development: A literature review. *Journal of College Student Development*, 40(5), 610-623.

Pascarella, E. T., Wolniak, G. C., Pierson, C. T., & Terenzini, P. T. (2003). Experiences and outcomes of first-generation students in community colleges. *Journal of College Student Development*, 44(3), 420-429. doi:10.1353/csd.2003.0030

Perlin, D. (2004). Remediation beyond developmental education: The use of learning assistance centers to increase academic preparedness in community colleges. *Community College Journal of Research and Practice*, 28(7), 559-582.

doi:10.1080/10668920490467224

- Phelan, D. J. (2000). *Enrollment policies and student access at community colleges* [Policy paper]. Denver, CO: Education Commission of the States.
- Pike, G. R., & Kuh, G. D. (2005). First- and second-generation college students: A comparison of their engagement and intellectual development. *Journal of Higher Education*, 76(3), 276-300.
- Pohlmann, J. T. (2004). Use and interpretation of factor analysis in *The Journal of Educational Research*: 1992-2002. *The Journal of Educational Research*, 98(1), 14-23. doi:10.3200/JOER.98.1.14-23
- Policy Center on the First Year of College. (2000). *Summary of findings*. <http://www.brevard.edu>.
- Porter, S. R., & Swing, R. L. (2006). Understanding how first-year seminars affect persistence. *Research in Higher Education*, 47(1), 89-109. doi:10.1007/s11162-005-8153-6
- Purnell, R., & Blank, S. (2004). *Support success: Services that may help low-income students succeed in community college*. New York, NY: MDRC. Retrieved from <http://www.mdrc.org/publication/support-success>
- Reason, R. D. (2003). Student variables that predict retention: Recent research and new developments. *NASPA Journal*, 40(4), 704-723. doi:10.2202/1949-6605.1286
- Reitano, J. R. (1998). The community college mission: Access or anarchy? *Community Review*, 16, 119-127.
- Rendon, L. I., Jalomo, R. E., & Nora, A. (2000). Theoretical considerations in the study of minority student retention in higher education. In J. M. Braxton (Ed.),

- Reworking the student departure puzzle* (pp. 127-156). Nashville, TN: Vanderbilt University Press.
- Reyment, R., & Joreskog, K. G. (1993). *Applied factor analysis in the natural sciences*. New York, NY: Cambridge University Press.
- Rhodes, L., & Carifio, J. (1999). Community college students' opinions regarding the value of their freshman seminar experience. *Community College Journal of Research and Practice*, 23(5), 511-523. doi:10.1080/106689299264701
- Robles, S. Y. (2002). *The influence of a freshman orientation course on the academic performance and retention of new community college students* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database.
- Roueche, J. E., & Roueche, S. D. (1993). *Between a rock and a hard place: The at-risk student in the open-door college*. Washington, DC: American Association of Community Colleges.
- Ryder, R. A., Bowman, R. L., & Newman, P. P. (1994). Nontraditional students: Perceived barriers to degree completion. *College Student Affairs Journal*, 13(2), 5-13.
- Schnell, C. A., & Doetkott, C. D. (2003). First year seminars produce long-term impact. *Journal of College Student Retention: Research, Theory and Practice*, 4(4), 377-391. doi:10.2190/NKPN-8B33-V7CY-L7W1
- Schnell, C. A., Louis, K. S., & Doetkott, C. (2003). First-year seminar as a means of improving college graduation rates. *Journal of the First-Year Experience & Students in Transition*, 15(1), 53-75.

- Schuh, J. H. (2005). Finances and retention: Trends and potential implications. In A. Seidman, *College student retention: A formula for success* (pp. 277-294). Westport, CT: American Council on Education and Praeger.
- Seidman, A. (2005). *College student retention: Formula for student success*. Westport, CT: American Council on Education and Praeger.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2001). *Experimental and quasi-experimental designs for generalized causal inference*. Independence, KY: Cengage Learning.
- Shanley, M. G., & Witten, C. H. (1990). University 101 freshman seminar course: A longitudinal study of persistence, retention, and graduation rates. *NASPA Journal*, 27(4), 344-352.
- Shavelson, R. J. (1996). *Statistical reasoning for the behavioral sciences* (3rd ed.). Needham Heights, MA: Allyn & Bacon.
- Sidle, M. W., & McReynolds, J. (1999). The freshman year experience: Student retention and success. *NASPA Journal*, 36(4), 288-300.
- Siegel, B. L. (1989). A president's perspective on the value of freshman seminars. In M. L. Upcraft, J. N. Gardner, & Associates, *The freshman year experience: Helping students survive and succeed in college* (pp. 250-258). San Francisco, CA: Jossey-Bass.
- Simmons, J., & George, M. (1995). Evaluating the effectiveness of a freshman orientation course. *Journal of College Student Personnel*, 28, 179-187.

- Sivan, A., Leung, R. W., Woon, C., & Kember, D. (2000). An implementation of active learning and its effect on the quality of student learning. *Innovations in Education and Training International*, 37(4), 381-389. doi:10.1080/135580000750052991
- Skipper, T. L. (2005). *Student development in the first college year: A primer for college educators*. Columbia, SC: University of South Carolina National Resource Center for The First-Year Experience and Students in Transition.
- Skipper T. L., & Argo, R. (Eds.). (2003). *Involvement in campus activities and the retention of first-year college students* (Monograph No. 36). Columbia, SC: National Resource Center for The First-Year Experience and Students in Transition, University of South Carolina.
- Smith, J. S. (2002). First-year student perceptions of academic advisement: A qualitative study and reality check. *NACADA Journal*, 22(2), 39-49.
- Spalding, A. (2012). *Crossing the finish line: Overcoming barriers to community college degree and credential attainment in Kentucky* [Report]. Berea, KY: Kentucky Center for Economic Policy. Retrieved from <http://kypolicy.org/crossing-finish-line-overcoming-barriers-community-college-degree-credential-attainment-kentucky-2/>
- Spiezio, K. E., Baker, K. Q., & Boland, K. (2005). General education and civic engagement: An empirical analysis of pedagogical possibilities. *The Journal of General Education*, 54(4), 273-292.
- Starke, M. C., Harth, M., & Sirianni, F. (2001). Retention, bonding, and academic achievement: Success of a first-year seminar. *Journal of The First-Year Experience & Students in Transition*, 13(2), 7-36.

- Steiger, J. H. & Lind, J. C. (1980). Statistically-based tests for the number of common factors. Paper presented at the Annual Spring Meeting of the Psychometric Society, Iowa City, IA.
- Steltenpohl, E., & Shipton, J. (1986). Facilitating a successful transition to college for adults. *Journal of Higher Education*, 57(6), 637-658. doi:10.2307/1981197
- Stevens, J. (1996). *Applied multivariate statistics for the social sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Stovall, M. (2002). Using success courses for promoting persistence and completion. *New Directions for Community Colleges*, 2000(112), 45-54. doi:10.1002/cc.11204
- Strange, C. C., & Banning, J. H. (2001). *Education by design: Creating campus learning environments that work*. San Francisco, CA: Jossey-Bass.
- Summers, M. D. (2003). ERIC review: Attrition research at community colleges. *Community College Review*, 30(4), 64-84. doi:10.1177/009155210303000404
- Swaner, L. E., & Brownell, J. E. (2009). *Outcomes of high impact practices for underserved students: A review of the literature*. Washington, DC: Association of American Colleges and Universities.
- Swing, R. L. (Ed.). (2001). *Proving and improving: Strategies for assessing the first college year* (Monograph No. 33). Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition. Retrieved from <http://files.eric.ed.gov/fulltext/ED458855.pdf>
- Swing, R. L. (2002a). *The impact of engaging pedagogy on first-year seminars*. Retrieved from http://www.sc.edu/fye/resources/assessment/essays/swing-8.28.02_pdfs/introduction.pdf

- Swing, R. L. (2002b). *What type of seminar is best?* Retrieved from http://www.sc.edu/fye/resources/assessment/essays/swing-8.28.02_pdfs/essay4.pdf
- Swing, R. L. (2004). What's so special about assessment in the first year of college? *Assessment Update*, 16(2), 1-4. doi:10.1002/au.162
- Sydow, D. L., & Sandel, R. H. (1998). Making student retention an institutional priority. *Community College Journal of Research and Practice*, 22(7), 635-643. doi:10.1080/1066892980220701
- Szelenyi, K. (2001). *Minority student retention and academic achievement in community colleges* (ERIC digests). Retrieved from <http://eric.ed.gov/?id=ED451859>
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Needham Heights, MA: Allyn & Bacon.
- Tagg, J. (2003). *The learning paradigm college*. Bolton, MA: Anker Publishing.
- Tatum, B. D. (2000). The ABC approach to creating climates of engagement on diverse campuses. *Liberal Education*, 86(4), 22-29.
- Thayer, P. B. (2000). Retention of students from first generation and low income backgrounds. *Opportunity Outlook: The Journal of the Council for Opportunity in Education*, 3(1), 2-8.
- Thomas, S. L. (2000). Ties that bind: A social network approach to understanding student integration and persistence. *Journal of Higher Education*, 71(5), 591-615. doi:10.2307/2649261

- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125.
doi:10.3102/00346543045001089
- Tinto, V. (1994). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago, IL: University of Chicago Press.
- Tobolowsky, B. F., & Associates (2008). *2006 national survey of first-year seminars: Continuing innovations in the collegiate curriculum* (Monograph No. 51). Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition. Retrieved from <http://eric.ed.gov/?id=ED503181>
- Tsui, L. (2002). Fostering critical thinking through effective pedagogy: Evidence from four institutional case studies. *The Journal of Higher Education*, 73(6), 740-763.
- Turner A. L., & Berry, T. R. (2000). Counseling center contributions to student retention and graduation: A longitudinal assessment. *Journal of College Student Development*, 41(6), 627-636.
- United Census Bureau (2013). Statistics profile. Retrieved February 3, 2014 from <http://usbureau.org>.
- Upcraft, M. L. (2005). Assessing the first year of college. In M. L. Upcraft, J. N. Gardner, B. O. Barefoot, & Associates, *Challenging and supporting the first-year student: A handbook for improving the first year of college* (pp. 469-485). San Francisco, CA: Jossey-Bass.
- Upcraft, M. L., Gardner, J. N., & Associates. (1989). *The freshman year experience: Helping students survive and succeed in college*. San Francisco, CA: Jossey-Bass.

- Upcraft, M. L., Gardner, J. N., & Barefoot, B. O. (Eds.). (2004). *Challenge and support: Creating climates for first-year student success*. San Francisco, CA: Jossey-Bass.
- Upcraft, M. L., Gardner, J. N., Barefoot, B. O., & Associates (2005). *Challenging and supporting the first-year student: A handbook for improving the first year of college*. San Francisco, CA: Jossey-Bass.
- Upcraft, M. L., & Hunter, M. A. (2005). *Fostering student learning and success through first year programs*. Columbia, SC: National Resource Center for The Freshman Year Experience, University of South Carolina.
- Upcraft, M. L., & Swing, R. L. (2007). What student engagement data tells us about College Readiness. In M.L. Upcraft, J.N. Gardner, & B.O. Barefoot, & Associates, *Challenging and supporting the first-year student: A handbook for improving the first year of college* (pp.454-468). San Francisco, CA: Jossey-Bass.
- Vogt, W. P. (1999). *Dictionary of statistics & methodology: A nontechnical guide for the social sciences* (2nd ed.). Newbury Park, CA: SAGE.
- Watson, L. (2000). Working with schools to ease student transition to the community college. *New Directions for Community Colleges*, 2000(111), 53-58.
doi:10.1002/cc.11106
- Webster's Retrieved March 5, 2014 from <http://webstersdictionary.org>
- Weidman, J. C. (1985). Retention of nontraditional students in postsecondary education. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL. Retrieved from <http://files.eric.ed.gov/fulltext/ED261195.pdf>

- Wild, L., & Ebbers, L. (2002). Rethinking student retention in community colleges. *Community College Journal of Research and Practice*, 26, 503-519.
doi:10.1080/02776770290041864
- Wilkie, C., & Kuckuck, S. (1989). A longitudinal study of the effects of a freshman seminar. *Journal of The Freshman Year Experience*, 1(1), 7-16.
- Woosley, S. (2004). Stop-out or drop-out? An examination of college withdrawals and re-enrollments. *Journal of College Student Retention: Research, Theory and Practice*, 5(3), 293-303. doi:10.2190/6NW2-FUJ4-4ATU-EKHC
- Wyckoff, S. C. (1999). The academic advising process in higher education: History, research, and improvement. *Recruitment & Retention in Higher Education*, 13(1), 1-3.
- Zeidenberg, M., Jenkins, D., & Calcagno, J. C. (2007). Do student success course actually help community college students succeed? (Community College Research Center Brief No. 36). New York, NY: Community College Research Center. Retrieved from <http://ccrc.tc.columbia.edu/publications/student-success-courses-help.html>
- Zhai, L., & Monzon, R. (2001). *Community college student retention: Student characteristics and withdrawal reasons*. Paper presented at the Annual Meeting of the California Association for Institutional Research, Sacramento, CA.
Retrieved from <http://eric.ed.gov/?id=ED473676>
- Zimmerman, A. (2000). A journal-based orientation course as a predictor of student success at a public two-year technical college. *Journal of The First-Year Experience & Students in Transition*, 12(1), 29-43.

APPENDICES

Appendix A

Informed Consent/Preamble

Date

Dear Student

You are being invited to participate in a research study by answering the attached survey about your engagement on the campus. There are no known risks for your participation in this research study. The information collected may not benefit you directly, but the information learned in this study may be helpful to others. The information you provide will allow college administrators to improve services to meet the needs of first-year college students. Your completed survey will be stored and kept in a secured location at Jefferson Community and Technical College. The survey will take approximately fifteen to twenty minutes to complete.

Individuals from the Department of Educational Counseling Psychology, Counseling and College Student Personnel at University of Louisville, the Institutional Review Board (IRB) at University of Louisville, the Human Subjects Protection Program Offices at Jefferson Community and Technical College (HSPPO), and other regulatory agencies may inspect these records. In all other respects, however, the data will be held in confidence to the extent permitted by law. Should the data be published, your identity will not be disclosed.

Taking part in this study is voluntary. By completing this survey you agree to take part in this research study. You do not have to answer any questions that make you uncomfortable. You may choose not to take part at all. If you decide to be in this study you may stop taking part at any time. If you decide not to be in this study or if you stop taking part at any time, you will not lose any benefits for which you may qualify.

If you have any questions, concerns, or complaints about the research study, please contact: Dr. Michael Cuyjet by email at cuyjet@louisville.edu or phone 502.852.0628 or Kaye Lafferty at mlafferty0001@kctcs.edu or phone at 502.609.3794.

If you have any questions about your rights as a research subject, you may call the Human Subjects Protection Program Office at (502) 852-5188. You can discuss any questions about your rights as a research subject, in private, with a member of the Institutional Review Board (IRB). You may also call this number if you have other questions about the research, and you cannot reach the research staff, or want to talk to someone else. The IRB is an independent committee made up of people from the University community, staff of the institutions, as well as people from the community not connected with these institutions. The IRB has reviewed this research study.

If you have concerns or complaints about the research or research staff and you do not wish to give your name, you may call 1-877-852-1167. This is a 24-hour hotline answered by people who do not work at the University of Louisville or Jefferson Community and Technical College.

Sincerely,

Michael Cuyjet, Ed.D, Principal Investigator

Kaye Lafferty, Ed.S, Co-Investigator

Appendix B

Student Engagement Survey (SES)

In order to represent the formatting of the original survey document, this appendix incorporates digital images of each of the original survey's seven pages.

The Student Engagement Survey

1. Section 1

Instructions:
Thank you for agreeing to complete the Student Engagement Survey. The researcher appreciates you taking the time to complete the survey completely and honestly. The survey should take no more than 15-20 minutes to complete and your responses are confidential. The purpose of this survey is to assess the frequency in which students engage in a number of activities including participation in classroom discussions and interacting with faculty inside and outside the classroom. Additionally, the instrument assesses the frequency and knowledge of a variety of academic and student support services provided by the college.

Consent:
By completing the survey, I acknowledge that I have read the preamble, understand that there are no foreseeable risks. In addition, I understand that participating in this study is voluntary, I may choose to stop at any time without penalty, and there is no compensation for taking part in the study. My continuance with this survey indicates my consent. The responses to the study will be kept private and stored securely.

1. I completed the First Year Seminar course (FYE 105, GEN 101, GEN 102) at Jefferson Community and Technical College (JCTC) during a previous semester.

☐ Yes, continue with survey ☐ No, skip to question 6

2. If you have taken the First Year Seminar course, in what semester and year did you complete the course?

☐ Fall 2013

☐ Summer 2013

☐ Spring 2013

☐ Fall 2012

☐ Summer 2012

☐ Spring 2012

☐ _____ Other Semester and Year

3. I have taken the First Year Seminar course at JCTC and my level of satisfaction was:

1. Very Satisfied	2. Somewhat Satisfied	3. Neither Satisfied nor Dissatisfied	4. Somewhat Dissatisfied	5. Very Dissatisfied
☐	☐	☐	☐	☐

4. I have completed a First Year Seminar course at another school.

☐ Yes ☐ No

Page 1

The Student Engagement Survey

5. If you completed a First Year Seminar course at another institution, what semester and year did you complete the course? In addition, at which institution did you take the first year seminar?

☐ Fall 2013

☐ Summer 2013

☐ Spring 2013

☐ Fall 2012

☐ Summer 2012

☐ Spring 2012

☐ _____ Other Semester and Year

☐ _____ Please indicate institution where you completed the First Year Seminar course

6. Working a full-time or part-time job would cause me to withdraw from future class(es).

1: Very Likely

2: Somewhat Likely

3: Neither Likely nor Unlikely

4: Somewhat Unlikely

5: Very Unlikely

7. Caring for dependents would cause me to withdraw from future class(es).

1: Very Likely

2: Somewhat Likely

3: Neither Likely nor Unlikely

4: Somewhat Unlikely

5: Very Unlikely

8. Being academically unprepared for coursework would cause me to withdraw from future class(es).

1: Very Likely

2: Somewhat Likely

3: Neither Likely nor Unlikely

4: Somewhat Unlikely

5: Very Unlikely

9. Financial issues would cause me to withdraw from future class(es).

1: Very Likely

2: Somewhat Likely

3: Neither Likely nor Unlikely

4: Somewhat Unlikely

5: Very Unlikely

10. Personal issues (children/dependents, transportation, caring for elderly parents, etc.) would cause me to withdraw from future class(es).

1: Very Likely

2: Somewhat Likely

3: Neither Likely nor Unlikely

4: Somewhat Unlikely

5: Very Unlikely

2. Section 2

Instructions: The items below are statements related to your college experience. Indicate your level of engagement with each of the statements by selecting one of the response choices that best describes your experience. Reflecting on your experiences at JCTC this semester, how often have you engaged in each of the following:

Scale: 1: Very Often 2: Often 3: Sometimes 4: Never

The Student Engagement Survey

1. I asked questions in class or contributed to class discussions.

1. Very Often

2. Often

3. Sometimes

4. Never

2. I worked with other students on projects during class.

1. Very Often

2. Often

3. Sometimes

4. Never

3. I engaged in classroom discussions with my instructors.

1. Very Often

2. Often

3. Sometimes

4. Never

4. I worked with classmates outside of class to prepare assignments or projects.

1. Very Often

2. Often

3. Sometimes

4. Never

5. I used email to communicate with an instructor.

1. Very Often

2. Often

3. Sometimes

4. Never

6. I talked about career plans with an instructor or advisor.

1. Very Often

2. Often

3. Sometimes

4. Never

7. I discussed ideas from my readings or classes with instructors outside of class.

1. Very Often

2. Often

3. Sometimes

4. Never

8. I discussed ideas from my readings or course content with students outside of class.

1. Very Often

2. Often

3. Sometimes

4. Never

9. I discussed ideas/issues with instructors that do not relate to class.

1. Very Often

2. Often

3. Sometimes

4. Never

3. Section 3

Instructions: Indicate your level of agreement with the statements by selecting the response that best describes your experience.

Scale: 1: Strongly Agree 2: Somewhat Agree 3: Neither Agree nor Disagree 4: Somewhat Disagree 5: Strongly Disagree

The Student Engagement Survey

1. Since enrolling at JCTC, I feel a sense of belonging on this campus.

1: Strongly Agree   2: Somewhat Agree   3: Neither Agree nor Disagree   4: Somewhat Disagree   5: Strongly Disagree

2. Since enrolling at JCTC, I interacted with students outside of class.

1: Strongly Agree   2: Somewhat Agree   3: Neither Agree nor Disagree   4: Somewhat Disagree   5: Strongly Disagree

3. Since enrolling at JCTC, I have been encouraged by my instructors to spend more time studying.

1: Strongly Agree   2: Somewhat Agree   3: Neither Agree nor Disagree   4: Somewhat Disagree   5: Strongly Disagree

4. Since enrolling at JCTC, I have received assistance from my instructors that has helped me cope with nonacademic responsibilities (examples: work, family, etc.).

1: Strongly Agree   2: Somewhat Agree   3: Neither Agree nor Disagree   4: Somewhat Disagree   5: Strongly Disagree

5. Since enrolling at JCTC, I developed close relationships with other students.

1: Strongly Agree   2: Somewhat Agree   3: Neither Agree nor Disagree   4: Somewhat Disagree   5: Strongly Disagree

6. Since enrolling at JCTC, I attended campus events (student resource fair, cultural diversity events, transfer event, and theatre plays, etc.).

1: Strongly Agree   2: Somewhat Agree   3: Neither Agree nor Disagree   4: Somewhat Disagree   5: Strongly Disagree

7. Since enrolling at JCTC, I participated in campus sponsored organizations/clubs.

1: Strongly Agree   2: Somewhat Agree   3: Neither Agree nor Disagree   4: Somewhat Disagree   5: Strongly Disagree

8. I am concerned about my ability to pay for my education.

1: Strongly Agree   2: Somewhat Agree   3: Neither Agree nor Disagree   4: Somewhat Disagree   5: Strongly Disagree

9. It is important to me to graduate from college.

1: Strongly Agree   2: Somewhat Agree   3: Neither Agree nor Disagree   4: Somewhat Disagree   5: Strongly Disagree

The Student Engagement Survey

10. I am committed to completing a degree/certificate/diploma.

1. Strongly Agree

2. Somewhat Agree

3. Neither Agree nor
Disagree

4. Somewhat Disagree

5. Strongly Disagree

4. Section 4

Since enrolling at JCTC, how often have you used the following services:

1. Academic Advising

4 or more times

1 to 3 times

Have not used/0

2. Career Planning/Crew Center

4 or more times

1 to 3 times

Have not used/0

3. Tutoring Center

4 or more times

1 to 3 times

Have not used/0

4. Writing Center

4 or more times

1 to 3 times

Have not used/0

5. Math Lab

4 or more times

1 to 3 times

Have not used/0

6. Campus Library

4 or more times

1 to 3 times

Have not used/0

7. Counseling Center

4 or more times

1 to 3 times

Have not used/0

5. Section 5

1. What is your gender identity?

☐ Female

☐ Other

☐ Male

☐ Transgender

The Student Engagement Survey

2. What is your race/ethnicity? You may check more than one response in this item.

- ☐ African American/Black   ☐ Caucasian/White   ☐ Native Hawaiian/Pacific Islander
- ☐ Asian American/Asian   ☐ Native American/American Indian or Alaskan Native   ☐ Hispanic/Latino (A person of Cuban, Mexican, Puerto Rican, South or Central American or other Spanish culture or origin, regardless of race)

3. What is your age?

- ☐ Under 18
- ☐ 18-24
- ☐ 25+

4. What is your current enrollment status?

- ☐ Full-time (12 or more credit hours this term)
- ☐ Part-time (fewer than 12 credit hours this term)

5. On the average, how many hours do you work per week? Please indicate whether the work is on campus or off campus.

- ☐ 0, I do not have a job
- ☐ 1-10 hours Off campus
- ☐ 11-20 hours Off Campus
- ☐ 21-30 hours Off Campus
- ☐ 31-40 hours Off Campus
- ☐ 40+ hours Off Campus
- ☐ 1-10 hours On campus
- ☐ 11-20 hours On Campus
- ☐ 21-30 hours On Campus

6. I plan to return to JCTC in the fall 2014.

- ☐ Yes
- ☐ No
- ☐ Unknown
- ☐ If No or Unknown, Why? _____ (examples: complete a degree/diploma/certificate, transfer, family obligations, work reasons, etc).

The Student Engagement Survey

7. What is your highest academic/educational goal?

- ☐ Non-Degree Seeking (Taking classes but not to earn a certificate, diploma or degree)
- ☐ Certificate
- ☐ Diploma
- ☐ Two-Year Degree/Associates Degree
- ☐ Bachelor's Degree
- ☐ Graduate/Professional Degree

8. I am the first person in my family (as you define family) to go to college.

- ☐ Yes
- ☐ No

9. I need financial aid (grants, loans, work study, or scholarships) in order to continue taking courses at JCTC.

- ☐ Yes
- ☐ No
- ☐ If Yes, I received financial aid in:
  - ☐ fall 2013
  - ☐ spring 2014

Thank you for participating in this survey.

Appendix C

Survey Administration Script

Good <morning/afternoon,evening>. My name is Kaye Lafferty and I am here to administer the Student Engagement Survey. Your answers will help this college understand your experience and improve programs and services for all students. Participation in this survey is entirely voluntary. There are no penalties for choosing not to participate or for stopping your participation at any time. Your decision will not affect your grade in this or any class or your reputation within our college. However, the information you provide will help our college and other colleges across the country to improve their services.

If you are under the age of 18, please do not complete the survey; however, please remain in the classroom during the administration.

If you have completed the survey in another class, please do not take the survey again. If you opt out of taking the survey, please remain in the classroom during the administration.

<Please provide each student with the following: Survey, Preamble and a #2 pencil>

<Show students the survey> The survey booklet has questions on both sides of the page.

Please rest assured that your individual responses to this survey will remain confidential and will be maintained and kept in a secure location.

As you complete this survey, please remember that you are responding based on your experiences at this college during this academic year and not only about this

particular class. You may only use a #2 pencil to fill in the circles. Please fill in the circles completely, do not use X's or check marks.

We expect it to take no more than 15-20 minutes to complete this survey but you will be allowed to complete the survey even if it takes longer. If you have any questions after you finish, feel free to contact me at MLafferty0001@kctcs.edu or 213-4184. We appreciate your participation.

<When all students are finished or when time has run out, collect survey materials from students>

Appendix D

Faculty Recruitment – Initial Letter

Date

Dear English Faculty Members,

My name is Kaye Lafferty and I am a doctoral candidate in the Educational Counseling Psychology Department at the University of Louisville. I am conducting a research study as part of the requirements of my Ph.D degree and I would like to invite your English 101 students to participate in my study. My study is titled “The Impact of Participation in a First-Year Seminar on Increased Use of Campus Resources, Academic and Social Integration and First-to-Second Semester Persistence at a Two Year Community and Technical College.

The purpose of the study will seek to determine whether there are significant differences between students who enroll in the first year seminar courses and those who do not enroll. As many of you are aware, JCTC was selected as an Achieving the Dream Institution and is in the process of implementing initiatives to improve the college experience for Jefferson students. Areas of focus include: New Student Orientation, Front Door Experience, First Year Experience Course and Developmental Math. My study will aid administrators with understanding ways to increase student retention, completion and success for community college students.

If your students decide to participate, they will be asked to complete a Student Engagement Survey about first year seminar effectiveness. I am asking that they be allowed to complete the survey in your classes. The survey will take approximately 15 to

20 minutes to complete. If you consent, I will visit the class to conduct the survey.

Confidentiality of all survey responses will be maintained and kept in a secure location.

I will be happy to answer any questions/issues you have about the study. You may contact me at MLafferty0001@ketcs.edu or 502.213.4184 or my faculty advisor Dr.

Michael Cuyjet at Cuyjet@louisville.edu or 502.852.0628.

Thank you for your consideration.

Respectfully

Kaye Lafferty

Michael Cuyjet

Appendix E

Faculty Recruitment – Second Letter

Dear <Instructor Name>

Recently you have received correspondence from me introducing a research project that I am conducting through the University of Louisville. The following course you teach has been chosen randomly to be surveyed as part of a convenience sample of JCTC's class sections. Please note that students will be asked to reflect on their college experiences, not about their experiences in your specific class. I would like to arrange a time that works best for administering the Student Engagement Survey to the English 101 students enrolled in the course listed below. At a pre-arranged time, I will come to your classroom to administer the survey. I realize that class time is valuable but believe that the survey data will be exceptionally beneficial in our efforts to learn how we can support and strengthening student learning and retention.

Course Name: <Course Full Name>

Course Number: <Course Number>

Section Number: <Section Number>

Meet Days: <Meet days>

Class Time: <Course Start/End Time>

The survey is designed to be completed by most students within 15-20 minutes. If you have students with special needs, please inform me so that if necessary appropriate accommodations can be made the day of the in-class administration.

Please provide your first and second preferred dates for survey administration within this time range. Date _____ <Start Time> Date _____ <Start Time>

First Choice

Second Choice

Please provide the total enrollment for the course.

Enrollment_____

I will confirm the administration date after I receive your response. If you have any questions, contact me at 502.213.4184 or MLafferty0001@kctcs.edu. I appreciate your cooperation and participation in this exciting initiative. The results are sure to be useful in our continued work to ensure the highest quality educational programs and services for our students.

Respectfully,

Kaye Lafferty

Appendix F

Thank-You Note to Instructor

Dear <Instructor First Name>

Thank you for providing your students with the opportunity to complete the Student Engagement Survey in your class. The survey results will assist us in identifying what further action may be helpful in our continued work to support and strengthen teaching, student learning and student retention. Again, thank you for your time and cooperation.

Respectfully,

Kaye Lafferty

Appendix G

Table 11

National Community College Benchmark Data

School	Total Enrollment	Gender %		Enrollment Status %		Mean Age	Ethnicity/Race
		Male	Female	Full Time	Part Time		
Jefferson Community and Technical College	14,346	41.9%	58.1%	35%	65%	26	American Indian: 0.3% Asian: 2.2% Black or African American: 23.5% Hispanic/Latino: 4.5% Native Hawaiian/Pacific Islander: 0.2% White: 65.6% Two or more races: 2.0% Race/ethnicity unknown: 1.6%
Cuyahoga Community College	29,701	38.3%	61.7%	64%	36%	25	American Indian: 0.8% Asian: 1.8% Black or African American: 28.0% Hispanic/Latino: 4.2% Native Hawaiian/Pacific Islander: 0.0% White: 49.2% Two or more races: 0.2% Race/ethnicity unknown: 13.7%

Tallahassee Community College	14,237	46.7%	53.3%	48%	40%	23	American Indian: 0.2% Asian: 1.1% Black or African American: 33.4% Hispanic/Latino: 8.8% Native Hawaiian/Pacific Islander: 0.1% White: 49.4% Two or more races: 2.8% Race/ethnicity unknown: 3.4%
Pulaski Technical College	11,938	34.8%	65.2%	49%	51%	25	American Indian: 0.4% Asian: 1.5% Black or African American: 51.0% Hispanic/Latino: 3.8% Native Hawaiian/Pacific Islander: 0.1% White: 40.9% Two or more races: 2.0% Race/ethnicity unknown: 0.4%

Appendix H

Table 12

Intercorrelations of the Items of the SES (Student Engagement Survey)

Question	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
6	1.000	.615	.479	.378	.542	-.123	-.169	-.163	-.035	-.153	-.136	-.067	-.079	-.029	-.190
7	.615	1.000	.471	.456	.604	-.175	-.228	-.267	-.103	-.207	-.137	-.072	-.118	-.025	-.246
8	.479	.471	1.000	.431	.557	-.156	-.205	-.246	-.031	-.190	-.057	-.085	-.123	-.067	-.276
9	.378	.456	.431	1.000	.606	.002	-.119	-.090	-.067	-.089	-.032	-.123	-.101	-.057	-.104
10	.542	.604	.557	.606	1.000	-.088	-.144	-.140	-.016	-.114	-.034	.028	-.104	.031	-.183
11	-.123	-.175	-.156	.002	-.088	1.000	.608	.761	.507	.378	.457	.512	.597	.463	.488
12	-.169	-.228	-.205	-.119	-.144	.608	1.000	.700	.606	.392	.531	.524	.511	.486	.518
13	-.163	-.267	-.246	-.090	-.140	.761	.700	1.000	.580	.513	.510	.536	.591	.534	.572
14	-.035	-.103	-.031	-.067	-.016	.507	.606	.580	1.000	.450	.555	.566	.621	.524	.356
15	-.153	-.207	-.190	-.089	-.016	.507	.606	.580	.450	1.000	.570	.478	.496	.395	.382
16	-.136	-.137	-.057	-.032	-.034	.457	.531	.510	.555	.570	1.000	.625	.579	.522	.428
17	-.067	-.072	-.085	-.123	.028	.512	.524	.536	.566	.478	.625	1.000	.701	.663	.355
18	-.104	.597	.511	.591	-.101	-.138	-.090	-.101	.621	.496	.579	.701	1.000	.648	.373
19	.031	.463	.486	.534	-.067	-.057	.005	.524	.395	.522	.663	.511	.648	1.000	.310

*Correlation significant at 0.05%.

Table 13

Intercorrelations of the items of the Student Engagement Survey (SES), Continued

Question	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
20	.556	.640	.492	.562	.418	.000	.280	.000	.000	.000	.000	.000	.000	.000	.000	.000
21	1.000	.519	.551	.618	.465	.419	-.077	.296	.239	.459	.333	.313	.277	.303	.429	.227
22	.519	1.000	.498	.527	.323	.270	-.031	.329	.372	.417	.231	.206	.292	.227	.473	.181
23	.551	.498	1.000	.472	.364	.447	-.018	.189	.206	.355	.315	.311	.228	.206	.269	.218
24	.618	.527	.472	1.000	.530	.508	-.089	.238	.312	.355	.281	.200	.182	.250	.349	.197
25	.465	.323	.364	.530	1.000	.744	.144	-.120	.120	.284	.300	.320	.268	.252	.384	.210
26	.419	.270	.447	.508	.744	1.000	.130	.070	.100	.168	.291	.318	-.129	.232	.273	.239
27	-.077	-.031	-.018	-.089	.144	.130	1.000	.196	.006	-.011	.055	.035	.068	.024	.039	.064
28	.296	.329	.189	.238	.120	.070	-.196	1.000	.647	.310	.133	.135	.255	.207	.353	.127
29	.239	.372	.206	.312	.120	.100	.006	.647	1.000	.267	.119	.123	.229	.182	.315	.155
30	.459	.417	.355	.355	.284	.168	-.011	.310	.267	1.000	.376	.285	.342	.222	.449	.341
31	.333	.231	.315	.281	.300	.291	.055	-.133	.119	.376	1.000	.445	.303	.342	.307	.390
32	.313	.206	.311	.200	.320	.318	.035	.135	.123	.285	.445	1.000	.366	.430	.266	.216
33	.277	.227	.206	.250	.252	.129	.068	.255	.229	.342	.303	.366	1.000	.314	.428	.144
34	.303	.473	.269	.349	.384	.232	.024	.207	.182	.222	.342	.430	.314	1.000	.461	.158
35	.429	.473	.269	.349	.384	.273	.039	.353	.315	.449	.307	.266	.428	.461	1.000	.258
36	.003	.181	.218	.197	.210	.239	.064	.127	.155	.341	.390	.216	.144	.158	.258	1.000

*Correlation significant at 0.05%.

Appendix I

Table 14

Oblique Rotation: Factor Loadings

Factor	1	2	3	4	5	6	7	Communi- nality
Attachment to environment								
Question 11	.718	.048	-.151	.205	-.023	.203	-.033	.631
Question 12	.739	-.035	-.199	.146	.025	.168	.004	.644
Question 13	.776	-.045	-.216	.222	.041	-.135	-.151	.744
Question 14	.721	.213	.172	.030	.063	-.155	.238	.680
Question 15	.599	-.039	-.126	.317	-.100	-.185	-.249	.583
Question 16	.694	.123	-.199	.243	-.118	-.071	-.052	.617
Question 17	.685	.199	-.396	.142	-.229	-.093	.132	.764
Question 18	.748	.161	-.303	.042	-.177	-.138	.030	.730
Question 19	.629	.250	-.440	.018	-.075	-.121	.125	.688
Question 20	.706	-.132	.078	-.012	.337	.249	.046	.700
Question 21	.732	-.013	.068	-.215	.136	.181	-.027	.640
Question 22	.664	-.123	.164	.029	.253	.287	.019	.631
Question 23	.631	.033	-.014	-.264	.161	.139	.141	.534
Question 24	.702	-.058	-.029	-.245	.328	.135	.019	.683
Question 25	.592	.244	.058	-.394	.312	-.291	-.064	.754
Question 26	.579	.277	-.114	-.434	.302	-.319	.054	.810
Question 30	.595	-.090	.279	.041	-.173	.210	.183	.549
Question 35	.589	-.068	.421	-.029	-.094	-.066	-.089	.551
Outside barriers								
Question 6	-.225	.697	.017	.031	.144	.151	-.033	.582
Question 7	-.284	.734	.042	-.009	.118	.132	.004	.653
Question 8	-.270	.684	.052	.005	-.082	.162	-.002	.576
Question 9	-.180	.646	.194	.339	.185	.102	-.051	.649
Question 10	-.222	.778	-.015	.202	.120	.179	-.048	.745
Use of counseling services								
Question 36	.400	.244	.053	-.004	-.323	.101	.635	.740

Appendix J

Table 15

Varimax Versus Oblique Rotation of Items

	Model 1	Model 2
	Varimax rotation (orthogonal) items	Oblique rotation (non-orthogonal) items
Academic engagement	11, 12, 13, 14, 15, 16, 17, 18, 19	
Attachment to environment	20, 21, 22, 23, 24	11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 30, 35
Outside barriers	6, 7, 8, 9, 10	6, 7, 8, 9, 10
Use of campus resources	31, 32, 33, 34, 35	
Participation in campus resources	25, 26	
Commitment to complete	27, 28, 29	
Use of counseling services	36	36

Appendix K

Steps to Developing the Student Engagement Survey

1. Review the literature in the area of student engagement, including CCSSE and other instruments.
2. Develop a list of subscales for the instrument to measure (academic engagement, attachment to environment, use of campus resources, participation in campus events, outside barriers, commitment to complete, and use of counseling services).
3. Develop operational definitions for each area identified above and establish purpose of the survey questionnaire.
4. Write and draft items for survey (look at nationally normed instruments, etc.). Make sure to consult research questions to see if the items will answer the research questions.
5. Establish scale and response format for survey questionnaire (Likert-type items are most frequently asked on a survey, including demographic questions).
6. Ask expert opinions (panel of experts will match the operational definitions with their appropriate content domains).
7. Test the survey to establish reliability and validity of the instrument (exploratory factor analysis and confirmatory factor analysis). Calculate Cronbach's alpha coefficients for reliability. Analyze Likert-scale data by creating a composite score from the series of questions that represented the scale to be measured. Create factor scales from the survey by summing scores by factor.
8. Administer the instrument to the main sample.

Appendix L

Table 16

Student Engagement Survey Scoring in SPSS

Variable	Coding/SPSS
First-year seminar completion	
First-year seminar (FYE) completion	1 = completed FYE, 2 = did not complete FYE
First-year seminar semester	1 = fall 2013, 2 = summer 2013, 3 = spring 2013, 4 = fall 2012, 5 = summer 2012, 6 = spring 2012, 7 = other semester and year, 9 = none
First-year seminar satisfaction	1 = very satisfied, 2 = somewhat satisfied, 3 = neither satisfied nor dissatisfied, 4 = somewhat dissatisfied, 5 = very dissatisfied, 9 = none
First-year seminar at another school	1 = yes, 2 = no
First-year seminar semester at another school	1 = fall 2013, 2 = summer 2013, 3 = spring 2013, 4 = fall 2012, 5 = summer 2012, 6 = spring 2012, 7 = other semester and year, 8 = institution at which seminar was completed, 9 = none
Outside influences/barriers	
Likelihood that holding a full- or part-time job would lead to withdrawal	1 = very likely, 2 = somewhat likely, 3 = neither nor unlikely, 4 = somewhat unlikely, 5 = very unlikely
Likelihood that caring for a dependent would lead to withdrawal	1 = very likely, 2 = somewhat likely, 3 = neither nor unlikely, 4 = somewhat unlikely,

Likelihood that lack of academic preparation would like to withdrawal	5 = very unlikely 1 = very likely, 2 = somewhat likely, 3 = neither nor unlikely, 4 = somewhat unlikely, 5 = very unlikely
Likelihood that financial issues would lead to withdrawal	1 = very likely, 2 = somewhat likely, 3 = neither nor unlikely, 4 = somewhat unlikely, 5 = very unlikely
Participation in course and on campus	
Asked questions in class discussions	1 = very often, 2 = often, 3 = sometimes, 4 = never
Collaborated on student projects in class	1 = very often, 2 = often, 3 = sometimes, 4 = never
Engaged in classroom discussions with instructor	1 = very often, 2 = often, 3 = sometimes, 4 = never
Collaborated with classmates on projects outside of class	1 = very often, 2 = often, 3 = sometimes, 4 = never
Used email to communicate with instructor	1 = very often, 2 = often, 3 = sometimes, 4 = never
Discussed career plans with instructor	1 = very often, 2 = often, 3 = sometimes, 4 = never
Discussed course readings with instructor outside of class	1 = very often, 2 = often, 3 = sometimes, 4 = never
Discussed course readings with other students outside of class	1 = very often, 2 = often, 3 = sometimes, 4 = never
Discussed issues with instructor that did not relate to class	1 = very often, 2 = often,

	3 = sometimes, 4 = never
Felt sense of belonging at JCTC	1 = strongly agree, 2 = somewhat agree, 3 = neither agree nor disagree, 4 = somewhat disagree, 5 = strongly disagree
Interacted with other students outside of class	1 = strongly agree, 2 = somewhat agree, 3 = neither agree nor disagree, 4 = somewhat disagree, 5 = strongly disagree
Encouraged by instructors to study more	1 = strongly agree, 2 = somewhat agree, 3 = neither agree nor disagree, 4 = somewhat disagree, 5 = strongly disagree
Received assistance from instructors to help cope with nonacademic responsibilities	1 = strongly agree, 2 = somewhat agree, 3 = neither agree nor disagree, 4 = somewhat disagree, 5 = strongly disagree
Developed close relationships with other students	1 = strongly agree, 2 = somewhat agree, 3 = neither agree nor disagree, 4 = somewhat disagree, 5 = strongly disagree
Attended student events	1 = strongly agree, 2 = somewhat agree, 3 = neither agree nor disagree, 4 = somewhat disagree, 5 = strongly disagree
Participated in campus clubs	1 = strongly agree, 2 = somewhat agree, 3 = neither agree nor disagree, 4 = somewhat disagree, 5 = strongly disagree
Concerned about ability to pay for education	1 = strongly agree, 2 = somewhat agree, 3 = neither agree nor disagree, 4 = somewhat disagree, 5 = strongly disagree
Feels graduating from college is important	1 = strongly agree, 2 = somewhat agree, 3 = neither agree nor disagree, 4 = somewhat disagree,

Feels strong commitment to completing degree/certificate/diploma	5 = strongly disagree 1 = strongly agree, 2 = somewhat agree, 3 = neither agree nor disagree, 4 = somewhat disagree, 5 = strongly disagree
Use of campus resources	
Academic advising	1 = 4 or more times, 2 = 1 to 3 times, 3 = have not used/0 times
Career planning (CREW Center)	1 = 4 or more times, 2 = 1 to 3 times, 3 = have not used/0 times
Tutoring center	1 = 4 or more times, 2 = 1 to 3 times, 3 = have not used/0 times
Writing center	1 = 4 or more times, 2 = 1 to 3 times, 3 = have not used/0 times
Math lab	1 = 4 or more times, 2 = 1 to 3 times, 3 = have not used/0 times
Campus library	1 = 4 or more times, 2 = 1 to 3 times, 3 = have not used/0 times
Counseling center	1 = 4 or more times, 2 = 1 to 3 times, 3 = have not used/0 times
Demographic items	
Gender identity	1 = female, 2 = male, 3 = other, 4 = transgender
Race/ethnicity	1 = African American, 2 = Asian American, 3 = Caucasian, 4 = Native American, 5 = Native Hawaiian, 6 = Hispanic/Latino
Age	1 = under 18, 2 = 18-24, 3 = 25+
Current enrollment status	1 = full time, 2 = part time
Weekly hours worked on or off campus	1 = I do not have a job, 2 = 1-10 hours off campus,

	3 = 11-20 hours off campus, 4 = 21-30 hours off campus, 5 = 31-40 hours off campus, 6 = 40+ hours off campus, 7 = 1-10 hours on campus, 8 = 11-20 hours on campus, 9 = 21-30 hours on campus
Plans to return to JCTC in following semester	1 = yes, 2 = no
Highest academic/educational goal	1 = non-degree seeking, 2 = certificate, 3 = diploma, 4 = two-year degree, 5 = bachelor's degree, 6 = graduate/professional degree
First person in family to go to college	1 = yes, 2 = no
Need financial aid to continues at JCTC (If yes, did student receive financial aid)	1 = yes, 2 = no (1 = fall 2013, 2 = Spring 2014, 3 = no)

Appendix M

Table 17

Rotated Factor Matrix of the Student Engagement Scale (N = 288)

Factor	1	2	3	4	5	6	7	Communi- nality
Academic engagement								
Question 11	.635	.441	-.021	.141	-.053	.076	.063	.631
Question 12	.631	.467	-.115	.096	.011	.058	-.034	.644
Question 13	.705	.458	-.120	.102	-.005	.104	-.037	.744
Question 14	.697	.186	.007	.294	.267	.009	-.035	.680
Question 15	.669	.077	-.150	.205	.009	.215	-.136	.583
Question 16	.725	.183	-.028	.150	.067	.143	.103	.617
Question 17	.793	.100	-.027	.022	.145	-.002	.320	.764
Question 18	.754	.156	-.083	.144	.237	-.002	.230	.730
Question 19	.712	.135	.026	-.054	.300	-.059	.257	.688
Attachment to environment								
Question 20	.278	.728	-.133	.098	.145	.207	.032	.700
Question 21	.315	.612	-.123	.283	.243	.001	.106	.640
Question 22	.241	.692	-.108	.178	.045	.216	.043	.631
Question 23	.250	.542	-.090	.135	.319	-.021	.222	.534
Question 24	.281	.660	-.147	.108	.365	.028	.040	.683
Outside barriers								
Question 6	-.068	-.045	.747	-.024	.068	-.105	.000	.582
Question 7	-.127	-.096	.776	-.016	.088	-.124	.042	.653
Question 8	-.084	-.159	.700	.072	-.034	-.182	.122	.576
Question 9	-.026	-.056	.766	.031	-.078	.215	-.076	.649
Question 10	.034	-.078	.856	-.054	-.034	-.043	-.011	.745
Use of campus resources								
Question 31	.203	.097	.052	.520	.119	-.037	.537	.628
Question 32	.057	.121	.086	.693	.200	-.056	.186	.583
Question 33	.286	.116	.059	.684	-.115	.182	-.143	.633
Question 34	.070	.097	-.017	.695	.142	.053	.066	.526
Question 35	.189	.279	-.179	.565	.098	.263	.081	.551

Participation in campus events								
Question 25	.235	.305	.027	.279	.725	.044	-.016	.754
Question 26	.293	.262	.025	.131	.794	-.029	.084	.810
Commitment to complete								
Question 27	.044	-.306	.355	-.013	.377	.584	.032	.706
Question 28	.101	.213	-.198	.163	-.021	.778	.065	.731
Question 29	.125	.331	-.186	.108	-.094	.670	.053	.633
Use of counseling services								
Question 36	.221	.121	.082	.090	.031	.109	.805	.740

Appendix N

Table 18

Summary of Statistical Analyses to Be Used in the Study

Question	Variables		
	Independent variable	Dependent variable	Analysis
1. Is there a difference in academic engagement between students who completed the first-year seminar and students who did not complete the first-year seminar?	Attendance in first-year seminar (nominal/categorical) with two levels: attended = 1, not attended = 0; Gender: female = 1, male = 2; Age: 18-24 = 1, 25+ = 2; Race/ethnicity: African American = 1, Caucasian/White = 2; Enrollment status: full time = 1, part time = 2	Academic engagement (continuous/interval)	MANOVA
2. Is there a difference in attachment to the environment between students who completed the first-year seminar and students who did not complete the first-year seminar?	Attendance in first-year seminar (nominal/categorical) with two levels: attended = 1, not attended = 0; Gender: female = 1, male = 2; Age: 18-24 = 1, 25+ = 2; Race/ethnicity: African American = 1, Caucasian/White = 2; Enrollment status: full time = 1, part time = 2	Attachment to environment (continuous/interval)	MANOVA
3. Is there a difference in the commitment to complete the degree between students who completed the first-year seminar and students who did not complete the first-year seminar?	Attendance in first-year seminar (nominal/categorical) with two levels: attended = 1, not attended = 0; Gender: female = 1, male = 2; Age: 18-24 = 1, 25+ = 2; Race/ethnicity: African American = 1, Caucasian/White = 2; Enrollment status: full time = 1, part time = 2	Commitment to complete (continuous/interval)	MANOVA

4. Is there a difference in attendance to campus events between students who completed the first-year seminar and students who did not complete the first-year seminar?	Attendance in first-year seminar (nominal/categorical) with two levels: attended = 1, not attended = 0; Gender: female = 1, male = 2; Age: 18-24 = 1, 25+ = 2; Race/ethnicity: African American = 1, Caucasian/White = 2; Enrollment status: full time = 1, part time = 2	Participation in campus events (continuous/interval)	MANOVA
5. Is there a difference in use of the counseling center between students who completed the first-year seminar and students who did not complete the first-year seminar?	Attendance in first-year seminar (nominal/categorical) with two levels: attended = 1, not attended = 0; Gender: female = 1, male = 2; Age: 18-24 = 1, 25+ = 2; Race/ethnicity: African American = 1, Caucasian/White = 2; Enrollment status: full time = 1, part time = 2	Use of counseling resources (continuous/interval)	MANOVA
6. Does a significant difference exist in use of campus resources (e.g., advising, counseling center, etc.) between students who completed the first-year seminar and who did not complete the first-year seminar?	Attendance in first-year seminar (nominal/categorical) with two levels: attended = 1, not attended = 0; Gender: female = 1, male = 2; Age: 18-24 = 1, 25+ = 2; Race/ethnicity: African American = 1, Caucasian/White = 2; Enrollment status: full time = 1, part time = 2	Use of campus resources (continuous/interval)	MANOVA
Do outside barriers have less of an effect on students who completed the first-year seminar compared to those who did not complete the first-year seminar?	Attendance in first-year seminar (nominal/categorical) with two levels: attended = 1, not attended = 0; Gender: female = 1, male = 2; Age: 18-24 = 1, 25+ = 2; Race/ethnicity: African American = 1, Caucasian/White = 2; Enrollment status: full time = 1, part time = 2	Outside barriers (continuous/interval)	MANOVA

Note. All research questions and hypotheses assume that age, gender identity, race/ethnicity, and enrollment status are controlled.

CURRICULUM VITA

NAME: M. Kaye Lafferty

ADDRESS: Jefferson Community and Technical College
Technical Campus
727 West Chestnut Street, Building B Room 109
Louisville, KY 40203

DOB: February 16, 1964

EDUCATION & TRAINING:

B.A., Psychology
Western Kentucky University
1982-86

M.A., Education
Western Kentucky University
1987-89

Ed.S., Education
Western Kentucky University
1989-94

Ph.D., Counseling and Personnel Services
University of Louisville
2005-2014

PROFESSIONAL SOCIETIES:

Kentucky Counseling Association
Kentucky Academic Advising Association
College Personnel Association of Kentucky
Kentucky Career Development Association
American Association for Women in Community Colleges
Association for Kentucky Advocates for Higher Education

PRESENTATIONS: "Changing Workplace: Employment Trends in Career and
Technical Education." Accelerating Opportunity Kentucky
Program, 2014.

- “Advising without Walls: An Introduction to Facebook as an Advising Tool (E-advising).” Kentucky Counseling Association, 2011.
- “Creating a Successful Learner/Student Centered Advising Approach for Underprepared Students.” KCTCS New Horizon Conference, 2008.
- “Thinking Outside the Cell: Educational Opportunities for Ex-Offenders.” Louisville Metro Job Task Force Job Fair, 2007.
- “Examining the National Reentry Process: A Development, Recruitment, and Enhancement Effort.” Kentucky State Pre-Release Program. 2007.
- “Kentucky Prison to the Streets: Pre-Release Statistical Data Analysis and Best Practices in Reentry Efforts.” North American Association of Wardens and Superintendents and the Kentucky Council on Crime and Delinquency Conference, 2006.
- “Building Partnerships: Correctional Education Programs.” Kentucky Career and Technical Conference and Corrections Education Association Ohio Conference, 2006.