CONCURRENT ENROLLMENT AT A FAITH-BASED LIBERAL ARTS COLLEGE:
STUDENT BEHAVIOR AND POLICY CONSIDERATIONS

DISSERTATION
SUBMITTED TO
The School of Education and Allied Professions
THE UNIVERSITY OF DAYTON

In Partial Fulfillment of the Requirements for
The Degree
Doctor of Philosophy in Educational Leadership
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THE UNIVERSITY OF DAYTON
DAYTON, OHIO
AUGUST 2011
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The purpose of this study was to produce findings and conclusions that could inform future policy decisions on concurrent enrollment at Cedarville University specifically and at other institutions generally. The study population consisted of Cedarville University students who met the following 2 criteria in the fall semester of the 2009-2010 academic year: (a) they were seniors; (b) they had completed transfer credit through concurrent enrollment at another institution after initial enrollment at Cedarville University. The entire study population was invited to participate in the study; 137 of 258 completed the Transfer Credit Questionnaire.

Findings of the study were: (1) the percentage (53%) of study participants that transferred 10 or more credits through concurrent enrollment appears to be typical; (2) study participants reported considerable variation in the range of individual transfer
credits earned through concurrent enrollment; (3) approximately $1.3 million in lost tuition revenue resulted from the 2,056 semester hours that study participants completed at institutions other than Cedarville University; (4) community/technical colleges were a popular choice for concurrent enrollment; (5) the most common reason for concurrent enrollment was lower tuition costs at other institutions; (6) respondents indicated that a highly restrictive transfer credit policy would have discouraged them from enrolling at Cedarville University. Implications of these findings for policy and further research were discussed.
ACKNOWLEDGEMENTS

A heartfelt thank you to several individuals who supported me in this process. Dr. Kowalski, the chair of my committee, thank you for the many hours you dedicated to reviewing my chapter drafts and providing guidance. Reaching this point was not easy and I thank you for your patience and constant encouragement. My parents, thank you for challenging me to pursue higher education and for your continued support. Last and certainly not least; Chrystie, my wife, thank you for challenging me and encouraging me to persist. You sacrificed many hours to help make this possible and I am truly grateful for your support and prayers.
TABLE OF CONTENTS

CHAPTER

I. INTRODUCTION .............................................................................................................. 1

  Statement of the Problem ................................................................. 3
  Purpose and Research Questions .................................................. 4
  Significance of the Study ............................................................ 5
  Methodology .................................................................................. 6
    Study Population ........................................................................ 6
    Procedure ................................................................................. 6
  Definition of Terms ...................................................................... 7
  Limitations .................................................................................... 10
  Organization of Study ............................................................... 10

II. REVIEW OF THE LITERATURE ................................................................................. 11

  Introduction .................................................................................... 11
  This History of Transfer Credit .................................................. 11
    The Curriculum Unit .............................................................. 12
    Credit Hour ................................................................................ 13
  Early Transfer Credit Research (1970s – 1980s) ........................... 13
  Increase in Transfer and Concurrent Enrollment (1990 – present) .................................................. 15
    Transfer from 2-Year Colleges to 4-Year Colleges ... 16
    Reverse Transfer ....................................................................... 16
    Increase in Transfer Credit Attainment ................................. 17
    Emergence of Transfer Credit Attainment through Concurrent Enrollment ................................................................. 18
  Transfer Credit and Student Choice ........................................... 21
    On-line Access and Educational Quality ................................. 21
    Cost ......................................................................................... 24
    Time to Degree Completion ..................................................... 25
  University Governance ............................................................... 26
    Fiscal Policy .............................................................................. 27
    Student Transfer Policy ........................................................... 28
  Cedarville University ................................................................. 29
    Degree Requirements ............................................................. 29
    Cedarville University Governance ........................................ 29
APPENDICES ............................................................................................................... 81
Appendix A. Cedarville University Letter of Approval ....................... 81
Appendix B. University of Dayton Institutional Review Board Approval ................................................................................................ 82
Appendix C. Transfer Credit Questionnaire .......................................... 83
Appendix D. Letter to Study Population ............................................... 86
LIST OF TABLES

Table 1: Concurrent Enrollment at Cedarville University
Table 2: Research Questions and Related Data Analysis Procedures
Table 3: Distribution of Hours Transferred by Degree Curricular Categories \( (n = 137) \)
Table 4: Distribution of Hours Transferred by Gender \( (n = 137) \)
Table 5: Distribution of Hours Transferred by Host Academic Department \( (n = 137) \)
Table 6: Institutions where Transfer Credit was Earned \( (n = 137) \)
Table 7: Respondents Earning Transfer Credit at Multiple Types of Institutions \( (n = 33) \)
Table 8: Academic Status of Respondents when Concurrent Enrollment Occurred \( (n = 137) \)
Table 9: Timing of when Concurrent Enrollment Occurred, Fall Semester \( (n = 64) \)
Table 10: Timing of when Concurrent Enrollment Occurred, Spring Semester \( (n = 36) \)
Table 11: Timing of when Concurrent Enrollment Occurred, Summer Term \( (n = 99) \)
Table 12: Respondents who Concurrently Enrolled during Multiple Academic Statuses \( (n = 117) \)
Table 13: Instructional Format Encountered in Concurrent Enrollment Courses \( (n = 137) \)
Table 14: Respondents who Encountered Two or Three Instructional Formats in Concurrent Enrollment Courses \( (n = 56) \)
Table 15: Reasons for Concurrent Enrollment \( (n = 137) \)
Table 16: Institution Type where Concurrent Enrollment Occurred Selected by Students Whose Designated Intent was “Lower Tuition Costs at Another Institution” \( (n = 111) \)
Table 17: Institution Type where Concurrent Enrollment Occurred Selected by Students Whose Designated Intent was “Convenience” (n = 68)

Table 18: Institution Type where Concurrent Enrollment Occurred Selected by Students Whose Designated Intent was “Wanted to Avoid a Course or Courses at Cedarville University” (n = 44)

Table 19: Institution Type where Concurrent Enrollment Occurred Selected by Students Whose Designated Intent was “Needed to Complete Transfer Credit in Order to Graduate from Cedarville University in Four Years” (n = 43)

Table 20: Institution Type where Concurrent Enrollment Occurred Selected by Students Whose Designated Intent was “Other” (n = 27)

Table 21: Institution Type where Concurrent Enrollment Occurred Selected by Students Whose Designated Intent was “Desired to Experience Another Institution” (n = 15)

Table 22: Institution Type where Concurrent Enrollment Occurred Selected by Students Whose Designated Intent was “Course(s) Not Offered at Cedarville University” (n = 9)

Table 23: Respondent Level of Agreement Regarding Three Possible Policies for Restricting Transfer Credit at Cedarville University (n = 137)

Table 24: Respondent Prior College Attendance (n = 137)

Table 25: Respondents’ Academic Majors Categorized by Host Departments (n = 137)
CHAPTER I

INTRODUCTION

The literature on higher education indicates that increasing levels of transfer credit are the product of a recent trend known as student swirl. According to McCormick (2003), student swirl occurs when students compile multiple transfer credits from various institutions and through various means in pursuit of their degree program. Adelman (1999) explained that some students view their postsecondary experience as a “shopping mall” adventure where they can piece together degree programs by picking and choosing from any number of institutions.

A variety of terms are used in the literature to explain student swirl patterns. For instance, the pattern of transfer credit activity occurring at Cedarville University (a private, medium sized, 4-year, faith-based liberal arts institution in the Midwest), is defined in the literature as concurrent enrollment. Concurrent enrollment occurs when a degree-seeking student is attending his or her primary institution and completes transfer credit from another institution in an attempt to supplement or accelerate his or her degree pursuits (Adelman, 2004; De los Santos & Wright, 1990).

Longanecker and Blanco (2003) asserted that transfer credit activities are encouraged by liberal transfer credit policies intended to attract and retain students who desire flexibility in earning credits. According to the associate registrar at Cedarville University, this institution had no university-wide transfer credit policy statement when
this study was conducted (K. R. Linafelter, personal communication, December 5, 2009). Although no formal policy exists, the institution does require that students receive a “C” or above in courses they desire to transfer. Consequently, transfer credit was approved or disapproved on a case-by-case basis.

One reason why students are typically discouraged from completing transfer credit through concurrent enrollment is because private colleges depend on tuition revenues to cover instructional and operating expenses. Thus, private institutions often discourage concurrent enrollment by instituting a block tuition policy that charges students one price for a semester regardless of the number of credit hours taken. The alternative approach to block tuition is per credit hour tuition that charges students a fixed per credit hour fee. At the time of this study, Cedarville University had a per credit hour pricing model.

The Transfer Credits Earned Through Concurrent Enrollment Report, produced by the Registrar’s office at Cedarville University indicated that 42.0% (280/667) of the 2003 graduating class had earned transfer credit hours via concurrent enrollment (Campbell, 2009). Further analysis revealed that in the subsequent 7 years the percentage of graduates who had engaged in concurrent enrollment remained relatively constant with the average (mean) for the period being 44.5%. In 2009, 47% of the baccalaureate graduates had completed transfer credits through concurrent enrollment.

At the time of this study, the Cedarville University administration, concerned about the level of concurrent enrollment, was considering enacting policies to restrict the practice. The university provost said that “alarming” numbers of Cedarville University students had attained credits through a “cafeteria” approach resulting in a
loss of tuition revenue. In addition to considering block tuition, the institution was considering expanding on-line course offerings and strengthening university course offerings to high school students (J. Gredy, personal communication, July 30, 2009). The associate vice president for academics affirmed that the university was “continually reviewing” and studying the problem (A. Runyan, personal conversation, July 28, 2009).

Statement of the Problem

Recognizing a relatively constant pattern of concurrent enrollment between 2002 and 2009, Cedarville University administrators were contemplating a critical question: Should they restrict concurrent enrollment to prevent a loss of tuition revenue? If they failed to adopt curtailment measures, data suggested that approximately 45% of students would continue to engage in concurrent enrollment, thus perpetuating or possibly increasing the level of tuition revenue losses. Plausibly, university officials had four alternatives for dealing with this issue.

1. They could adopt a policy prohibiting concurrent enrollment.
2. They could adopt a policy restricting the number of credits a student could transfer to Cedarville University.
3. They could adopt a block pricing policy in the hope of curtailing concurrent enrollment.
4. They could continue without adopting a policy in the hope that the level of concurrent enrollment would subside.
Each of the first three alternatives potentially could have reduced tuition losses; however, each included risk. Specifically, prohibiting or curtailing concurrent enrollment could discourage some students from attending Cedarville University. The last alternative arguably entails the greatest risk because it is a non-managerial approach to the problem.

Logically, high-risk policy decisions should be made rationally; that is, to the extent possible, administrators should rely on data and other forms of empirical evidence (Kowalski, Lasley, & Mahoney, 2008). In order to do this, Cedarville University administrators would have to objectively answer two essential questions: Why do students engage in concurrent enrollment? Would a policy prohibiting, restricting, or discouraging concurrent enrollment affect enrollments at Cedarville University? At the time of this study, data necessary to answer these two pivotal queries had not been accumulated and analyzed.

Purpose and Research Questions

The population study included Cedarville University students classified as seniors during the fall semester of the 2009-2010 academic year who had previously engaged in concurrent enrollment. The intent was to acquire data that would facilitate the efforts of Cedarville University officials to make an informed policy decision related to concurrent enrollment.

The following research questions guided this study:

1. How much transfer credit was completed by members of the study population through concurrent enrollment generally and in curricular
categories (general education, electives, academic minor, and academic major) specifically?

2. At which types of institutions did members of the study population earn transfer credit?

3. At what points during their baccalaureate program did members of the study population engage in concurrent enrollment?

4. What instructional formats did the members of the study population experience during concurrent enrollment?

5. Why did members of the study population engage in concurrent enrollment?

6. Would policy prohibiting, restricting, or discouraging concurrent enrollment have influenced students’ decisions to enroll at Cedarville University?

7. What are the demographic characteristics (gender, enrollment history, and academic major) of the study population?

Significance of the Study

Findings and conclusions reported in this study have value for at least two reasons. First, they contribute to the knowledge base on student behavior in higher education. Second, they provide data for Cedarville University administrators who have a responsibility to shape future policy on transfer credit, student recruitment and retention, and fiscal management.
Methodology

Study Population

The study population was defined as Cedarville University students who met the following two criteria in the fall semester of the 2009-2010 academic year: (a) they were seniors; (b) they had completed transfer credit through concurrent enrollment at another institution after initial enrollment at Cedarville University. The Cedarville University Registrar’s Office provided the names, student identification numbers, and e-mail addresses of the students who met these criteria.

Procedure

Guided by a literature review, the researcher developed a survey instrument to obtain data necessary to answer the research questions. The questionnaire included 12 items. In an effort to establish clarity and content validity (Krathwohl, 1998), the survey instrument was reviewed by a panel of experts including John Gredy, provost, Cedarville University; A. William Place, associate professor of educational leadership, University of Dayton; and Joanne Risacher, assistant professor of educational leadership, Wright State University.

The study population members were initially contacted by the researcher through a letter transmitted via campus e-mail. The letter described the study, ensured respondents their answers would remain confidential, and contained a Web-hosted electronic link to the survey instrument. Responses were electronically recorded and transferred to the Statistical Package for Social Sciences software (SPSS) for analysis. Descriptive statistics (frequency distributions, means, standard deviations, minimum
and maximum values, frequency counts and percentages) were calculated and used to answer the research questions.

**Definition of Terms**

The following terms were operationally defined for this study:

An *academic major* is a student’s main field of study or specialization during the course of an undergraduate program (Cedarville University, 2007; Rudolph, 1977).

An *academic minor* is a student’s secondary field of study or specialization during the course of an undergraduate program (Cedarville University, 2007; Rudolph, 1977).

The term *another institution* describes a college or university other than Cedarville University.

*Block tuition* is a pricing structure that charges a student a set amount regardless of the number of credit hours taken within a determined range of credit hours. The typical range of credits hours for undergraduate students under block pricing is 12-18 semester hours.

*Concurrent enrollment* occurs when a degree-seeking student is attending his or her primary institution and completes transfer credit from another institution in an attempt to supplement or accelerate his or her degree pursuits (Adelman, 1999, 2004; De los Santos & Wright, 1990; Gose, 1995; McCormick, 2003). Concurrent enrollment may occur during the traditional academic year and during summer terms.

An academic *credit hour* is the unit of measurement awarded to a student for satisfactorily completing coursework. One credit hour is typically defined as one hour
of classroom instruction per week during each week of a 14-15 week semester (Ehrlich & Wellman, 2003; Shedd, 2003).

*Curriculum* represents the set of courses and requirements that must be satisfactorily completed by a student in order to earn a degree. At Cedarville University, the curriculum is established by the faculty and complies with standards set forth by accrediting bodies (Cedarville University, 2007).

An *elective course* is a course that is chosen by a student from several course options. Most curriculums allow elective courses, and thereby credit hours assigned to these courses, to be completed by students and counted towards their degree (Cedarville University, 2007; Rudolph, 1977).

A *faith-based institution* is an institution whose mission and purpose is focused on the beliefs and practices of a religious faith or conviction (Barr, 2000).

A *4-year college or university* is defined as a higher education institution where baccalaureate degrees are awarded (Carnegie Foundation, 2011).

A *full-time student* at Cedarville University is defined as a student who is enrolled in 12 or more semester credits (Cedarville University, 2007).

*General education* represents the core classes required of all students as set forth in the curriculum. Students in all academic majors and academic minors are required to complete the same general education courses (Cedarville University, 2007).

A *liberal arts college* offers a broad based post-secondary education that includes the study of classical disciplines (i.e., humanities) and technical, career focused disciplines (i.e., engineering, nursing; Cundiff, 1982).
An academic *linear path* occurs when a student is following his or her degree completion guidelines at his or her primary institution in a linear fashion. Students who complete linear paths typically take 4-5 years to complete their degree program (Adelman, 1999, 2004).

The *Midwest* is comprised of 12 states in the north-central United States: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin (U.S. Census, 2010).

A *medium sized institution* is defined as an institution with 3,000-9,999 degree-seeking students (Carnegie Foundation, 2011).

*Reverse transfer* occurs when a student drops out of a 4-year higher education institution and enrolls as a full-time student in a 2-year higher education institution (Adelman, 1999).

A *private college* is operated and supported by private individuals or a corporation rather than by a government or public agency (Bastedo & Gumport, 2003).

A *senior* at Cedarville University is a student who has successfully completed 91 semester hours of instructional credit (Cedarville University, 2007)

*Stop out* occurs when a student drops out of an institution, takes at least one term off, and then returns to the same institution to complete his or her degree program (McCormick, 2003).

*Student retention* is a term used in higher education to describe the aggregate percentage of students who remain enrolled at an institution from one academic year to the next (Swann & Henderson, 1998).
Student swirl describes a process in which students take college credit from multiple institutions (De los Santos & Wright, 1990; Hoover, 2005; McCormick, 2003).

Transfer credit is credit completed at another institution that is subsequently accepted by the student’s primary institution (Swann & Henderson, 1998).

Limitations

This study was limited to investigating students at Cedarville University who engaged in concurrent enrollment. Moreover, the results are only representative of the respondents who participated in this study. Therefore, inferences to non-responders are not appropriate. Data validity was contingent on institutional records and the truthfulness of participant responses.

Organization of the Study

Chapter 2 includes a review of the literature on the historical development of transfer credit, current trends in student transfer, transfer policy, and student choice. Chapter 3 is devoted to explaining the research methods that were used to complete the study. Research findings are reported in chapter 4, and chapter 5 includes a summary of findings, the conclusions drawn from the findings, and recommendations.
CHAPTER II
REVIEW OF THE LITERATURE

Introduction

The literature review begins with a historical overview of the transfer credit function in higher education and is followed by a summary of student transfer, transfer policy, student choice, and university governance. The chapter concludes with a review of Cedarville University and its transfer credit policy.

The History of Transfer Credit

Policy on the transferability of courses has evolved over time and continues to be discussed, debated, and researched in higher education (Shedd, 2003). The start of this evolution, of course, had early beginnings that are rooted in the first American colleges.

American higher education has changed since its beginnings at Harvard in 1636. The curriculum in early American colleges placed an emphasis on the classics and was focused on providing students with a broad liberal arts education. The foundation of this experience was grounded in the ability of students to learn Latin and show proficiency in the classical works of literature. Since most of the students during this era were pursuing careers in the clergy or public service, this curriculum provided them with the necessary knowledge base (Cohen, 1998). A shift in the traditional liberal arts
curriculum occurred, however, during the 1800s when colleges and universities began to standardize instruction and coursework. This standardization was facilitated by the creation of the curriculum unit, which is now referred to in American higher education as the credit hour.

The Curriculum Unit

College enrollments began to grow during the late 1800s and college administrators needed a comprehensive picture of the curriculum that high school students were completing. In an effort to address this need, the National Education Association (NEA) appointed a committee during the 1890s titled the Ten on Secondary School Studies that was chaired by Charles Eliot, the president of Harvard University (Levine, 1978). This committee recommended and adopted the idea that curricular standards be set at the secondary level and measured by courses divided into units (Kreplin, 1971; Shedd, 2003).

The idea of the high school curriculum unit quickly transferred into the college curriculum with the formation of the Carnegie Foundation in 1906. The catalyst for this change was the offering of pension assistance to both K-12 educators and university professors by the foundation. In order to receive this assistance, educational institutions were required to adopt the new Carnegie system and organize their institutions to report the unit attainment of students and the number of units taught by instructors (Rudolph, 1977). Institutions were also categorized according to type and purpose during this period (Barrow, 1990).
Credit Hour

In 1910, Morris L. Cooke proposed new accounting and measurement procedures for higher education. Cooke asserted that standardized processes were needed so that institutions could be compared to one another. His proposal included the idea of the credit hour. The credit hour term was to become the unit of measurement used to determine student coursework loads, faculty teaching loads, and faculty research efforts (Barrow, 1990). Cooke believed that the credit hour could be used across institutions and would assist the Carnegie Foundation in determining where financial resources should be allocated (Cooke, 1910).

After Cooke’s proposal was adopted by the Carnegie Foundation, higher educational institutions quickly adopted the new measurement methods. Since its inception, the credit hour has been the standard measurement of course instruction and productivity in higher education.

Prior to the development of the credit hour, there was no systematic or standardized process by which a student could transfer a completed course from one institution to another. Though the intent was to use the credit hour to compare college productivity, the new measurement method also made it possible for students to more easily transfer credits from one institution to another (Shedd, 2003).

Early Transfer Credit Research (1970s – 1980s)

According to Leavitt (1995), who studied student transfer and assessment strategies, the earliest studies on student mobility were divided into two types. One type, such as Astin’s studies on student dropout in the 1970s, focused on student mobility from one institution to another institution (Astin 1975, 1977). In these studies, Astin described
how cultural and societal influences impacted student mobility and transfer. Factors such as institutional connectedness and student satisfaction were described as causes for student attrition among transfer students.

Leavitt (1995) also asserted that initial studies on student transfer tended to narrowly focus on degree-seeking students who were pursuing degrees on a linear path and then dropped out, stopped out, or transferred to another institution. In one study, for instance, Sandeen and Goodale (1976) examined enrollment behavior among a cohort of transfer students that were enrolled in a university sponsored transfer program. Despite institutional efforts to assist this cohort of transfer students, Sandeen and Goodale found that students in the cohort demonstrated high rates of attrition, mostly because of problems with transfer articulation and academic advising.

The second type of transfer study, as described by Leavitt (1995), focused on student mobility between 2-year and 4-year institutions. One explanation for the emergence of these studies was the growth of 2-year community colleges during the 1980s. Mosholder and Zirkle (2007), who conducted a historical review of the literature on transfer and transfer articulation, termed the 1970s – 1990s as the “growth years” in student transfer activity (p. 735). This growth came as a result of societal pressure to create schools and programs that would enable all classes of society to pursue a college degree. The logic behind the growth of 2-year colleges was simple; 2-year colleges would create a bridge to 4-year colleges, producing more college graduates (Cohen & Brawer, 1989).

As the number of 2-year colleges expanded, the mission and purpose of these 2-year colleges was also under examination, in part because 2-year colleges developed
alongside 4-year colleges and universities but their inclusion as respected and reputable institutions was not always validated in academia. In order to address this concern, research during this era called for stronger articulation agreements between 2-year and 4-year schools, higher academic standards in the 2-year college curriculum, and an increased emphasis on the liberal arts foundation for both 2-year and 4-year colleges (Cohen & Brawer, 1982).

In summary, early research on transfer credit primarily focused on 2-year to 4-year transfer, transfer between 4-year institutions, and transfer articulation. These studies acknowledged an increase in the amount of transfer credit students completed, leading to a higher number of college graduates who finished degree programs with credits from two or more institutions (Adelman, 1999; McCormick, 2003).

**Increase in Transfer and Concurrent Enrollment (1990 – present)**

Studying recent trends on transfer credit attainment in American higher education can be an exercise in futility given the multidimensional breadth of the topic. Recent literature on student transfer examines the academic credibility of transfer; the ease of transfer; and the influence of state and national government on transfer. Transfer credit is also being examined in terms of how it impacts various institutions, such as 2-year colleges and 4-year institutions.

For instance, in today’s colleges and universities, there are several ways that students transfer credit. Transfer occurs by students who move from 2-year to 4-year institutions, by students who move from one 4-year institution to another, by students who reverse transfer from a 4-year institution to a 2-year institution, and by
concurrently enrolled students who maintain enrollment at a primary institution while completing transfer credits at another institution (De los Santos & Wright, 1990; Leavitt, 1995; Sandeen & Goodale, 1976; Swenson, 1998). Given the complex nature of this topic and the angles at which it can be studied, it is no surprise that there are multiple paths that a researcher can examine.

Transfer from 2-Year Colleges to 4-Year Colleges

Student transfer is often examined in the context of analyzing how and when students transfer from 2-year institutions to 4-year institutions (Cohen & Brawer, 1989; Hoyt & Winn, 2004). This type of traditional transfer pattern is analyzed by looking at students that complete credits at a 2-year institution towards an associate degree, and then transfer their credits to a 4-year institution in pursuit of a baccalaureate degree. Today’s students, however, are often leaving 2-year institutions prior to completing associate degree requirements. Townsend and Barnes found that today’s students often enter the 2-year institution without intent to complete an associate degree (2001). Instead, students enter the 2-year institution with the intent of transferring to a 4-year program as soon as possible. A possible contributor to this phenomenon could be the increased efforts by state local governments to create policy and articulation agreements that assure the ease of transfer between 2-year and 4-year institutions (Wellman, 2002).

Reverse Transfer

Reverse transfer, where students began their degree program at a 4-year college but transferred to a 2-year college, is a term that was introduced by Heinze and Daniels in 1970. Sandeen and Goodale (1976) provided an example of this type of transfer when they documented the emergence of multiple transfer patterns. They described students...
who were moving from one 4-year institution to another, reverse transferring, and
double reverse transferring from one 4-year school to multiple 2-year schools. The
emergence and growth of 2-year schools made the evolution of transfer possible and in
many cases encouraged students to pursue multiple classes at multiple institutions.

*Increase in Transfer Credit Attainment*

Adelman (1999), in his federally funded research report titled, *Answers in the
Tool Box: Academic Intensity, Attendance Patterns, and Bachelor’s Degree Attainment*,
reported that levels of transfer activity were increasing in colleges and universities. His study analyzed longitudinal data from over 20,000 participants at
multiple types of institutions who were involved in the National Longitudinal Study of
the High School Class of 1972 (NLS:72) and the High School and Beyond Longitudinal
Study of 1980/High School Sophomores (HS&B/So.80-92). This study reported that
students shopped around for their academic credit and compiled their degree
requirements from various institutions. The HS&B/So.80-92 also reported that students
completed higher levels of transfer credit than in the past.

Adelman (2004) followed up his 1999 study with another report titled, *Principal Indicators of Student Academic Histories in Postsecondary Education*. This report
included data from the NLS:72, HS&B/So.80-92, and the National Education
Longitudinal Study of 1988 (NELS:88/2000), which when combined, examined the
academic histories of nearly 30,000 students. In this report Adelman cited that student
transfer continues to increase as evidenced by three longitudinal studies. Adelman
reported that results from the NELS:88/2000 indicated that 57% of students in the
survey completed credit from more than one institution. In comparison, the HS&B/So.80-92 reported only 51% and the NLS:72 reported 47%.

McCormick and Carroll (1999) also analyzed the HS&B/So.80-92 data which included transcripts from 8,400 students who graduated in 1982 and enrolled in a 4-year institution by 1992. Their report, titled Credit Production and Progress Towards the Bachelor’s Degree: An Analysis of Postsecondary Transcripts for Beginning Students at 4-Year Institutions, posited that bachelor degree attainers in the sample averaged 132 credits overall, and 130 credits at 4-year institutions. Ten percent of bachelor degree attainers had also earned credits from 2-year institutions, averaging 18 credits completed at the 2-year institution.

Other studies have also used the NLS:72, HS&B/So.80-92, and NELS:88/2000 data to look at the transfer credit function. Rab (2004), for instance, utilized the longitudinal data to investigate student swirl among students from lower socioeconomic backgrounds. Rab (2004) found that student swirl among students from lower socioeconomic backgrounds negatively impacted a student’s ability to complete a 4-year degree program. Cheng (1995) and West (1994) also analyzed the longitudinal data to gain insights on the transfer habits of community college students to degree granting institutions. Their findings revealed that student transfer was growing and that students were concurrently enrolling between institutions.

Emergence of Transfer Credit Attainment through Concurrent Enrollment

One of the first reported instances of concurrent enrollment was recorded by De los Santos and Wright in 1990. They described students who were “swirling” from one institution to another en route to their undergraduate degree; that is, the students moved
back and forth between institutions while compiling courses and credits toward a degree program. Their study also revealed that a high percentage of students had completed credits from multiple sources. Their article was among the first to report this emerging trend in higher education.

Adelman (1999, 2004) and Gose (1995) claimed that students concurrently enroll for a variety of reasons: (a) to supplement their degree program with courses not offered at their primary institution, (b) to fulfill the requirements of their degree program in a timely manner, (c) to save financial resources by completing transfer credits from less expensive institutions, (d) and in some cases, to take a course they perceive to be less difficult than the equivalent course at their primary institution. Once completed, credits are transferred to the primary institution and counted toward the completion of a degree program (Rab, 2004).

The National Center for Education Statistics (NCES) published a series of reports from its national study titled *The Beginning Postsecondary Students Longitudinal Study (BPS)*. Two recent comprehensive BPS reports analyzed trends for cohorts that began postsecondary education in 1989-1990 and 1995-1996. The 1989-90 BPS analyzed student behavior 5 years after initial enrollment, and the 1995-96 BPS analyzed student behavior 6 years after initial enrollment. These reports relied on interview data from participants and did not analyze institutional records.

McCormick’s (2003) paper, titled *Swirling and Double-Dipping: New Patterns of Student Attendance and Their Implications for Higher Education*, reported from the 1989-90 BPS that 32.9% of 4-year private college entrants completed credit at two or more institutions and 15% completed credit at three or more institutions. McCormick
noted that these data did not account for transfer students or specifically examine concurrent enrollment trends.

Knepper (2002), who produced the NCES sponsored statistical analysis report of the 1995-96 BPS, reported the percentages of students that attended one, two, and three or more institutions. She also reported the number of students that engaged in concurrent enrollment. According to her analysis of students who began their program of study at a 4-year school, 61.8% attended one institution, 27.9% attended two institutions, and 10.2% attended three or more institutions. Among those same students, 87.4% reported never concurrently enrolling and 12.6% reported concurrently enrolling (p. 44).

In 2005, the National Survey of Student Engagement (NSSE) gathered data from over 80,000 college seniors on concurrent enrollment trends. This survey is widely used in higher education and provides national norms on student engagement in college. Questions on the 2005 survey explored the growing trend of concurrent enrollment. The results from the survey revealed that: (1) one-third of all seniors took at least one course at another postsecondary institution after first enrolling at the primary institution; (2) 58% of the concurrent enrollment students completed their transfer coursework at either a vocational-technical school or community college; (3) 47% of the concurrent enrollment students completed transfer to complete their degree sooner; and (4) 23% completed concurrent enrollment transfer credit for financial reasons (NSSE, 2005, p. 19).

Clingman (2006) studied how baccalaureate degree seeking students at a small, private, 4-year college used community colleges throughout their degree program. She
reported that 486 of the 642 (75.54%) graduates she studied had attended a community college and had transferred credit hours to the 4-year college (p. 84). She also reported that 53.3% of study participants used the community college to begin their studies and then transferred to the 4-year institution, and 21% of study participants engaged in concurrent enrollment by attending community college while also enrolled at the 4-year institution (p. 68). Lastly, her review of the literature led her to develop four distinct patterns of transfer credit usage: traditional transfer, traditional concurrent enrollment, reverse transfer, and native concurrent (p. 66).

Transfer Credit and Student Choice

Regardless of how transfer occurs, the activity is a product of students making choices about where and when they complete credits. Current research reveals that students are offered more choices, from more institutions, than ever before (NCES, 2005; Pusser & Turner, 2004; Tierney, 2007). An example of this is the heightened access students have to course offerings at multiple institutions. Students can shop around for courses from regionally or nationally accredited universities, complete the courses on-site or on-line, and then transfer the completed credit. Access, however, is not the only variable that influences student choice. Educational quality, cost, and time to degree are commonly cited in the literature as other relevant variables (Hossler & Gallagher, 1987; Hossler, Schmidt, & Vesper, 1999; Hu & Hossler, 1998).

On-line Access and Educational Quality

Overall enrollment in postsecondary education increased from 14,262,000 students in 1995 to 18,199,920 in 2008, a 22% increase over 14 years. Projections
suggest enrollments will continue to grow at this rate, and overall student enrollments will near 20 million by the year 2014 (Allen & Seaman, 2010; NCES, 2004). While several factors contribute to this growth, the research literature suggests that an impetus for growth is the heightened cultural emphasis on higher education and improved access to higher education (Adelman, 1999; Miller, 2007; Trow, 1999).

According to Trow (1999), the emergence of the information technology age (IT) has contributed to increased quantities of students enrolling in colleges and universities. Prior to the wide scale use of the Internet, institutional enrollment and course offering information were attained through direct mail and phone conversations between a college representative and a prospective student (Swann & Henderson, 1998). More often than not, students who desired information would need to seek out colleges of interest and request materials. Using the Internet, today’s students can easily access abundant information about a college or university.

Given the growth of technology and on-line learning opportunities, students now have the freedom to take college level classes at institutions around the world. As a result, students are completing transfer courses from multiple institutions and piecing together academic programs. In fact, it is now possible for a full-time student at a 4-year college or university to take a minimal course load at his or her primary institution, while concurrently taking on-line courses from another institution in pursuit of a degree program. In most cases these colleges and universities are fully accredited, which qualifies their academic programs for transfer under most articulation agreements (Bush, 2002; Mosholder & Zirkle, 2007).
In fact, students are often viewing competitive advertising about courses and degree programs from various universities while searching for information (Sevier, 2002). This fundamental change in the way that students receive information has made it possible for prospective students to instantly view enrollment standards, admission applications, academic majors, and course offerings. Because of this, many colleges and universities are experiencing enrollment increases in on-line learning. The 2009 Sloan Survey of Online learning reports that over 4.6 million students took at least one on-line course during fall 2008, up from 1.6 million students in the fall of 2002 (Allen & Seaman, 2010).

A common criticism of on-line learning is that educational quality is lowered through the mass availability of accessible courses (Astin & Oseguera, 2004; Rhoades, 2006). Proponents of this criticism believe the curriculum is watered down and that higher education is being viewed as an attainable commodity. Advocates for on-line learning, on the other hand, acknowledge there are some obstacles to mass education but promote that the course content reaches more learners in more places than ever before (Bastedo & Gumport, 2003; Miller, 2007).

Despite the criticisms and challenges of on-line learning, institutions have sought to expand their programs and course offerings because of the financial benefits of increased enrollments and increased revenues (Garmon, 2001). Miller (1999) claimed that college administrators are seeking to capitalize on how they offer on-line courses in an effort to maximize the generation of revenue and stabilize the financial viability of their institution.
Cost

The cost of higher education has increased over the past decade. The national average cost to attend a 4-year private school in 1995 was $16,602 per year. In 2005, the cost to attend the same type of institution had increased to $26,489 per year. Public 4-year institution costs increased at a similar rate from $6,670 per year in 1995, to $11,441 per year in 2005. Public 2-year colleges, often referred to as community colleges, also increased their tuition from $4,137 per year in 1995, to $6,334 per year in 2005 (NCES, 2007).

According to economic research in higher education, cost and the availability of financial aid can impact the eventual college choices students make (Hu & Hossler, 1998). In fact, the UCLA Higher Education Research Institute found that over 30% of freshman students attended their second choice college. Among those students, one-third attended their second choice college due to finances (Pope, 2007).

Students unable to afford the rising costs must rely on financial aid. This is evidenced by the fact that in 1990 nearly 54% of students received some type of financial aid. By 2000, over 71% of students reported receiving some type of financial aid. This percentage growth was not isolated to a single socioeconomic group (NCES, 2004).

Data also indicate that students are accumulating increasing amounts of debt in order to finance their degree programs. The state of Ohio is no exception. Ohio students graduate with an average debt of $21,952, ranking Ohio students in the top 15 of state indebtedness for higher education (Institute for College Access & Success, 2008).
Time to Degree Completion

In 1992 an inter-institutional team called the University/Community College Research Consortium (CRC) was formed to study student transfer patterns and the impact of transfer on higher education (Bach et al., 2000). This team of researchers studied 504 undergraduate students in an effort to understand various patterns of transfer credit attainment and the academic performance of study participants. Their study revealed that students are less likely to complete their bachelor degree in a timely manner when they demonstrate a pattern of multiple transfers between institutions.

Koker and Hendel (2003) also studied degree completion rates among transfer students. Their study examined the time to degree completion for students who transferred to a large public university in the Midwest from multiple sources: 2-year colleges, 4-year colleges, and high school students who completed post secondary education option (PSEO) credit while in high school. Results from their study show that 60% of transfer students withdrew from the university without completing their degree program.

At Cedarville University, the graduation completion rate is calculated on a 6-year scale beginning the year a student enters the university. This measure for degree completion is commonly used by higher education institutions (Adelman, 1999). Using this calculation, historical data from Cedarville University reveal that approximately 70% of students who enroll will complete their degree program within 6 years at Cedarville University (Cedarville University, 2006, 2010).
University Governance

In higher education, the university governance structure dictates the decision-making process and an organization’s ability to change and adapt (Gayle, Tewarie, & White, 2003). Kowalski, Lasley, and Mahoney (2008) posit, however, that “behavior in organizations is complex, inconsistent, and often unpredictable” (p. 25). In higher education, these characteristics often produce disjointed governance and confuse the decision-making process (Mallon, 2004). According to Kowalski and associates, the choices administrators make, “even for important matters, are neither consistently rational nor unfailingly deferential to authority” (i.e., policy and rules, p. 25).

The governance structure of colleges and universities has also been changed by the realities of a global economy and an information-based society. As a result, the speed of business and decision making has accelerated the need to make decisions in higher education. Most colleges and universities operate in a shared governance format where issues and policies are discussed by varying interest groups before decisions are made. This process can delay important decision making and prevent an institution from making time sensitive changes (Gayle, Tewarie, & White, 2003).

Riley (2007), who studied administrative decision making at a major research university, reported that administrators often failed to make the proper decisions and respond to declining enrollments. Riley reported that the administrators under investigation lacked the societal “mechanisms” to detect the “early recognition of problems” (p. 108). He also reported that decision making was inhibited because the leadership of the campus lacked the ability to diagnose the problem and the ability to effectively communicate.
Kezar (2005) examined the negative impact of radical change on a private 4-year college. She examined whether radical change techniques, commonly used in the corporate sector, produced effective results when applied in higher education. She concluded that “radical change” had produced “many negative consequences” and that “gradual change and innovation appeared to be a more promising route to enhancing governance in higher education” (p. 662).

Fiscal Policy

Private colleges are increasingly looking for ways to increase their enrollment and maximize tuition revenues (Russo & Coomes, 2000). The push to maximize tuition revenue is the result of intense competition for students, financial pressures from state budget cuts, a struggling economy, and reductions in the availability of student financial aid. As a result, the average university increased its tuition more than 300% above the consumer price index from 1980 to present (Gayle, Twearie, & White, 2003).

More recently, colleges and universities are seeking ways to maximize net tuition revenue (NTR) by seeking to maximize the tuition revenue from students in an effort to balance budgets and cover costs. Higher education institutions typically either charge a “block tuition” rate or “per credit tuition” rate. Block tuition allows for a student to pay one fee per semester and typically take between 12-18 hours of course instruction. This rate structure assists administrators in financial planning by allowing for fluctuations in student credit attainment patterns. The alternative to the block tuition rate, called the per credit tuition rate, charges a student a set dollar amount per credit unit. This rate structure maximizes the NTR per credit unit by charging students for all credits taken. Per credit rates are not as reliable to administrators for financial planning
purposes because they fail to account for fluctuations in student credit attainment habits (Gayle et al., 2003).

*Student Transfer Policy*

As organizations, colleges and universities attempt to address the transfer function through institutional policy. Suggestions have been made for how universities and colleges should approach policy and decision making, but policy is often dictated by institutional type and size (Alfred, 2006; Balderston, 1995; Birnbaum, 1998; Perkins, 1973). In most cases, institutional type and size correlate with the mission of the institution, thus inferring that institutional transfer credit policy is typically reflective of institutional mission (Hossler & Bean, 1990).

Longanecker and Blanco (2003) asserted that private colleges are typically characterized as having strict and formal transfer credit policies restricting the amount of credit a student can transfer. Longanecker and Blanco also claimed that larger institutions are typically characterized as having liberal (informal) transfer credit policies that are open to varying patterns of student transfer (McCormick, 2003).

Tyler (1995) studied transfer credit habits at four Oklahoma state institutions and found they had liberal transfer credit policies that led to inconsistencies. One of these findings was institutional inconsistency; that is, a course accepted for transfer at one institution was not accepted at another.

Bush (2002), who studied articulation and transfer in Texas, found that the state government attempted to improve articulation and transfer by imposing a two-tract transfer policy that guaranteed credit acceptance among participating institutions. The findings from Bush’s study showed that student transfer had increased.
Cedarville University

Cedarville University was founded in 1887 and is “a Christ-centered Baptist University of arts, sciences, and professional and graduate programs” (Cedarville University, 2007, p. 3). The university offers over 100 programs of study that are taught from a “conservative theological position . . . with biblical perspective” (Cedarville University, 2007, p. 3). Students have an average ACT score of 25, average SAT score of 1180, and an average high school GPA of 3.6. The university is chartered by the State of Ohio, certified by the Ohio Board of Regents, accredited by the North Central Association of Colleges and Schools, and holds membership in the Council for Christian Colleges and Universities.

Degree Requirements

The following summarizes the requirements that must be met in order to graduate from Cedarville University: (a) complete at least 128 semester hours, (b) maintain a cumulative and major grade point average at or above 2.0, (c) complete general education requirements, and (d) complete the specific course and professional requirements for the desired major. At least one-third of the course requirements within a major must be taken from Cedarville University (Cedarville University, 2007, p. 15).

Cedarville University Governance

The administrative leadership team at Cedarville consists of the President, Provost, Vice President for Academics, Vice President for Business, Vice President for Enrollment Management and Marketing, Vice President for Finance, and the Vice President for Student Life. The administrative leadership team provides leadership and
guidance to faculty and staff and is accountable to the University Board of Trustees (Cedarville University, 2009).

**Cedarville University Fiscal Policy**

Cedarville University is a tuition-driven institution and the primary sources of revenue for the institution come from undergraduate student tuition receipts. The university’s endowment is approximately $20 million and is primarily used for student scholarships. At the time that this study commenced Cedarville University students were charged on a per credit hour basis. In 2010, the university implemented the net tuition revenue model and changed to block tuition pricing for new students. Returning students remained under the previous per credit charge system. The switch to block pricing was implemented in an effort to utilize predictive modeling in financial aid. The change was also instituted in an attempt to curtail concurrent enrollment behavior (Supiano, 2011).

**Cedarville University Transfer Policy**

Cedarville University does not have a written transfer credit policy. Although no formal policy exists, the institution does require that students receive a “C” or above in courses they desire to transfer. Transfer credits are considered on a case-by-case basis and “course evaluations are determined upon receipt of official transcripts” (Cedarville University, 2007, p. 13). Students desiring transfer credit must gain approval from the Registrar’s Office and the academic department that offers the Cedarville University equivalent course that they desire to transfer. Most departments require one-third of degree requirements in a major to be completed at Cedarville University, but this policy can be modified by the chair of the department. The university does limit the number of
College Level Examination Program (CLEP) credits, Institutional Test Out (ITO) credits, Advanced Placement (AP) credits, and International Bacheloriate Testing (IBT) credits to 40 credit hours per student.

*Snapshot of Transfer Credits Awarded at Cedarville University*

A 7-year review of Registrar data from Cedarville University verifies that students are earning credits through concurrent enrollment. Table 1 contains the concurrent enrollment statistics at Cedarville University from 2003-2009.

**Table 1**

*Concurrent Enrollment at Cedarville University*

<table>
<thead>
<tr>
<th>Graduation year</th>
<th>Class size</th>
<th>Number with concurrent enrollment</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>667</td>
<td>280</td>
<td>42%</td>
</tr>
<tr>
<td>2004</td>
<td>643</td>
<td>330</td>
<td>49.8%</td>
</tr>
<tr>
<td>2005</td>
<td>608</td>
<td>239</td>
<td>39.3%</td>
</tr>
<tr>
<td>2006</td>
<td>653</td>
<td>288</td>
<td>43%</td>
</tr>
<tr>
<td>2007</td>
<td>693</td>
<td>320</td>
<td>44%</td>
</tr>
<tr>
<td>2008</td>
<td>647</td>
<td>281</td>
<td>43.5%</td>
</tr>
<tr>
<td>2009</td>
<td>647</td>
<td>304</td>
<td>47.0%</td>
</tr>
</tbody>
</table>

*Note.* Cedarville University changed from the quarter system to semester system in the fall of 2002.
Summary

Student transfer is a complex issue within higher education and there are many paths that a researcher can take to study its complexity (Adelman, 2004). This review, for the purposes of this study, presented the historical development of the credit hour, the current state of student transfer, the theoretical framework used by the researcher to study concurrent enrollment, and an overview of Cedarville University. Generally, dissimilarities in transfer credit policy among both private and public institutions of higher education persist; however, increasing competition for students coupled with increased operating costs are prompting administrators to reconsider this issue.
CHAPTER III
METHODS AND PROCEDURES

The content presented in this chapter includes a restatement of the research questions that guided the research. In addition, study participants, instrumentation, analytic procedures and methods are described.

Purposes and Research Questions

The intent of this study was to produce findings and conclusions that could inform future policy decisions on concurrent enrollment at Cedarville University specifically and at other institutions generally. The study was guided by the following seven research questions:

1. How much transfer credit was completed by members of the study population through concurrent enrollment generally and in curricular categories (general education, electives, academic minor, and academic major) specifically?
2. At which types of institutions did members of the study population earn transfer credit?
3. At what points during their baccalaureate program did members of the study population engage in concurrent enrollment?
4. What instructional formats did the members of the study population experience during concurrent enrollment?

5. Why did members of the study population engage in concurrent enrollment?

6. Would policy prohibiting, restricting, or discouraging concurrent enrollment have influenced students’ decisions to enroll at Cedarville University?

7. What are the demographic characteristics (gender, enrollment history, and academic major) of the study population?

Methods

Study Population

The study population was defined as Cedarville University students who met the following two criteria in the fall semester of the 2009-2010 academic year: (a) they were seniors; (b) they had completed transfer credit through concurrent enrollment at another institution after initial enrollment at Cedarville University. The Cedarville University Registrar provided the names and e-mail addresses of the study population in September of 2009. The entire study population \((N = 258)\) was invited to participate in the study.

Approval and Protection of Human Subjects

The researcher was granted permission to conduct this study by the Associate Vice President of Academics at Cedarville University and the University of Dayton Committee for the Protection of Human Subjects. Appendix A and Appendix B contain the approval documents from both institutions. Appropriate ethical and statutory
requirements were applied in the collection of participant data. Respondents did not receive any compensation for their participation in the research.

Description of the Survey

The researcher designed the Transfer Credit Questionnaire (TCQ) in the summer of 2007 after reviewing related literature and developing the research questions. Data were collected using the TCQ and the original instrument consisted of 18 items (15 questions and three statements) designed to generate data pertinent to answering the research questions. Categorical response options were provided for the questions and a 5-point interval Likert-type scale was provided for the statements. A copy of the TCQ is in Appendix C.

The researcher sought to establish survey validity in two ways. First, as recommended by Krathwohl (1998), a panel of experts reviewed the instrument for clarity and content validity and made recommendations for improvements. The panel consisted of John Gredy, provost, Cedarville University; A. William Place, associate professor of educational leadership, University of Dayton; and Joanne Risacher, assistant professor of educational leadership, Wright State University.

The original draft of the TCQ included 18 items. The panel recommended changes in the wording and structure, reducing question items from 15 to nine because of six questions that appeared redundant, reducing the interval selections within the three Likert scale items from five choices to four choices (removed neutral selection), and also recommended realignment of the question order to match with the research questions. The researcher made revisions to the survey instrument based on the recommendations of these individuals.
The second survey validity measure was a pilot study conducted with six Cedarville students in the spring of 2009. At the time of the pilot test, these students were seniors who had concurrently enrolled prior to the spring of 2009. These students were chosen because they met the same population criteria used for the study, except that they were scheduled to graduate in May of 2009; thus, they were not part of the defined study population. The six students recommended clarification in wording and affirmed that they understood the survey questions. Based on the student recommendations, changes were made to the instructions to clarify the definition of concurrent enrollment. No changes were made to the survey items.

**Distribution of the Survey**

The study population received an e-mail message from the researcher on September 27, 2009, informing them of (a) the study, (b) its purposes, (c) the nature of the electronic survey, (d) instructions on completing the survey, and (e) a link to the survey hosted at www.surveymonkey.com (see Appendix C).

The timing of data collection was advantageous because the students were on campus and had daily access to their university e-mail accounts. Biweekly e-mail reminders were sent to the entire study population, including both respondents and non-respondents, until the survey was no longer accessible (that date was November 19, 2009). Survey data were downloaded by the researcher into a Microsoft Excel comma delimited file (.csv) and then imported from Survey Monkey on February 15, 2010, into the Statistical Package for Social Sciences (SPSS) software.
Data Analysis

Utilizing SPSS, the means, standard deviations, minimum and maximum values, frequency counts, and percentages were calculated from the survey questions’ response data and reported in relevance to their alignment with answering the research questions. The researcher utilized these descriptive statistics to organize and summarize key characteristics as prescribed by Heiman (2006). The research questions and data analysis procedures are summarized in Table 2.

Table 2

Research Questions and Related Data Analysis Procedures

<table>
<thead>
<tr>
<th>Research question number</th>
<th>Aligning TCQ number</th>
<th>Data analysis procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1</td>
<td>1</td>
<td>frequency counts, means, minimum and maximum values, standard deviations</td>
</tr>
<tr>
<td>Question 2</td>
<td>2</td>
<td>frequency counts, percentages</td>
</tr>
<tr>
<td>Question 3</td>
<td>3</td>
<td>frequency counts, percentages</td>
</tr>
<tr>
<td>Question 4</td>
<td>4</td>
<td>frequency counts, percentages</td>
</tr>
<tr>
<td>Question 5</td>
<td>5</td>
<td>frequency counts, percentages</td>
</tr>
<tr>
<td>Question 6</td>
<td>6-8</td>
<td>frequency counts, percentages</td>
</tr>
<tr>
<td>Question 7</td>
<td>9-12</td>
<td>frequency counts, percentages</td>
</tr>
</tbody>
</table>
Limitations

The study was limited to investigate Cedarville University students who met the following two criteria in the fall semester of the 2009-2010 academic year: (a) they were seniors; (b) they had completed transfer credit through concurrent enrollment at another institution after initial enrollment at Cedarville University. The results are only representative of the respondents who participated in this study. Therefore, inferences to non-responders are not appropriate. Data validity was contingent on institutional records and the truthfulness of participant responses.
CHAPTER IV
STUDY FINDINGS

This study was designed to acquire data on students who were seniors in the fall semester of the 2009-2010 academic year and who had engaged in concurrent enrollment after initial enrollment at Cedarville University. Data were collected using a survey, the Transfer Credit Questionnaire (TCQ), that was designed by the researcher. Data were collected from September 27, 2009, to November 19, 2009, and all returned surveys were analyzed. In total, 137 completed surveys were returned by members of the study population, a return rate of 53%.

Findings

Total Transfer Credit Hours Earned through Concurrent Enrollment

Respondents were asked to identify the number of transfer credit hours that were earned to meet requirements in one of four curricular categories: general education, electives, academic minor, and academic major. Respondents were able to enter earned transfer hours in each applicable category.

One hundred nineteen respondents (87%) indicated that they transferred hours to meet general education requirements. General education credits accounted for 60.7% of all transfer semester hours. Across all categories, the quantity of hours transferred by an individual student varied considerably. The range was 1 to 76 semester hours with
52.5% of respondents transferring 10 or more semester hours of credit (72/137). For the respondent who transferred 76 hours, 54 were in general education, 14 in electives, and 8 in the academic major.

The aggregate number of semester hours transferred by respondents was 2,056; the average (mean) number was 15.01. Male respondents accounted for 741 (36%) of the aggregate credit hours and females accounted for 1,315 (64%) of the credit hours. The mean number of semester hours transferred by males and females, however, varied only slightly. Tables 3 and 4 contain the data summarizing these responses.

Table 3

_Distribution of Hours Transferred by Degree Curricular Categories (n = 137)_

<table>
<thead>
<tr>
<th>Curricular category</th>
<th>Respondent</th>
<th>Min hours</th>
<th>Max hours</th>
<th>Total hours</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>General education</td>
<td>119</td>
<td>1</td>
<td>69</td>
<td>1249</td>
<td>10.50</td>
<td>9.88</td>
</tr>
<tr>
<td>Electives</td>
<td>46</td>
<td>2</td>
<td>26</td>
<td>324</td>
<td>7.04</td>
<td>6.10</td>
</tr>
<tr>
<td>Academic minor</td>
<td>20</td>
<td>1</td>
<td>30</td>
<td>129</td>
<td>6.45</td>
<td>5.94</td>
</tr>
<tr>
<td>Academic major</td>
<td>54</td>
<td>3</td>
<td>24</td>
<td>354</td>
<td>6.56</td>
<td>4.57</td>
</tr>
</tbody>
</table>

*Note.* Cumulative respondent frequency exceeds 137 because respondents were able to identify credits completed in one or more categories.
Table 4

*Distribution of Hours Transferred by Gender (n = 137)*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Respondent</th>
<th>Min</th>
<th>Max</th>
<th>Total</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>49</td>
<td>3</td>
<td>76</td>
<td>741</td>
<td>15.10</td>
<td>14.20</td>
</tr>
<tr>
<td>Female</td>
<td>88</td>
<td>1</td>
<td>70</td>
<td>1315</td>
<td>14.94</td>
<td>14.59</td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>1</td>
<td>76</td>
<td>2056</td>
<td>15.01</td>
<td>14.40</td>
</tr>
</tbody>
</table>

Across academic departments, both the total and average semester hours transferred by the respondents varied. The Business Administration and Education departments had 20 respondents each and the average semester hours transferred by them were 14.9 and 13.4 semester hours respectively. Students in the History and Government department had the highest average, each with 31.0 semester hours. Table 5 provides data regarding hours transferred by respondents classified by their host academic department.
### Table 5

*Distribution of Hours Transferred by Host Academic Department (n = 137)*

<table>
<thead>
<tr>
<th>Academic department</th>
<th>Respondent</th>
<th>Min</th>
<th>Max</th>
<th>Total</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biblical and Theological Studies</td>
<td>4</td>
<td>9</td>
<td>15</td>
<td>39</td>
<td>9.75</td>
<td>3.46</td>
</tr>
<tr>
<td>Business Administration</td>
<td>20</td>
<td>3</td>
<td>55</td>
<td>298</td>
<td>14.9</td>
<td>13.61</td>
</tr>
<tr>
<td>Communication Arts</td>
<td>9</td>
<td>6</td>
<td>23</td>
<td>114</td>
<td>12.67</td>
<td>6.76</td>
</tr>
<tr>
<td>Education</td>
<td>20</td>
<td>3</td>
<td>59</td>
<td>268</td>
<td>13.4</td>
<td>12.79</td>
</tr>
<tr>
<td>Engineering and Computer Science</td>
<td>11</td>
<td>3</td>
<td>38</td>
<td>140</td>
<td>12.73</td>
<td>11.98</td>
</tr>
<tr>
<td>Exercise and Sport Science</td>
<td>8</td>
<td>3</td>
<td>20</td>
<td>68</td>
<td>8.5</td>
<td>7.43</td>
</tr>
<tr>
<td>History and Government</td>
<td>7</td>
<td>3</td>
<td>76</td>
<td>217</td>
<td>31.0</td>
<td>25.48</td>
</tr>
<tr>
<td>Language and Literature</td>
<td>4</td>
<td>11</td>
<td>17</td>
<td>40</td>
<td>10.0</td>
<td>3.21</td>
</tr>
<tr>
<td>Music, Art, and Worship</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6.0</td>
<td>0</td>
</tr>
<tr>
<td>Nursing</td>
<td>19</td>
<td>5</td>
<td>70</td>
<td>298</td>
<td>15.68</td>
<td>18.25</td>
</tr>
<tr>
<td>Psychology</td>
<td>11</td>
<td>1</td>
<td>69</td>
<td>227</td>
<td>20.64</td>
<td>21.26</td>
</tr>
<tr>
<td>Science and Mathematics</td>
<td>18</td>
<td>3</td>
<td>39</td>
<td>225</td>
<td>12.5</td>
<td>11.09</td>
</tr>
<tr>
<td>Social Work, Criminal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Justice, and Sociology</td>
<td>9</td>
<td>6</td>
<td>27</td>
<td>116</td>
<td>12.89</td>
<td>6.27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>141</strong></td>
<td><strong>1</strong></td>
<td><strong>76</strong></td>
<td><strong>2056</strong></td>
<td><strong>15.01</strong></td>
<td><strong>14.40</strong></td>
</tr>
</tbody>
</table>

*Note.* The total respondent frequency exceeds 137 because four respondents identified double majors. The mean value in the total column was calculated using the
respondent total of 137.

Lost tuition revenue. The cost for tuition per credit hour at Cedarville University from 2006 to 2010 was: 2006/2007, $575/hr.; 2007/2008, $615/hr.; 2008/2009, $656/hr.; 2009/2010 $697/hr. The average cost of tuition during this 4-year period was $636 per credit hour. Respondents indicated completing 2,056 total hours of transfer credit. By utilizing the average cost per credit over this 4-year period, the lost revenue for Cedarville University was approximately $1,307,616.00. Since this figure does not include lost revenue stemming from transfer hours completed by non-respondents, the actual amount of lost revenue attributed to the senior class in 2009-2010 was higher. Moreover, if the experiences of the senior class were typical, the total loss to the university would potentially be greater.

Types of Institutions where Transfer Credit was Completed

Respondents were asked to identify the types of institutions where they had completed transfer credit through concurrent enrollment. Response choices included: community/technical college, state 4-year college/university, and private 4-year college/university. Respondents were instructed to select all applicable categories. Responses are shown in Table 6.
Table 6

*Institutions where Transfer Credit was Earned (n = 137)*

<table>
<thead>
<tr>
<th>Institution type</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community/technical college</td>
<td>99</td>
<td>72.3</td>
</tr>
<tr>
<td>State 4-year college/university</td>
<td>35</td>
<td>25.5</td>
</tr>
<tr>
<td>Private 4-year college/university</td>
<td>34</td>
<td>24.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>168</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Because respondents were able to select more than one response, the total number of responses reported exceeded the number of respondents. Data in the percent column are based on the number of respondents (137).

Thirty-three of the 137 respondents had completed transfer credit at more than one type of institution. Data for these students are reported in Table 7.
Table 7

*Respondents Earning Transfer Credit at Multiple Types of Institutions (n = 33)*

<table>
<thead>
<tr>
<th>Institution type</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community/technical college &amp; state 4-year college/university</td>
<td>12</td>
<td>36.4</td>
</tr>
<tr>
<td>Community/technical college &amp; private 4-year college/university</td>
<td>13</td>
<td>39.4</td>
</tr>
<tr>
<td>State 4-year college/university &amp; private 4-year college/university</td>
<td>7</td>
<td>21.2</td>
</tr>
<tr>
<td>Community/technical college, state 4-year college/university, &amp; private 4-year college/university</td>
<td>1</td>
<td>3.0</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*When Concurrent Enrollment Occurred*

Concurrent enrollment occurred most often during the freshman year and least often during the senior year. Data for the senior year need to be considered in light of the timing of this study; that is, respondents had not yet completed their senior year at the time they submitted data. Table 8 includes concurrent enrollment occurrences by class status. Tables 9, 10, and 11 provide data based on student status and academic term (fall, spring, and summer).
Table 8

*Academic Status of Respondents when Concurrent Enrollment Occurred* (n = 137)

<table>
<thead>
<tr>
<th>Academic status</th>
<th>$f$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>80</td>
<td>58.4</td>
</tr>
<tr>
<td>Sophomore</td>
<td>62</td>
<td>45.3</td>
</tr>
<tr>
<td>Junior</td>
<td>56</td>
<td>40.9</td>
</tr>
<tr>
<td>Senior</td>
<td>22</td>
<td>16.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>220</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Because respondents were able to select more than one response, the total number of responses reported exceeded the number of respondents. Data in the percent column are based on the number of respondents (137).

Table 9

*Timing of when Concurrent Enrollment Occurred, Fall Semester* (n = 64)

<table>
<thead>
<tr>
<th>Academic status</th>
<th>$f$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>41</td>
<td>64.1</td>
</tr>
<tr>
<td>Sophomore</td>
<td>11</td>
<td>17.2</td>
</tr>
<tr>
<td>Junior</td>
<td>16</td>
<td>25.0</td>
</tr>
<tr>
<td>Senior</td>
<td>12</td>
<td>29.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Because respondents were able to select more than one response, the total number of responses reported exceeded the number of respondents. Data in the percent column are based on the number of respondents (64).
Table 10

*Timing of when Concurrent Enrollment Occurred, Spring Semester (n = 36)*

<table>
<thead>
<tr>
<th>Academic status</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>12</td>
<td>33.3</td>
</tr>
<tr>
<td>Sophomore</td>
<td>11</td>
<td>30.6</td>
</tr>
<tr>
<td>Junior</td>
<td>13</td>
<td>36.1</td>
</tr>
<tr>
<td>Senior</td>
<td>8</td>
<td>22.2</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Because respondents were able to select more than one response, the total number of responses reported exceeded the number of respondents. Data in the percent column are based on the number of respondents (36).

Table 11

*Timing of when Concurrent Enrollment Occurred, Summer Term (n = 99)*

<table>
<thead>
<tr>
<th>Academic status</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>44</td>
<td>44.4</td>
</tr>
<tr>
<td>Sophomore</td>
<td>54</td>
<td>54.5</td>
</tr>
<tr>
<td>Junior</td>
<td>39</td>
<td>39.4</td>
</tr>
<tr>
<td>Senior</td>
<td>8</td>
<td>8.1</td>
</tr>
<tr>
<td>Total</td>
<td>145</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Because respondents were able to select more than one response, the total number of responses reported exceeded the number of respondents. Data in the percent column are based on the number of respondents (99).
Responses also revealed that concurrent enrollment was not isolated to a single academic year. In total, 117 respondents concurrently enrolled during more than one of the selectable academic status years. Table 12 contains data concerning this matter.

Table 12

Respondents who Concurrently Enrolled during Multiple Academic Statuses (n = 117)

<table>
<thead>
<tr>
<th>Academic status</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman &amp; sophomore</td>
<td>32</td>
<td>27.4</td>
</tr>
<tr>
<td>Freshman &amp; junior</td>
<td>20</td>
<td>17.2</td>
</tr>
<tr>
<td>Freshman &amp; senior</td>
<td>4</td>
<td>3.5</td>
</tr>
<tr>
<td>Sophomore &amp; junior</td>
<td>25</td>
<td>21.5</td>
</tr>
<tr>
<td>Sophomore &amp; senior</td>
<td>8</td>
<td>6.9</td>
</tr>
<tr>
<td>Junior &amp; senior</td>
<td>12</td>
<td>10.4</td>
</tr>
<tr>
<td>Freshman, sophomore, &amp; junior</td>
<td>11</td>
<td>9.5</td>
</tr>
<tr>
<td>Sophomore, junior, &amp; senior</td>
<td>4</td>
<td>3.5</td>
</tr>
<tr>
<td>Freshman, sophomore, junior, &amp; senior</td>
<td>1</td>
<td>.1</td>
</tr>
<tr>
<td>Total</td>
<td>117</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Instructional Methods Applied

Respondents were asked to identify the instructional modes they experienced in courses during concurrent enrollment. On campus face-to-face instruction was the most common instructional format identified (94/137, 68.6%) and on-line instruction was second (73/137, 53.3%). The remaining instructional formats (correspondence instruction, independent study, and other) accounted for 24 respondents (17.5%). The frequency and percentage for instructional format are reported in Table 13.
Table 13

*Instructional Format Encountered in Concurrent Enrollment Courses (n = 137)*

<table>
<thead>
<tr>
<th>Instructional format</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-line instruction</td>
<td>73</td>
<td>53.3</td>
</tr>
<tr>
<td>On campus face-to-face instruction</td>
<td>94</td>
<td>68.6</td>
</tr>
<tr>
<td>Correspondence instruction</td>
<td>9</td>
<td>6.6</td>
</tr>
<tr>
<td>Independent study</td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
<td>9.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>191</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Because respondents were able to select more than one response, the total number of responses reported exceeded the number of respondents. Data in the percent column are based on the number of respondents (137).

Further analysis revealed that 56 out of 137 (40.9%) respondents encountered at least two instructional formats, and two respondents encountered three instructional formats. None of the respondents reported encountering more than three instructional formats. Table 14 provides data for respondents who encountered two or three instructional formats.
Table 14

*Respondents who Encountered Two or Three Instructional Formats in Concurrent Enrollment Courses (n = 56)*

<table>
<thead>
<tr>
<th>Instructional format</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-line instruction &amp; on campus face-to-face instruction</td>
<td>39</td>
<td>69.6</td>
</tr>
<tr>
<td>On-line instruction &amp; correspondence instruction</td>
<td>2</td>
<td>3.6</td>
</tr>
<tr>
<td>On-line instruction &amp; independent study</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td>On-line instruction &amp; other</td>
<td>3</td>
<td>5.4</td>
</tr>
<tr>
<td>On campus face-to-face instruction &amp; correspondence</td>
<td>4</td>
<td>7.1</td>
</tr>
<tr>
<td>On campus face-to-face instruction &amp; independent study</td>
<td>2</td>
<td>3.6</td>
</tr>
<tr>
<td>On campus face-to-face instruction &amp; other</td>
<td>5</td>
<td>8.9</td>
</tr>
<tr>
<td>Correspondence instruction &amp; independent study</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Correspondence instruction &amp; other</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Independent study &amp; other</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Reasons for Concurrent Enrollment*

This study sought to determine why members of the study population concurrently enrolled. Response choices were: *lower tuition costs at another institution, wanted to avoid a course or courses at Cedarville University, course(s) not available at Cedarville University, needed to complete transfer credit in order to graduate from Cedarville University in four years, desired to experience another institution,.*
convenience, and other. Respondents were able to choose one or more of the available responses.

As shown in Table 15, respondents indicated that lower tuition costs at another institution and convenience were the two most common reasons for concurrent enrollment, with 81% selecting lower tuition costs at another institution and 49.6% selecting convenience.

Table 15

Reasons for Concurrent Enrollment (n = 137)

<table>
<thead>
<tr>
<th>Reason for transferring hours</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower tuition costs at another institution</td>
<td>111</td>
<td>81.0</td>
</tr>
<tr>
<td>Wanted to avoid a course or courses at Cedarville University</td>
<td>44</td>
<td>32.1</td>
</tr>
<tr>
<td>Course(s) not offered at Cedarville University</td>
<td>9</td>
<td>6.6</td>
</tr>
<tr>
<td>Needed to complete transfer credit in order to graduate from Cedarville University in four years</td>
<td>43</td>
<td>31.4</td>
</tr>
<tr>
<td>Desired to experience another institution</td>
<td>15</td>
<td>10.9</td>
</tr>
<tr>
<td>Convenience</td>
<td>68</td>
<td>49.6</td>
</tr>
<tr>
<td>Other</td>
<td>27</td>
<td>19.7</td>
</tr>
<tr>
<td>Total</td>
<td>317</td>
<td></td>
</tr>
</tbody>
</table>

Note. Because respondents were able to select more than one response, the total number of responses reported exceeded the number of respondents. Data in the percent column are based on the number of respondents (137).
The reasons for concurrent enrollment were examined in relation to the types of institutions where concurrent enrollment occurred. Tables 16–22 contain these data.

Table 16

*Institution Type where Concurrent Enrollment Occurred Selected by Students Whose Designated Intent was “Lower Tuition Costs at Another Institution” (n = 111)*

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community/technical college</td>
<td>89</td>
<td>80.2</td>
</tr>
<tr>
<td>State 4-year college/university</td>
<td>27</td>
<td>24.3</td>
</tr>
<tr>
<td>Private 4-year college/university</td>
<td>23</td>
<td>20.7</td>
</tr>
<tr>
<td>Total</td>
<td>139</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Because respondents were able to select more than one response, the total number of responses reported exceeded the number of respondents. Data in the percent column are based on the number of respondents (111).
Table 17

*Institution Type where Concurrent Enrollment Occurred Selected by Students Whose Designated Intent was “Convenience” (n = 68)*

<table>
<thead>
<tr>
<th>Institution type</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community/technical college</td>
<td>56</td>
<td>82.3</td>
</tr>
<tr>
<td>State 4-year college/university</td>
<td>18</td>
<td>26.5</td>
</tr>
<tr>
<td>Private 4-year college/university</td>
<td>16</td>
<td>23.5</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Because respondents were able to select more than one response, the total number of responses reported exceeded the number of respondents. Data in the percent column are based on the number of respondents (68).

Table 18

*Institution Type where Concurrent Enrollment Occurred Selected by Students Whose Designated Intent was “Wanted to Avoid a Course or Courses at Cedarville” (n = 44)*

<table>
<thead>
<tr>
<th>Institution type</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community/technical college</td>
<td>32</td>
<td>72.7</td>
</tr>
<tr>
<td>State 4-year college/university</td>
<td>11</td>
<td>25.0</td>
</tr>
<tr>
<td>Private 4-year college/university</td>
<td>12</td>
<td>27.3</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Because respondents were able to select more than one response, the total number of responses reported exceeded the number of respondents. Data in the percent column are based on the number of respondents (44).
Table 19

*Institution Type where Concurrent Enrollment Occurred Selected by Students Whose Designated Intent was “Needed to Complete Transfer Credit in Order to Graduate from Cedarville University in Four Years” (n = 43)*

<table>
<thead>
<tr>
<th>Institution type</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community/technical college</td>
<td>30</td>
<td>69.8</td>
</tr>
<tr>
<td>State 4-year college/university</td>
<td>15</td>
<td>34.9</td>
</tr>
<tr>
<td>Private 4-year college/university</td>
<td>9</td>
<td>20.9</td>
</tr>
<tr>
<td>Total</td>
<td>54</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Because respondents were able to select more than one response, the total number of responses reported exceeded the number of respondents. Data in the percent column are based on the number of respondents (43).

Table 20

*Institution Type where Concurrent Enrollment Occurred Selected by Students Whose Designated Intent was “Other” (n = 27)*

<table>
<thead>
<tr>
<th>Institution type</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community/technical college</td>
<td>18</td>
<td>66.7</td>
</tr>
<tr>
<td>State 4-year college/university</td>
<td>4</td>
<td>14.8</td>
</tr>
<tr>
<td>Private 4-year college/university</td>
<td>11</td>
<td>40.7</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Because respondents were able to select more than one response, the total number of responses reported exceeded the number of respondents. Data in the percent column are based on the number of respondents (27).
Table 21  

*Institution Type where Concurrent Enrollment Occurred Selected by Students Whose Designated Intent was “Desired to Experience Another Institution” (n = 15)*

<table>
<thead>
<tr>
<th>Institution type</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community/technical college</td>
<td>9</td>
<td>60</td>
</tr>
<tr>
<td>State 4-year college/university</td>
<td>5</td>
<td>33.3</td>
</tr>
<tr>
<td>Private 4-year college/university</td>
<td>6</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Because respondents were able to select more than one response, the total number of responses reported exceeded the number of respondents. Data in the percent column are based on the number of respondents (15).

Table 22  

*Institution Type where Concurrent Enrollment Occurred Selected by Students Whose Designated Intent was “Course(s) Not Offered at Cedarville University” (n = 9)*

<table>
<thead>
<tr>
<th>Institution type</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community/technical college</td>
<td>7</td>
<td>77.8</td>
</tr>
<tr>
<td>State 4-year college/university</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Private 4-year college/university</td>
<td>4</td>
<td>44.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Because respondents were able to select more than one response, the total number of responses reported exceeded the number of respondents. Data in the percent column are based on the number of respondents (9).
Reactions to Potential Transfer Credit Policy

At the time of this study, Cedarville University did not have a policy restricting either concurrent enrollment or the number of transfer credits. Instead, decisions on transfer credits were made on an individual student basis. Consequently, participants were asked to state their level of agreement with statements reflective of three possible future policies for transfer credit at this institution. The three statements were:

1. If Cedarville University had a policy prohibiting transfer credit, such a policy would not have affected my decision to attend the institution.

2. If Cedarville University had a policy limiting transfer credit to six semester hours, such a policy would not have affected my decision to attend the institution.

3. If Cedarville University had a policy limiting transfer credit to 12 semester hours, such a policy would not have affected my decision to attend the institution.

Response choices regarding agreement with the statements were: 4 = Strongly Agree, 3 = Agree, 2 = Disagree, 1 = Strongly Disagree. Table 23 includes responses for the three statements.
Table 23

*Respondent Level of Agreement Regarding Three Possible Policies for Restricting Transfer Credit at Cedarville University (n = 137)*

<table>
<thead>
<tr>
<th>Level of agreement</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Possible policy: If Cedarville University had a policy prohibiting transfer credit, such a policy would not have affected my decision to attend the institution.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>10</td>
<td>7.3</td>
</tr>
<tr>
<td>Agree</td>
<td>36</td>
<td>26.3</td>
</tr>
<tr>
<td>Disagree</td>
<td>43</td>
<td>31.4</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>48</td>
<td>35.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>137</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Possible policy: If Cedarville University had a policy limiting transfer credit to six semester hours, such a policy would not have affected my decision to attend the institution.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>18</td>
<td>13.1</td>
</tr>
<tr>
<td>Agree</td>
<td>41</td>
<td>29.9</td>
</tr>
<tr>
<td>Disagree</td>
<td>45</td>
<td>32.8</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>33</td>
<td>24.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>137</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Possible policy: If Cedarville University had a policy limiting transfer credit to 12 semester hours, such a policy would not have affected my decision to attend the institution.

<table>
<thead>
<tr>
<th>Level of agreement</th>
<th>( f )</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>27</td>
<td>19.8</td>
</tr>
<tr>
<td>Agree</td>
<td>51</td>
<td>37.4</td>
</tr>
<tr>
<td>Disagree</td>
<td>40</td>
<td>29.3</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>19</td>
<td>13.9</td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Demographic Information**

Respondents were asked to report if they attended college prior to initial enrollment at Cedarville University; 83.2% reported that they *attended no college before Cedarville University*. Table 24 provides a summary of respondents’ prior attendance by type of institution.
Table 24

Respondent Prior College Attendance (n = 137)

<table>
<thead>
<tr>
<th>Prior attendance</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attended 1-or 2-year college before Cedarville University (i.e., Bible college)</td>
<td>3</td>
<td>2.2</td>
</tr>
<tr>
<td>Attended a community/technical college before Cedarville University</td>
<td>16</td>
<td>11.7</td>
</tr>
<tr>
<td>Attended a 4-year college before Cedarville University</td>
<td>8</td>
<td>5.8</td>
</tr>
<tr>
<td>Attended no college before Cedarville University</td>
<td>114</td>
<td>83.2</td>
</tr>
<tr>
<td>Total</td>
<td>141</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Because respondents were able to select more than one response, the total number of responses reported exceeded the number of respondents. Data in the percent column are based on the number of respondents (137).

A majority of respondents (132/137, 96.4%) maintained linear enrollment at Cedarville University; the remaining 5 students withdrew from and subsequently re-enrolled in the institution at some point prior to this study. Out of the 137 respondents, 88 (64.2%) were *female* and 49 (35.8%) were *male*. Overall, the institution enrolled 3,038 total students at the beginning of the 2008-2009 academic year; 54% of the student body were female, and 46% were males.

In the 2009 fall semester, Cedarville University offered 83 majors across its five schools (School of Biblical and Theological Studies, School of Humanities, School of Natural and Applied Sciences, School of Pharmacy, and the School of Social Science and Human Performance) and 13 academic departments. The School of Pharmacy,
however, was newly created in the fall of 2009; therefore, no respondents were enrolled in it.

The majors enrolling the greatest numbers of students during the 2008-2009 academic year were nursing (346/3,038, 10.4%), mechanical engineering (205/3,038, 6.7%), early childhood education (160/3,038, 5.3%), biology (109/3,038, 3.6%), electronic media (96/3,038, 3.2%), and graphic design (90/3,038, 3.0%). The departments enrolling the greatest numbers of students in 2008-2009 were Business Administration (356/3,038, 11.4%), Nursing (346/3,038, 10.4%), Engineering and Computer Science (331/3,038, 10.9%), Science and Mathematics (328/3,038, 10.8%), Communication Arts (263/3,038, 8.7%), and Education (262/3,038, 8.6%). Table 25 includes data for respondent majors based on the host academic departments. Four of the 137 study participants had double majors; thus, there were 141 recorded responses.
Table 25

Respondents’ Academic Majors Categorized by Host Departments (n = 137)

<table>
<thead>
<tr>
<th>Academic major by department</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biblical and Theological Studies</td>
<td>4</td>
<td>2.9</td>
</tr>
<tr>
<td>Business Administration</td>
<td>20</td>
<td>14.6</td>
</tr>
<tr>
<td>Communication Arts</td>
<td>9</td>
<td>6.6</td>
</tr>
<tr>
<td>Education</td>
<td>20</td>
<td>14.6</td>
</tr>
<tr>
<td>Engineering and Computer Science</td>
<td>11</td>
<td>8.0</td>
</tr>
<tr>
<td>Exercise and Sport Science</td>
<td>8</td>
<td>5.9</td>
</tr>
<tr>
<td>History and Government</td>
<td>7</td>
<td>5.1</td>
</tr>
<tr>
<td>Language and Literature</td>
<td>4</td>
<td>2.9</td>
</tr>
<tr>
<td>Music, Art, and Worship</td>
<td>1</td>
<td>.1</td>
</tr>
<tr>
<td>Nursing</td>
<td>19</td>
<td>13.9</td>
</tr>
<tr>
<td>Psychology</td>
<td>11</td>
<td>8.0</td>
</tr>
<tr>
<td>Science and Mathematics</td>
<td>18</td>
<td>13.1</td>
</tr>
<tr>
<td>Social Work, Criminal Justice, and Sociology</td>
<td>9</td>
<td>6.6</td>
</tr>
<tr>
<td>Total</td>
<td>141</td>
<td>-----</td>
</tr>
</tbody>
</table>

Note. Because respondents were able to select more than one response, the total number of responses reported exceeded the number of respondents. Data in the percent column are based on the number of respondents (137).

The departments housing the largest number of respondent majors were Nursing (19/137, 13.9%), Biology (13/137, 9.5%), Psychology (10/137, 7.3%), and Early Childhood Education (9/137, 6.6%).
Summary

At the time of this study, Cedarville University did not have a policy for accepting transfer credits. Consequently, decisions regarding this matter were made on an ad hoc basis, typically by administrative staff in the department housing the student’s major area of study. Although data regarding transfer credits were maintained, they were in individual student files and had not been aggregated nor analyzed to determine fiscal impact or to inform possible policy decisions.

Findings presented in this chapter relate to the quantity of credit hours transferred to Cedarville University by the study population, the reasons for concurrent enrollment, respondent demographic characteristics, estimated loss of tuition revenue, and respondent opinions toward possible institutional policies restricting concurrent enrollment. Descriptive statistics were calculated and used to answer the study’s guiding questions. Overall, the findings reveal that quantity of concurrent enrollment and the resulting fiscal impact were substantial.
CHAPTER V

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to examine why students at Cedarville University concurrently enrolled at other institutions while pursuing a baccalaureate degree. This chapter includes a summary of findings, conclusions based on these findings, and recommendations.

Summary of Findings

This study was guided by the following seven research questions. A summary of the findings is presented in relation to each of them.

1. How much transfer credit was completed by members of the study population through concurrent enrollment generally and in curricular categories (general education, electives, academic minor, and academic major) specifically?

In total, 137 of the 258 students comprising the study population completed and returned surveys, a return rate of 53%. Collectively, the respondents had completed 2,056 semester hours of transfer credit. The mean number of semester hours transferred to Cedarville University was 15.01 with a range of 1 to 76 semester hours. Male respondents accounted for 741 of the aggregate semester hours (36%) and females accounted for 1,315 of the aggregate semester hours (64%). Fifty-three percent (72/137) of the respondents reported transferring 10 or more credit hours. Eighty-seven percent
(119/137) reported that their credits were transferred in the curricular category of general education. Nearly two-thirds of the aggregate transfer credit hours (60.7%) were used for this purpose.

2. At which types of institutions did members of the study population earn transfer credit?

Respondents were asked to identify the types of institutions where they earned transfer credit. Three response choices (community/technical college, state 4-year college/university, private 4-year college/university) were available and respondents were able to identify more than one type of institution if applicable. Among the 137 study respondents, 99 (72.3%) had enrolled at a community/technical college, 35 (25.5%) at a state 4-year college/university and 34 (24.8%) at a private 4-year college/university. Thirty-three respondents (24.1%) had earned transfer credit at more than one type of institution.

3. At what points during their baccalaureate program did members of the study population engage in concurrent enrollment?

Respondents were asked to identify when they concurrently enrolled by selecting the academic status level and term in which courses taken at other institutions were completed. Respondents were able to select all response options that applied. The response options for academic status level were: freshman, sophomore, junior, senior. Respondents were also asked to identify the academic term in which they concurrently enrolled. The response choices were: fall, spring, summer and respondents again were able to select all that applied.
The frequency of concurrent enrollment decreased as academic status (class level) increased. Eighty students (58.4%) concurrently enrolled as *freshman*, 62 (45.3%) as *sophomores*, 56 (40.9%) as *juniors*, and 22 (16.1%) as *seniors*. Concurrent enrollment occurred most frequently during the *summer term* (99/137, 72.3%), followed by *fall term* (64/137, 46.7%) and *spring term* (36/137, 26.3%). Combined, concurrent enrollment occurred most frequently during the *summer term* of *sophomore* year (54/137, 39.4%); the next most frequent period was the *summer term* of *freshman* year (44/137, 32.1%).

4. *What instructional formats did the members of the study population experience during concurrent enrollment?*

Response options for instructional modes experienced included: *on campus face-to-face instruction*, *on-line instruction*, *correspondence instruction*, *independent study*, and *other*.

*On campus face-to-face instruction* was the most common response (94/137, 68.6%), followed by *on-line instruction* (73/137, 53.3%). The remaining 24 respondents (17.5%) selected one of the other survey response choices (*correspondence instruction*, *independent study*, and *other*).

5. *Why did members of the study population engage in concurrent enrollment?*

Response options for identifying the reasons for concurrent enrollment were: *lower tuition costs at another institution*, *wanted to avoid course or courses at Cedarville University*, *course(s) not offered at Cedarville University*, *needed to complete transfer credit in order to graduate from Cedarville University in four years*, desired to
experience another institution, convenience, and other. Respondents were able to select one or more response options.

One hundred and eleven respondents (81%) selected lower tuition costs at another institution as the most common reason for concurrent enrollment. Sixty-eight respondents (49.6%) selected convenience as the second most common reason for concurrent enrollment. The following summarizes respondents’ selections of the remaining response options: wanted to avoid course or courses at Cedarville University (44/137, 32.1%), needed to complete transfer credit in order to graduate from Cedarville University in four years (43/137, 31.4%), other (27/137, 19.7%), desired to experience another institution (15/137, 10.9%), and course(s) not offered at Cedarville University (9/137, 6.6%).

6. Would policy prohibiting, restricting, or discouraging concurrent enrollment have influenced students’ decisions to enroll at Cedarville University?

At the time of this study, Cedarville University did not have an institutional policy regarding transfer credits. The first intent of this research question was to determine if the existence of policy prohibiting or restricting transfer credits would have influenced initial enrollment at Cedarville University. The second intent of this question was to determine if a transfer credit policy would have decreased lost tuition revenue.

Opinions regarding policy prohibiting or limiting concurrent enrollment should be considered in light of cost savings for students and lost tuition revenue for the institution. The cost for tuition per credit hour at Cedarville University from 2006 to 2010 was: 2006/2007, $575/hr.; 2007/2008, $615/hr.; 2008/2009, $656/hr.; 2009/2010 $697/hr. The average (mean) cost of tuition during this 4-year period was $636 per
credit hour. Respondents had completed 2,056 total hours of transfer credit. Applying the average cost per credit over this 4-year period, the lost tuition revenue for Cedarville University (among respondents), was approximately $1,307,616.00.

Respondents were asked to state their level of agreement with the following statements: (1) *If Cedarville University had a policy prohibiting transfer credit, such a policy would not have affected my decision to attend the institution*; (2) *If Cedarville University had a policy limiting transfer credit to six semester hours, such a policy would not have affected my decision to attend the institution*; (3) *If Cedarville University had a policy limiting transfer credit to 12 semester hours, such a policy would not have affected my decision to attend the institution*. Response options to the statements were: *strongly agree, agree, disagree, and strongly disagree*.

Ninety-one respondents (66.4%) *strongly disagreed* or *disagreed* with the first statement. Seventy-eight respondents (57%) *strongly disagreed* or *disagreed* with the second statement. Seventy-eight respondents (57.2%) *strongly agreed* or *agreed* with the third statement.

7. *What are the demographic characteristics (gender, enrollment history, and academic major) of the study population?*

Respondents were asked if they had attended another college prior to initial enrollment at Cedarville University. Response options for this question were: *attended 1- or 2-year college before Cedarville University* (i.e., Bible college), *attended a community/technical college before Cedarville University*, *attended a 4-year college/university before Cedarville University*, and *attended no college/university before Cedarville University*. A substantial majority (83.2%) had not attended another
college prior to initial enrollment at Cedarville University. Among the remaining respondents, 11.7% had attended a community/technical college, 5.8% had attended a 4-year college/university, and 2.2% had attended a 1or 2 year college.

Respondents were also asked if they had withdrawn from Cedarville University after initial enrollment and subsequently re-enrolled at that institution. The vast majority (96.4%) had not done so.

Among the 137 respondents, 64.2% were female. At the time of this study, 54% of the Cedarville University students were female. Male students accounted for 49 of respondents (35.8%). At the time of this study, 46% of all Cedarville University students were males.

The most common academic majors among the study population were nursing (19/137, 13.9%), biology (13/137, 9.5%), psychology (10/137, 7.3%), and early childhood education (9/137, 6.6%). Majors were also classified and reported by host department since some departments host multiple majors. The largest departments represented by participants were Business Administration (20/137, 14.6%), Education (20/137, 14.6%), Nursing (19/139, 13.9%), and Science and Math (18/139, 13.1%). Four of the 137 study respondents had double majors.

Conclusions

On a per-student basis, 53% of the respondents in this study transferred 10 or more semester hours of credit to Cedarville University. At the collective level, they transferred 2,056 semester hours or an average (mean) of 15.01 semester hours with a range of 1 to 76 semester hours. The finding that 53% of respondents transferred 10 or
more semester hours of credit is similar to the finding of Adelman (2004) who reported that 57% of the participants in the National Education Longitudinal Study of 1988 (NELS:88/2000) who completed at least 10 credits during their undergraduate experience attended more than one school as an undergraduate. Thus, the percentage of Cedarville University students who completed 10 or more transfer credit hours appears to have been typical. This evaluation, however, needs to be considered in light of two relevant conditions. First, Adelman’s research included transfer credit data regardless of the point at which courses were completed; this study included only transfer credit completed after respondents had initially enrolled at Cedarville University. The second is the time span between this study and Adelman’s study.

The finding regarding the range of credits transferred to Cedarville University (1 to 76 semester hours) was similar to the ranges reported in several previous studies. For instance, researchers who studied 2-year college to 4-year college transfer credit attainment (e.g., Townsend & Barnes, 2001; Wellman, 2002), reverse transfer credit attainment from 4-year college to 2-year college (e.g., Rab, 2004; Sandeen & Goodale, 1976), and concurrent enrollment transfer credit attainment (e.g., Adelman, 1999; Cheng, 1995; McCormick & Carroll, 1999; West, 1994) all reported considerable variation in the range of individual student transfer credit. Thus, the range of individual student transfer credit in this study appears to be typical.

Given the magnitude of concurrent enrollment reported (aggregate of 2,056 semester hours) and the fact that participants were paying tuition on a per credit hour basis at the time of this study, the lost tuition revenue for Cedarville University appears to have been substantial. For the responders in this study alone, the lost tuition revenue
was estimated to be $1.3 million. This estimate does not include lost tuition revenue attributable to non-respondents in the study population (i.e., senior students who had concurrently enrolled but had not responded to the survey) and to other Cedarville University students who had engaged in concurrent enrollment (i.e., students classified as freshman, sophomore, and junior at the time of this study). If the quantity of concurrent enrollment in these two groups paralleled the quantity reported by the respondents, the total loss of tuition revenue for academic year 2009-2010 would have been greater than $1.3 million. This level of lost revenue is substantial, especially for a private institution where administrators are expected to maximize net tuition revenue while retaining institutional competitiveness. Concerns about the fiscal impact of concurrent enrollment have been addressed in other studies (e.g., Gayle, Tewarie, & White, 2003; Russo & Coomes, 2000).

Ninety-nine respondents (72.3%) had transferred credit from community/technical colleges. This finding reveals that community/technical colleges are a popular choice for concurrent enrollment, most likely because of ease of access and cost advantages. The percentage of students in this study who concurrently enrolled at community/technical colleges is higher than the results of the 2005 National Survey on Student Engagement (NSSE). The 2005 NSSE (80,000 senior level college students) reported that of the participants in their study who concurrently enrolled, 58% did so at either a vocational-technical school or community college. The difference in percentage between this study and the 2005 NSSE could be attributed to the limited nature of this study. Nevertheless, both studies reported the pervasive practice of students concurrently enrolling at community/technical colleges. Studies by Clingman (2006)
and Gose (1995) also found that transferring credit from 2-year colleges to 4-year colleges is a pervasive practice.

The most common reason for concurrent enrollment was *lower tuition cost at another institution* (81% of the respondents). This finding explains why public colleges generally and public community/technical colleges specifically are popular choices for concurrent enrollment. Other studies (e.g., Adelman 1999, 2004; Gose, 1995, Hossler, Schmidt, & Vesper, 1999; Hu & Hossler, 1998, National Survey of Student Engagement, 2005) have found that students enrolled in private colleges are concerned about tuition costs and prone to concurrently enroll at public colleges if permitted to do so.

Most respondents indicated that a highly restrictive transfer credit policy would have discouraged them from enrolling at Cedarville University. This finding needs to be considered in light of the fact that the respondents may not have been aware that many other private colleges and universities have policy restricting concurrent enrollment (Longanecker & Blanco, 2003). Nevertheless, implementing a highly restrictive policy at Cedarville University entails some risk because the effects are uncertain.

**Recommendations**

Findings and conclusions presented in this study should be considered by Cedarville University administrators to make objective decisions regarding transfer credit policy. Also, administrators at other higher education institutions may wish to deploy the research design to conduct similar studies.
Transfer Credit Policy

Cedarville University administrators should consider implementing a moderately restrictive concurrent enrollment policy that limits transfer credits post initial enrollment to 12 semester hours. This recommendation takes into consideration two factors: the estimated loss of tuition revenue due to concurrent enrollment and potential negative consequences of adopting a highly restrictive policy. Given these two factors, a moderately restrictive policy provides a prudent option given the data currently available.

Block Tuition Pricing

When this study commenced, Cedarville University administrators were considering a block tuition pricing model. That model was adopted in the fall of 2010 but was applied only to new students. The purposes of the new pricing model were to reduce concurrent enrollment and to produce more accurate projections of net tuition revenue (see, Russo & Coomes, 2000; Supiano, 2011). Since the fiscal impact of the block tuition model is not yet fully known, it is recommended that another study be conducted after the entering class of 2010 reaches senior-level status. That study should determine if the policy change achieved its stated purposes.

Tracking Concurrent Enrollment

Given the magnitude of concurrent enrollment and tuition loss reported in this study, Cedarville University administrators should annually examine the fiscal effects of concurrent enrollment. Such research should replicate elements of this study and provide a longitudinal profile of concurrent enrollment. These annual evaluations are
especially meaningful if the institution adopts a transfer credit policy aimed at reducing concurrent enrollment.

Examination of Commuter Student versus On-Campus Student

This study did not examine if concurrent enrollment attainment differed between commuter students and on-campus students. The results of the study reported that a high percentage of students concurrently enrolled because of “convenience,” therefore, it is recommended that future studies on concurrent enrollment examine if attainment patterns differ between students who commute and students who live on-campus.

Broadening the Knowledge Base

As options for students broaden and as competition for students intensifies, administrators across all private colleges will benefit from having access to data on concurrent enrollment. Therefore, this study should be replicated at other private, liberal arts 4-year colleges and universities.
REFERENCES


Cedarville University. (2006). *Cedarville University factbook*. Cedarville, OH: Cedarville University, Department of Institutional Research.


Cedarville University. (2010). *Cedarville University factbook*. Cedarville, OH: Cedarville University, Department of Institutional Research.


student attendance patterns. *New Directions for Higher Education, 121*, 51-68.


Appendix A

Cedarville University Letter of Approval

April 3, 2009

Scott Van Loo
Director of Admissions
Cedarville University

To: Scott Van Loo

Subject: Research Proposal Approval

After review by the Cedarville University Institutional Review Board, the following proposal has been approved and research may be conducted as described in the proposal. We request a copy of your final research report as it may provide interesting insight into our student population.

Proposal Title/Subject: An Analysis of Concurrent Enrollment Behavior in Baccalaureate Degree-seeking Students

Thank you for supporting our students’ interest in, and experience with, research related to their areas of study. If you or those participating in your study have questions regarding this action, please feel free to contact me at (937) 766-3840 or by email at arunyan@cedarville.edu.

Best regards,

Andrew A. Runyan

Andrew A. Runyan, Ph.D., P.E.
Associate Vice President,
Academic Administration
Appendix B

University of Dayton Institutional Review Board Approval

12 June 2009

Mr. Scott VanLoo
9452 Sandy Run Dr.
Waynesville, OH 45068

SUBJECT: “An Analysis of Concurrent Enrollment Behavior in Baccalaureate Degree Seeking Students”

Dear Mr. VanLoo,

The Committee for the Protection of Human Subjects in Research has reviewed the subject proposal and has approved it for a period of one year. If the study is not completed by 12 June 2010, you are required to seek re-approval from the committee at that time. The committee must approve any changes in the protocol prior to the implementation of the change unless such a delay would place your participants at an increased risk of harm. In such situations, the committee is to be informed of the changes as soon as possible. The committee is to be informed immediately of any ethical issues that arise in your study.

Please let me know if you have any questions. Good luck with your research.

Sincerely,

Jon Nieberding
Chair

---

COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS IN RESEARCH

Jon Nieberding, Chair
UDRI KL 142
UDRI 100 College Park
Dayton, OH 45469-0194
(937) 229-2010
FAX (937) 229-2291
Appendix C
Survey Instrument

Transfer Credit Questionnaire

Please Print:
Name: ____________________________________________
Student ID#: ____________________________________

Questionnaire Instructions:
You are being asked to complete this questionnaire because you are a senior status student at Cedarville University who has completed transfer credit from another institution after full time enrollment at Cedarville University. For the purposes of this study and to assist you with the questionnaire, transfer credit is defined as academic credit:
- That you have earned at another institution through the successful completion of courses and coursework
- That has been accepted at Cedarville University and posted to your transcript
- That has been completed after full time enrollment at Cedarville

Student Behavior

1. Identify the number of semester hours that you transferred to Cedarville University in each of the following categories:  (example: 3 General education semester hours transferred)

   ___ Semester hours transferred that count towards my general education requirement
   ___ Semester hours transferred that count towards my elective hour requirement
   ___ Semester hours transferred that count towards my minor(s)
   ___ Semester hours transferred that count towards my major(s)

2. I completed transfer credit at a . . . (check all that apply)

   ☐ Community / Technical college
   ☐ State 4-year college/university
   ☐ Private 4-year college/university

3. I completed transfer credit during . . . (check all that apply)

   ☐ Freshman Year  ☐ Fall Semester  ☐ Spring Semester  ☐ Summer Semester
   ☐ Sophomore Year  ☐ Fall Semester  ☐ Spring Semester  ☐ Summer Semester
   ☐ Junior Year  ☐ Fall Semester  ☐ Spring Semester  ☐ Summer Semester
   ☐ Senior Year  ☐ Fall Semester  ☐ Spring Semester  ☐ Summer Semester
   ☐ Other
4. How many semester hours of transfer credit did you complete in each of the following instructional formats? (example: 3 On-line instruction)

- On-line instruction
- On campus face-to-face instruction
- Correspondence instruction
- Independent study
- Other (please specify)

5. Why did you complete transfer credit? (check all that apply)

- Lower tuition costs at another institution
- Wanted to avoid a course or courses at Cedarville University
- Course(s) not offered at Cedarville University
- Needed to complete transfer credit in order to graduate from Cedarville University in four years
- Desired to experience another institution
- Convenience
- Other

**Student Reaction**

6 – 8. Indicate your agreement with each of the following statements using the provided response code.

*4. Strongly agree; 3. Agree; 2. Disagree; 1. Strongly Disagree*

<table>
<thead>
<tr>
<th>4 3 2 1</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 3 2 1</td>
<td>If Cedarville University had a policy prohibiting transfer credit, such a policy would not have affected my decision to attend the institution.</td>
</tr>
<tr>
<td>4 3 2 1</td>
<td>If Cedarville University had a policy limiting transfer credit to 6 semester hours, such a policy would not have affected my decision to attend the institution.</td>
</tr>
<tr>
<td>4 3 2 1</td>
<td>If Cedarville University had a policy limiting transfer credit to 12 semester hours, such a policy would not have affected my decision to attend the institution.</td>
</tr>
</tbody>
</table>
Demographic Profile

9. Did you attend another college or university as a full-time student prior to enrolling at Cedarville University?
   - [ ] Attended 1 or 2 year college before Cedarville University (i.e., Bible college)
   - [ ] Attended a community/technical college before Cedarville University
   - [ ] Attended a 4-year college before Cedarville University
   - [ ] Attended no college before Cedarville University

10. Have you ever withdrawn for a semester or more before re-enrolling at Cedarville University?
    - [ ] Yes  [ ] No

11. Gender:
    - [ ] Male  [ ] Female

12. What is your major? (Fill in blank)
    ____________________________________
Appendix D

Letter to Study Population

You are receiving this letter as an invitation to participate in a questionnaire that I will be administering to complete my Ph.D. I am studying the “Concurrent Enrollment Behaviors” of undergraduate students and the questionnaire that you will receive will be titled the “Transfer Credit Questionnaire”. You are being invited to participate because you are a senior status student at Cedarville that has completed transfer credit from another institution after full time enrollment at Cedarville.

I realize that you are very busy and short on time. The survey is a 12 item questionnaire that will be sent to you via e-mail. When you receive this e-mail, I ask that you take a few minutes to complete the survey. Data will be collected and returned to the researcher for use in the dissertation process.

Results of this study will be beneficial to university leaders because increasing knowledge on student behavior can provide insights for future policy and decision making. Again, thank you for taking time out of your busy schedule and for your help with this study.

Sincerely,

Scott Van Loo
Director of Admissions