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Off-Campus Work and Its Relationship to Students’ Experiences with Faculty

Using the College Student Experiences Questionnaire

by

Cathy J. Hakes

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education
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Key Words: Engagement, Persistence, Student Employment, Student-Faculty Interaction, Student Success

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Off-Campus Work and Its Relationship to Students’ Experiences with Faculty Using the College Student Experiences Questionnaire

Cathy J. Hakes

ABSTRACT

Statistics on the numbers of college students working have shown an increase as students cope with rising costs of education, decreasing financial aid, greater personal financial commitments, and the expectation that students should contribute to the cost of their own education. These facts combined with the students’ need to secure employment upon graduation contribute to why they must work while attending college.

Whereas working may provide a means to address students’ financial and employment concerns, it also limits the amount of time students have to interact with faculty outside of class. This form of student engagement enables students to become more comfortable with their academic environment and enhances their sense of belonging which contributes to their persistence.

The purpose of this study was to examine the relationship between the number of hours students worked off-campus and the frequency of their experiences with faculty as measured by the College Student Experiences Questionnaire 4th Edition. Examples of students’ interactions with faculty included actions such as talking with your instructor about your course grades and assignments; discussing career plans; socializing outside of class; asking for comments on academic performance; and working with a faculty
member on a research project. The study also examined the relationships between gender and work and between class standing and work.

In examining the relationship between hours worked and the ten experiences with faculty, those who worked 1-20 hours weekly participated in significantly more discussions outside of class with other students and faculty than students who did not work. The researcher suspects this may be true because students may be more inclined to gather together with peers outside of class for study groups, lab projects, and group assignments that may involve the participation of faculty outside of class. These types of activities are usually associated with class requirements and students, regardless of their work schedules, must make time for them as they influence their grades in the course.

In examining the relationship between gender and hours worked, the research revealed no significant relationship existed for any of the work groups which included: no work, 1-20 hours per week, and over 20 hours per week. Further examination of the relationship between class standing and hours worked showed a greater proportion of seniors worked compared to juniors.

These findings resulted in several recommendations for future research which include studying the relationship between student engagement and other variables such as: the nature of the students’ work; time constraints i.e.; intercollegiate athletics or performing arts; and the students’ academic major. Examining these may yield insights into the relationship work may have with other aspects of student engagement.
CHAPTER ONE: INTRODUCTION

A common component of any mission and goals statement at an institution of higher learning traditionally includes the institution's desire to deliver enriched learning experiences that engage its students and promote student success. Though this seems straightforward, the implications and working definition of student success are not always reflective of the same outcomes. Some researchers would point to grade point averages (GPA) and graduation rates to define student success while others would review placement rates among graduates, length of time to degree completion, and the level of debt at time of departure from college. Habley & Schuh in Kramer et al., (2007) stated “the current measures of institutional success are the percentage of students who enroll, the percentage who stay, and the percentage who subsequently graduate” (p. 359). This definition describes student success strictly from the perspective of the institution and its need to assess student success within its own reporting structure.

As Habley and Schuh further pointed out the assumptions supporting these measures of success are flawed as not every student enrolls with the intent to earn a degree at that college. For these students, the definition of student success can be as simple as the desire to earn the necessary pre-requisites to transfer to another institution or gain skills that will enable them to move up the employment ladder or secure employment in a new emerging field perhaps due to job loss. Additionally, not all students enter with the intent to finish on the institution’s prescribed timetable as many
work full-time and attend part-time while meeting family obligations. Some will stop out, either planned or unplanned, taking time off to handle family matters such as childcare or eldercare issues. Others will encounter workplace issues such as time conflicts with class schedules which prohibit enrollment and may never return to finish their degrees. Some will find it necessary to withdraw due to financial matters that impact their ability to pay tuition. These and other situations often lead to longer time to completion. Based upon National Center for Education Statistics (NCES) data collected for the period of 1995-1996 half (51%) of students who enrolled at four-year institutions completed a bachelor’s degree within six years at the institution at which they started (Berkner, He, & Cataldi, 2002).

Regardless of the students’ reasons for dropping out or not re-enrolling, higher educational institutions are still held accountable for students’ success. The accountability measures are imposed by various governmental agencies, accrediting bodies, and others who define student success in terms of completers for meeting funding formulas and report student success in statistical comparisons where graduation rates may be used for rankings. These measures traditionally reflect student retention and degree completion statistics but don’t necessarily represent student success.

Faced with circumstances such as these, institutions must become more focused on “creating conditions that matter” as, Kuh, Kinzie, Schuh, Whitt, & Associates (2005) suggested. These conditions are within the institution’s span of control. They reported that “What students do during college counts more for what they learn and whether they will persist in college” (p. 8). They further advised that colleges must allocate sufficient resources and organize learning opportunities and services to encourage students to
become engaged to derive the benefits from such activities. Opportunities for students to
more frequently interact with faculty, staff and their peers will help to foster student
success. As Kuh, Kinzie, Schuh, & Whitt, (2005) suggested, “Students learn firsthand to
think about and solve practical problems by interacting with faculty members inside and
outside the classrooms. Through interactions with students, faculty become role models,
mentors, and guides for continuous lifelong learning” (p. 51).

Studies conducted relative to college student development showed that the time
and level of effort students devote to related educational activities or as Kuh, Kinzie,
Schuh, Whitt, & Associates (2005) described through their research “educational
purposeful activities” is the single best predictor of their learning and personal
development. The degree of personal involvement and the investment of time is a
contributing factor to student retention and success.

The level of student interaction can be impacted by numerous elements outside
the control of the institution. One such element is student employment while enrolled in
college. College students are increasingly likely to work while attending school.
Researchers have reported similarly over the past decade that approximately 57 percent
of students work full or part-time (Broadbridge & Swanson, 2005; Furr & Elling, 2000).
In 2006, the American Council on Education (ACE) reported that “regardless of age,
gender, race/ethnicity, dependency or marital status, enrollment status, types of institution
attended, or even income or educational and living expenses, 70-80 percent of students
work while they are enrolled” and “23 percent of full-time students work more than 35 or
more hours per week while enrolled” (p. 1-2). On average, employed students spend
almost 30 hours per week working while enrolled (ACE). The American Council on Education further reported that:

Students are more likely to work than they are to live on campus, to study full time, to attend a four-year college or university, or to apply for or receive financial aid. Students work regardless of the type of institution they attend, their age or family responsibilities, or even their family income or educational living expenses. Working while enrolled is perhaps the single most common major activity among America’s diverse undergraduate population. (p. 2)

Even though the value of work, either part-time or full-time, has been associated with numerous studies on student retention, success and even employment upon graduation, there has been little research conducted that specifically examines the relationship between work off-campus and student interactions with faculty. Kuh and Hu (2001) reported that “educators at all levels believe that frequent, meaningful interactions between students and their teachers are important to learning and personal development” (p. 309). Fjortoft (1995) suggested that “how employment interacts and influences students’ opportunities for activities that increase levels of integration with the campus need to be examined” (p. 3).

Statement of the Problem

The number of college students working off-campus has continued to grow as students are faced with decreasing financial aid, rising costs of education, greater personal financial commitments, and the need to secure employment upon graduation (ACE, 2006; Boehner & McKeon, 2003; Miller, Danner, & Staten, 2008). These same students are also faced with decisions related to their level of involvement with collegiate
resources and activities that have been shown to support engagement, retention, and persistence. Whereas employment while enrolled provides the means to address students’ financial concerns, it also limits the amount of time students can devote to educationally purposeful activities such as interaction with faculty and peers inside and outside the classroom. This study examined the relationship between the number of hours that students reported that they worked off-campus and their perceptions of the campus environment, specifically experiences with faculty, as measured by the College Student Experiences Questionnaire (CSEQ), (Pace & Kuh, 1998).

The CSEQ, developed by C. Robert Pace at the University of California and hosted by Indiana University Center for Postsecondary Research, is used to measure the quality and quantity of participant involvement on campus. “The CSEQ is based upon a simple but powerful premise related to student learning: The more effort students expend in using the resources and opportunities an institution provides for their learning and development, the more they benefit” (Gonyea, Kish, Kuh, Muthiah, & Thomas, 2003, p. 4). The “quality of effort,” a term coined by Pace and as measured by the CSEQ, describes the interaction between students and their college environment which is related to academic achievement and persistence (Pace & Kuh, 1998).

Need for the Study

Research related to student employment, including both on and off-campus, over the past twenty years reported both the positive and negative effects of student employment citing correlations between specific numbers of hours worked on students’ GPAs, persistence, graduation rates, and level of debt upon graduation (Astin, 1993;
Research has also quantified the impact of on-campus student employment such as work-study and its relationship to persistence and graduation. According to King’s 2002 study of 12,000 undergraduates, students who work more than 15 hours per week are less likely to graduate in four years. King (as cited by Dundes & Marx, 2006, p. 108) also found that those who work fewer than 15 hours are actually more likely to graduate in four years than those who do not work at all. Further, students who work long hours may be more likely to drop out of school and never receive a college degree (Astin, 1993).

Identifying the effects of work on college students has many implications and even though there have been numerous studies done, little research could be found that examined the relationship between students who work and their level of interaction with faculty. It has been well documented that the more engaged students are, both inside and outside the classroom, the greater their opportunities to gain support and encouragement from faculty and staff (Astin, 1993). This engagement contributes to student success. Educational researchers have shown that frequent, meaningful interactions between students and their teachers are important to learning and personal development (e.g. Astin, 1977, 1985, 1993; Bean, 2005; Kuh, Kinzie, Schuh, Whitt, & Associates, 2005; Pascarella & Terenzini, 1979, 1981; Tinto, 1993).

As McCormick, Moore, & Kuh, (2009) suggested:

Living away from campus, working off campus, and having substantial work commitments while enrolled full time raised concerns about the ability of students
to derive maximum benefit from the college experience. Of particular concern is the effect of these constraints on interacting with faculty outside class, participating in cultural and co-curricular activities, and using campus academic and support resources. (p. 14)

It can be hypothesized that anything that takes students off-campus and away from the supportive educational environment may influence students’ access to engaging in activities such as interaction with faculty. Such activities support the students’ quality of effort which has been positively linked to academic achievement, satisfaction, and persistence that ultimately results in retention and graduation (Gonyea, et al., 2003).

Purpose of the Study

This study examined the relationship between employment (working off-campus) and students’ frequency of involvement with specific educational opportunities (experiences with faculty). Through purposeful selection of secondary data, the study explored the relationship between the number of hours students worked off-campus (no work, part-time or full-time) while living off-campus, (in an apartment or house within walking or driving distance) and the frequency (never; occasionally; often; or very often) of students’ experiences with faculty with a variety of options (activities associated with Quality of Effort) as measured by the College Student Experiences Questionnaire (CSEQ).

The CSEQ is comprised of multiple parts designed to measure the quality of effort associated with students’ use of college resources. These resources are components of the college environment that have been shown to influence student performance and engagement. Students’ responses are characterized by the frequency and degree of
engagement in a variety of specific activities and use of various campus resources (Pace & Kuh, 1998).

Research Questions

This research focused on the relationship between the number of hours students worked and their quality of effort as it related to their experiences with faculty. The research explored the relationship between the variable of the number of hours worked off-campus and gender, and between the variable of the number of hours worked off-campus and classification in college which is referred to as class standing in this study.

The three research questions central to this study were:

1. Is there a relationship between the number of hours students work off-campus (independent variable) and students’ quality of effort as it relates to their reported experiences with faculty (dependent variable)?

2. Is there a relationship between the number of hours students work off-campus and their gender?

3. Is there a relationship between the number of hours students work off-campus and their class standing?

In summary, the primary research question asked was, does the number of hours worked by students off-campus add significantly to the explanation of the variation in the dependent variables (level of interaction with faculty)?

Assumptions

The author of this study assumed that:

1. The quality and quantity of the student engagement and persistence are related
to student involvement and therefore the study of the variables associated with such engagement is valuable in understanding its relationship to student actions that may inhibit or discourage such involvement,

2. Working off-campus while enrolled in college has the potential to affect degree attainment and/or type of student engagement associated with the educational environment, and

3. The responses from students to the questionnaire represent an honest and valid representation of their behaviors associated with the activities being surveyed.

Limitations

1. This study was a relational study utilizing differential analysis to examine potential relationships between variables and not a true experimental design, thereby restricting any attempt to find or suggest a cause or effect relationship.

2. No data about the nature of employment were available for analysis.

3. No data representing other substantial time commitments by students such as intercollegiate athletics, drama, music, etc. were available for analysis.

4. The generalization of the findings is limited to large public colleges and universities whose geographical locations are in a large urban setting.

5. Further, the generalization of the findings is limited to juniors and seniors enrolled full-time who live off-campus and work off-campus.
Definition of Terms

Classification in College

A term used to define the students’ class standing in this research as self-reported on the CSEQ. It can be coded as freshman/first year, sophomore, junior, senior, graduate student or unclassified. Only students reporting their class standing as junior or senior are included in this study.

College Student Experiences Questionnaire (CSEQ)

A survey instrument originally developed by C. Robert Pace at the University of California, Los Angeles in 1979 with revised editions in 1983, 1990, and 1998. It measures student progress and the quantity and quality of students experiences both inside and outside the classroom at various levels of their experience in their college career. The CSEQ consists of one hundred fifty-one overall items that include eighteen background items. It is eight pages in length and takes approximately thirty minutes to complete. The survey collects responses related to the frequency of engagement in a variety of collegiate activities as students are asked to reflect on their entire collegiate experiences. The CSEQ (4th ed.) measures three general aspects of a students’ experience: College Activities, (13 items); College Environment, (10 items) and Estimate of Gains, (25 items). Space is also provided for institutions to add twenty additional questions for student responses (Pace & Kuh, 1998). Students’ responses to questions in the College Activities section related to experiences with faculty are the ones of most interest in this study.
Experiences with Faculty

Within the College Activities section of the CSEQ, students are asked to respond to a series of ten behaviors related to their level of interaction with faculty. Using one of four frequency options: never; occasionally; often; or very often, students indicate how often they engage in the following specific activities relative to their experiences with faculty:

1. Talked with your instructor about information related to a course you were taking (grades, make-up work, assignments, etc.).

2. Discussed your academic program or course selection with a faculty member.

3. Discussed ideas for a term paper or other class project with a faculty member.

4. Discussed your career plans and ambitions with a faculty member.

5. Worked harder as a result of feedback from an instructor.

6. Socialized with a faculty member outside of class (had a snack or soft drink, etc.).

7. Participated with other students in a discussion with one or more faculty members outside of class.

8. Asked your instructor for comments and criticisms about your academic performance.

9. Worked harder than you thought you could to meet the instructor’s expectations and standards.

10. Worked with a faculty member on a research project (Pace & Kuh, 1998. CSEQ 4th ed., p. 4).
**Full-Time Employment**

Paid work either on or off-campus that is 21 or more hours per week.

**Full-Time Student**

A student enrolled in 12 or more credits in a given semester or term. This is consistent with common practice in higher education and reflects the definition of full-time enrollment for students receiving federal financial aid.

**Gender**

Students’ sex as indicated by their response on the CSEQ.

**Junior or Senior**

Description used to categorize the students’ self-reported class standing in college and as described as classification in college in the CSEQ.

**Involvement**

The intensity and frequency of activities in which students participate in college. This may include employment, student organizations and activities, community service, and academic activities. This variable has been found to have a positive relationship to retention rates (Astin, 1993; Tinto, 1987). Involvement is defined, for the purposes of this study, as the amount of time that a student devotes to academic experiences, specifically related to activities that include interactions with faculty.

**Off-Campus Employment**

Any type of paid work where the place of employment is located off the campus of the institution that the student attends and the employer is not the institution.
**On-Campus Employment**

Any type of paid work where the place of employment is located on the campus where the student attends. Students reporting they work on-campus will not be included in this study.

**Part-Time Employment**

Paid work either on or off-campus that is 20 hours or less per week.

**Persistence**

An important indicator of academic success which leads to graduation and is commonly used to describe a student’s continual re-enrollment through a prescribed course of study until earning a degree (ACE, 2006).

**Quality of Effort**

The degree of students’ use of institutional resources and opportunities provided for their learning and development as reported in the College Activities section of the CSEQ.

**Residence**

The location where the student lives during the school year as reported on the CSEQ. Response options are dormitory or other campus housing; residence (house, apartment, etc.) within walking distance of the institution; residence (house, apartment, etc.) within driving distance; or fraternity or sorority house. Students reporting their residence was a dormitory, fraternity, sorority, or other campus housing were not included in this study.
Retention

A campus-based phenomenon used to describe the ability of a particular college or university to successfully graduate students who initially enroll at that institution (Berger & Lyon, 2005). Tinto (1987) has also defined retention as the percentage or number of students that remain at the same college or university from a specified point in their academic enrollment. It is common practice to measure retention from semester to semester from the point in which the student initially enters to the point he or she graduates or ceases to be enrolled without completing the prescribed course of study. Tinto examined and described various stages of retention and causes for students’ early departure from college.

Student Engagement

Defined by Kuh (2001) as “A domain of constructs that measures both time and energy students devote to educationally purposeful activities, and how student perceive different facets of the institutional environment that facilitate and support their learning” (p. 10) and in 2003 he added “the single best predictor of [student] learning and personal development” (p. 24).

Student-Faculty Interaction

Defined by McCormick, Moore, & Kuh, 2009 as “The amount of a student’s reported contact with faculty members (for example, discussing class topics with faculty outside class, working with faculty on research projects or other activities outside class, and receiving prompt feedback on assignments” (p. 7).
Student Success

There is no single definition for student success as it is reported using multiple dimensions which commonly reflect persistence rates and graduation rates (Henry, Wills, Nixon, 2005). For purposes of this study, student success is the result of the students’ time and effort spent on activities, services and resources that promote and support their engagement within the learning environment (Kuh, 2005).

Overview of Methodology

This study utilized secondary data reported from the CSEQ (4th ed.) from 2005 to 2009 as collected by Indiana University Center for Postsecondary Research. Using the Statistical Package for the Social Sciences (SPSS) software for computer based calculations; the study examined the relationship that students’ self-reported levels of quality experiences with faculty have to student employment off-campus. A total of 1426 student cases were used in this study. All cases included complete responses eliminating the need to impute missing values.

In the Background Information collected on the CSEQ (4th ed.), students were asked to respond to a series of questions designed to establish some demographic parameters. Five of the eighteen background information questions used in this study included: 1) Sex; 2) What is your classification in college? 3) Where do you live during the school year? 4) How many credit hours are you taking this term? and 5) During the time school is in session, about how many hours a week do you spend working on a job for pay? (p. 2-3).

The first student response included in the data analysis was the students’ reported gender. This aspect was included in the study to build upon the research done by Kinzie,
Gonyea, Kuh, et al. (2007) who found that “men and women differ in terms of participating in activities that are positively linked to higher levels of student learning and development” (p. 6). Men, less frequently than women, engaged in academically challenging activities and participated less often in active and collaborative learning environments (p. 23).

The second student response included in the study was the students’ reported classification in college:

- freshman/first year
- sophomore
- junior
- senior
- graduate student
- unclassified

Only students who reported their class standing as junior or senior were included in this study to reduce the level of variability and to provide for a more homogeneous population. Previous studies conducted by ACE (2006) concluded nearly 80 percent of undergraduates work while pursuing a college education (p. 7).

The third student response used in the data analysis was the location where students lived during the school year with options for the following responses:

- dormitory or other campus housing
- residence (house or apartment, etc.) within walking distance of the institution
residence (house or apartment, etc.) within driving distance
fraternity or sorority house

Only students who reported their residence was a house or apartment, etc. within walking or driving distance of the institution were included in this study. Research has shown that “students who live on campus are more engaged overall compared with students who commute” (Kuh, Gonyea, & Palmer, 2001, p. 9). Proximity to campus makes a difference in commuter students’ level of engagement. Additionally, students who live on-campus are less likely to work off-campus due to the necessity for transportation to and from their place of employment.

The fourth response included in this study identified the students’ enrollment status by the number of credits they were taking. Students indicated the number of credit hours they were taking during the term by their selection of one of the following values:

- 6 or fewer
- 7 – 11
- 12 – 14
- 15 – 16
- 17 or more

Only students who reported enrollment in 12 or more hours were included in this study and were classified as full-time.

The fifth student response used in the data analysis was the students’ answers to the questions regarding whether they had a job; the location of the employment; and the number of hours per week they worked. Students were asked to indicate the location as on-campus or off-campus and had the option to select both. Additionally, respondents
were asked to indicate the number of hours per week based upon the following response options:

- None, I don’t have a job
- 1-10 hours a week
- 11-20 hours
- 21-30 hours
- 31-40 hours
- More than 40 hours a week.

Only students who reported that their employment is solely off-campus or that they did not have a job were included to reduce the effect of variables that were not part of the study and to control for a more homogeneous population.

Finally, within the CSEQ section titled “College Activities” students must have responded to specific data elements within the subsection “Experiences with Faculty.” This section asked students to rate the frequency of their experiences with faculty during the current school year on a scale from never; occasionally; often; or very often with a series of ten questions with varying levels and types of interaction with faculty (Pace, & Kuh, 1998).

Organization of Remaining Chapters

Chapter Two of this study provides a review of relevant scholarly research focused on student retention, persistence and success; effective educational practices impacting student engagement; historical perspectives of student employment; and the impact of student-faculty interaction on student success. In addition, the survey
instrument, the College Student Experiences Questionnaire (4th ed.) is presented in greater detail.

Chapter Three discusses the research design and methodology including the population and sample parameters; variables; the CSEQ as the secondary data source, its reliability and validity as well as data analysis procedures. Chapter Three also provides a description of the data analysis procedures used to answer the research questions.

Chapter Four presents the results of the research and discusses their significance. Tables and figures are included to graphically represent the findings.

Finally, Chapter Five provides a summary of the study and discusses in more detail the findings and how they relate to previous studies. Implications and the impact of this study relative to current practices are supported by the findings. Recommendations for further research and practice are also recommended.
CHAPTER TWO: REVIEW OF LITERATURE

Introduction

The literature review for this study defines and describes the factors that research has shown to impact students’ quantity and quality of effort relative to their higher educational experiences. Kuh, Gonyea, & Palmer (2001) in their studies on disengaged commuter students reference Pascarella’s work when they stated, “what students gain from their college experience depends a lot on how much time and effort students put into their studies and other educationally purposeful activities” (p. 1). Activities traditionally associated with learning, such as reading and writing, preparing for class, and interacting with instructors about various matters are all reflective of the students’ quality of effort. The degree of quality of effort students put into these types of activities is what Kuh (2001) reported contributes to student engagement.

The college environment, along with the opportunity for and degree of student engagement, impacts the amount of time and energy students devote to the myriad of opportunities they encounter in college. They also influence the students’ perceptions of their institution’s environment, and ultimately what the students perceive as gains from attending college. Within the discussion of student engagement, its relationship to student persistence and success are presented. Other factors that have shown to influence student retention, persistence and success are also described. Interaction with faculty is a key
component of student engagement and, from the literature reviewed factors limiting student interaction with faculty are addressed.

Chapter Two also provides an historical look at the impact of student employment on student engagement, persistence and academic success. Finally, the instrument used to collect the data for this study is introduced along with its attributes and a review of its historical context.

Student Retention, Persistence and Success

Student retention, persistence and student success are commonly expressed terms in higher education when examining the reasons some students are more likely to complete the goal of earning a degree in higher education than others. The demand for research on these topics is fueled by institutions that are faced with budget deficits, high dropout rates, declining graduation rates, and increasing numbers of applicants at both public and private colleges and universities. These issues, compounded by the increasing demand for assessment and accountability from accrediting organizations and political governing bodies, have forced institutions of higher education to examine their educational practices that contribute to student engagement which research has found impacts student retention, persistence and success. Tinto (2005) confirmed these concerns as the impetus for institutions of higher education finding useful models of student success that can guide their actions.

There has been a voluminous amount of research devoted to student retention which seeks to explain the reasons for student drop-outs, stop-outs and why some students persist and complete their course of study while others do not. Tinto (2005) suggested that retention has been one of the most widely studied topics in higher
education over the past thirty years. Berger & Lyon (2005) noted “recent trends have seen retention increasingly recognized as the responsibility of all educators on campus, faculty and staff, even when there are specialized staff members solely dedicated to improving campus retention” (p. 4). Findings in most studies point to the varying levels of personal commitment, academic preparation, financial support, and the degree of student involvement (Braxton & Lien 2000; Cabrera, Nora, & Castaneda 1992; Horn & Kojaku 2001; Ishitani & DesJardins 2002; Nora & Cabrera 1996). With all the studies on student retention, researchers commonly reported that academic preparation, commitment, and involvement contributed to student retention (Braxton & Lien 2000; Cabrera, Nora, & Castaneda 1992).

Another factor that has been shown to play a significant role in student retention is institutional commitment. Tinto’s (1993) “principles of effective retention” described a broader commitment to the education of all students and emphasized the importance of social and intellectual community in the education of students. These principles of institutional commitment to students; educational commitment; and social and intellectual community are the “secret of successful retention” and describe an “enduring commitment to student welfare, a broader commitment to the education, and not mere retention, of all students, and an emphasis upon the importance of social and intellectual community in the education of students” (p.145). As part of the social and intellectual community, Tinto (1993) reported that, “student learning best occurs in settings that involve students in the daily life and provides social and intellectual support for their individual efforts” (p.147). This support can come from contact with students in a variety of settings but Tinto suggested that:
Institutions must consciously make an effort to reach out and establish personal bonds among students and between students, faculty, and staff members of the institution. Particularly important is the continuing emphasis upon frequent and rewarding contact between faculty, staff, and students in a variety of settings both inside and outside the formal confines of the classroom and laboratories of institutional life. (p.147)

Student persistence is also a key element leading to student success. Early research related to student persistence done by Pascarella and Terenzini (1979) found frequent contact with faculty to be an important element in student persistence especially when the student faculty contact extends beyond the formal boundaries of the classroom. “The evidence for the effectiveness of such interactions is quite clear. The more frequent and rewarding the interactions are between students and other members of the institution, the more likely are individuals to stay” (Tinto, 1987, p. 150). In Tinto’s (1993) studies, academic integration and social integration are the keys to student persistence and success. These experiences “serve to integrate individuals into the social and intellectual life of the institution. Generally, the more satisfying those experiences are felt to be, the more likely are individuals to persist until degree completion” (p. 50).

Fjortoft’s (1995) research further described persistence when he stated “student persistence is a longitudinal process that occurs as a result of interactions between the student and the institution” (p. 4). He explained student persistence as a result of the match or “fit” between student characteristics and the institution’s academic and social characteristics. This match or fit, in turn, shapes students’ commitments to the institution itself and to the goal of college completion.
Strayhorn’s (2006) research regarding factors that influence academic achievement also found that both in-class and out-of-class college experiences impact students’ persistence. In-class experiences promote academic integration, which “relates to one’s satisfaction with the intellectual life of college that often takes place within the classroom” (p. 85). Out-of-class experiences, which facilitate students’ social integration with activities such as hours worked per week, also have a net impact on student achievement and persistence.

Astin (1970) was one of the early reporters of the impact of student involvement and its relationship to persistence and student success. His input-environment-outcome (I-E-O) model explained the influences of college on student outcomes. According to his model, (as cited by Pascarella and Terenzini, 2005) there were three factors that contributed to why and how students changed as a result of their college experience:

College outcomes are viewed as functions of three sets of elements: inputs, the demographic characteristics, family backgrounds, and the academic and social experiences that students bring to college; environment, the full range of people, programs, policies, cultures, and experiences that students encounter in college, whether on or off campus; and outcomes, students’ characteristics, knowledge, skills, attitudes, values, beliefs, and behaviors as they exist after college. (p. 53)

Astin (1985) later built upon this model when he proposed his “theory of involvement” to explain how students change as a result of their interaction with college activities. He suggested that the amount of physical and psychological energy invested by students, along with the quantity and quality of involvement and the capacity of the institutions’ policy to induce student involvement, all contributed to students learning by
becoming involved (as cited by Pascarella and Terenzini, 2005, p. 53). Astin (1985) in summary reflected:

…the amount of student learning and personal development associated with any educational program is directly proportional to the quality and quantity of student involvement in the program. The effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement. (p. 36)

Tinto (2005) also outlined what he believed to be the most important conditions institutions can demonstrate that contribute to student success. These conditions are institutional commitment, expectations, support, feedback, and involvement or engagement. The first condition, institutional commitment “is more than just words, more than just mission statements used in elaborate brochures; it is the willingness to invest the resources and provide the incentives and rewards needed to enhance student success” (p. 321).

The second condition Tinto (2005) believed enhances student success is the establishment of high institutional expectations. He stated, “No students rise to low expectations. However expressed, research is clear that students quickly pick up expectations and are influenced by the degree to which those expectations validate their presence on campus” (p. 321).

In addition to commitment and high expectations, Tinto suggested that “support is a condition that promotes student success” (p. 322). This can be in the form of academic, social or financial support. Each of these types of support must be accessible and relative
to students’ needs. As Tinto pointed out, “support is most effective when it is connected to, not isolated from, the learning environment in which students are asked to learn” (p. 323).

The fourth condition that promotes student success is feedback. Tinto (2005) concluded, “Students are more likely to succeed in settings that provide faculty, staff, and students frequent feedback about their performance” (p. 323). This is inclusive of feedback, not only in the form of entry assessment of learning skills and early warning systems that identify at-risk students, but as Tinto pointed out, feedback using techniques that enable students and faculty “to adjust their learning and teaching in ways that promote learning” (p. 323).

Finally, the fifth condition that promotes student success as Tinto suggested is involvement or what is frequently referred to as academic and social integration (e.g. Astin 1993; Strayhorn, 2006; Tinto 1993). Tinto (2005) stated: “Quite simply, the more students are academically and socially involved, the more likely they are to persist and graduate” (p. 323). Tinto believed that the classroom may be the only place students meet each other and the faculty because of the large numbers of students who commute to college and who work while in college. He further stated, “If involvement doesn’t occur in those smaller places of engagement, it is unlikely it will easily occur elsewhere” (p. 324). As Tinto has reported student success is highly dependent upon institutions that offer settings that are committed to provide resources and incentives; demonstrate high expectations for students; provide support services and feedback; and facilitate involvement between students and faculty.
The acknowledgement of the institutional factors that encourage and contribute to student involvement is only the first step in identifying the elements that promote or deter student success. Another critical component is the student and his or her response or lack thereof to the opportunities provided by the educational setting that encourages student involvement. The quality of effort students devote to educationally purposeful activities impacts the student’s engagement and how they perceive different facets of the institutional environment that facilitate and support their learning (Kuh, 2001). Student engagement has also been positively linked to grades and persistence rates (Astin, 1977, 1985, 1993; Indiana University for Postsecondary Research, 2002; Pike, Schroeder, Berry, 1997). It is considered to be among the best predictors of learning and personal development. The more students study or practice a subject, the more they tend to learn about it (Kuh, 2003).

The research of Kuh and others has also focused on student success in college and the links between student engagement and student success. Like Tinto’s research, additional studies have investigated factors that contribute to student success and many reported student engagement as a positive contributing factor (Carini, Kuh, & Klein, 2006; Kuh, Hu, & Vesper, 2000; Pike, 1999, 2000; Pike, Kuh, & Gonyea, 2003). The theory of student engagement originated with the work of Astin in 1984 and was supported by the work of Pace, 1984; Pascarella & Terenzini, 1991; and Kuh, Schuh, Whitt, & Associates, 1991. Even though these educational researchers used differing terminology to describe their concept of student engagement, they all agreed upon the simple but important point that “students learn from what they do in college” (Pike & Kuh, 2005).
Student Engagement

The term student engagement, as demonstrated by the student’s level of involvement, has been frequently linked to student retention, persistence, and success. Student engagement represents the degree to which students are exposed to and take part in effective educational practices - practices that have been empirically linked to learning outcomes (Kuh, 2001, 2003; Kuh, Schuh, Whitt, & Associates, 1991). Among others researching student engagement, Pascarella and Terenzini (1991) labeled it as the most important factor in student learning and personal development while enrolled in college. Pike and Kuh (2005) and others (e.g. Gellin, 2003; Kuh, Hu, & Vesper, 2000; Pascarella et al. 1996; Pike, 1999, 2000) have shown through their research that “engagement is positively related to objective and subjective measures of gains in general abilities and critical thinking” (p. 186).

The term student engagement has become synonymous with the activities and actions of students both inside and outside the classroom. Kuh, et al. (2005) described the factors that contribute to student success in college by acknowledging “Student Engagement as A Key to Student Success” (p. 7). These same authors suggested that “What students do during college counts more for what they learn and whether they will persist in college than who they are or even where they go to college” (p. 8).

Student-Faculty Interaction

Student-faculty contact has been cited numerous times by many researchers as another important factor in both persistence and retention. Moneta and Kuh (2005) suggest the frequency of student-faculty contact has increased slightly over the past two
decades perhaps because of the increased attention brought to this important educational practice by a constant stream of reform reports since *Involvement in Learning: Realizing the Potential of American Higher Education* by the National Institute of Education Study Group (1984).

Despite initiatives to provide more student-faculty interaction, Moneta and Kuh (2005) reported based upon CSEQ data that “the proportions of students in recent years who say they at least “occasionally” socialize with faculty members outside the classroom is about the same as it was in the early 1980’s” (p. 77). They further reported that students who say that they do research with faculty or seek feedback from a faculty member regarding their career plans or class performance are comparable or slightly higher than in the 1980’s. Kuh and Hu (2001) believed it was because of the nature of the interactions. Moneta and Kuh (2005) confirmed this and interpreted their findings in later research when they stated:

…this may be because the nature of such interactions is not focused on things that matter to desired learning outcomes. For example, talking with faculty members about writing has a negative effect on student satisfaction, perhaps because many students—especially the first year—interpret faculty feedback on their writing as overwhelmingly critical, while faculty members may intend their critique as a challenge to spur students to higher levels of performance. (p. 77)

Kuh and Hu (2001) found a significant amount of higher education research referencing the unequivocal virtues of students’ interaction with faculty as have others including Astin, 1977, 1985, 1993; Kuh, Schuh, Whitt, & Associates, 1991; Pascarella & Terenzini, 1979, 1981; Tinto, 1993. They further cited Astin’s research when they stated
“the more contact between student and faculty both inside and outside the classroom, the greater the student development and satisfaction” (p. 300).

Pascarella and Terenzini (1991) reported that both the frequency and the nature of the student-faculty interaction have impact on the degree and level of interaction between students and faculty. Interactions that are substantive in nature and focus on such issues as career aspirations or future employment have a greater impact on the faculty-student interaction than those interactions that are casual or social in nature only (Kuh and Hu, 2001). Kuh and Hu offer further explanation to meaningful student-faculty interaction by suggesting that as students become more comfortable with their academic environment it will be easier for them to adopt institutional values and norms that ultimately lead to their sense of belonging and “fit” with the institution (p. 310).

Tinto (1993) reported that, “In the collegiate setting, research has tended to support the conclusion that the establishment of supportive personal relationships – with faculty, peers and other significant persons – enables students to better cope with the demands of the college environment” and …“this in turn, has positive impact upon student academic success” (p. 122). Student involvement in the collegiate environment provides opportunities for students’ meaningful interaction with both faculty and peers which leads to coherence in their academic work and contributes to their persistence (p. 132).

Theoretical Framework

Nora, Barlow, & Crisp (2005) pointed to numerous qualitative and quantitative studies over the past twenty years that have contributed to the literature base on student persistence including Braxton & Brier 1989; Hurtado & Carter 1997; and Pascarella &
Terenzini 1991. These studies along with those of Cabrera & Nora 1994; Cabrera, Nora, & Castaneda 1992; Nora 2002, 2004; and Nora & Cabrera 1996; lead to the culmination of a Student Engagement Model Theoretical Framework (Nora 2006). As depicted in Figure 2.1, Nora’s model provides a theoretical framework used in examining common factors that have shown to impact withdrawal and persistence decisions of students after the first year of college.

Among the factors cited in the diagram, “Pre-college Factors & Pull Factors” including family responsibilities, work responsibilities and commuting to college have been identified as contributing factors influencing students’ commitment to attending a specific institution.

Nora, Barlow & Crisp (2004) also cited “Academic and Social Experiences” that contribute to “Cognitive and Non-cognitive Outcomes.” Included within these are “Formal/Informal Academic Interactions with Faculty” as well as other factors such as “Social Experiences, Campus Climates, Validating Experiences, and Mentoring Experiences” all of which theoretically are shown to contribute to “Institutional Commitment, Educational Goal attainment and ultimately reenrollment in a Higher Education Institution” (p. 131).
Factors included within this theoretical framework formed the basis for this study which examined Environmental Pull Factors such as work and commuting to college and their relationship to Academic and Social Experiences. Included within Academic and Social Experiences are interaction with faculty associated with a sense of belonging, re-enrollment, academic performance, and degree attainment.
Academic and Social Integration

Studies examining the reasons why students prematurely depart college or drop-out prior to finishing their degrees point to the level of academic and social and integration they experience. Aspects of academic integration include meeting the standards of the college or university as well as the students’ affiliation with the structure of the academic system (Tinto, 1975). Social integration relates to the congruency between the student and the social systems that exist at the college or university. “Social integration reflects the student’s perception of his or her degree of congruency with the attitudes, values, beliefs, and norms of the social communities of a college or university” (Tinto, p. 107). In Tinto’s studies on student departure from college prior to graduation, he postulated that academic and social integration influence a student’s subsequent commitments to the institution and to the goal of college graduation (Tinto, 1993, p. 137). According to Tinto (1975):

The greater the student’s level of academic integration, the greater the level of subsequent commitment to the goal of college graduation. Also, the greater the student’s level of social integration, the greater the level of subsequent commitment to the college or university. (p. 110)

Tinto (1993) further suggested that both social and intellectual integration are essential to student persistence and that “evidence suggests that persistence is greatly enhanced when both forms of personal integration occur” (p.137).

Kuh & Hu (2001) supported Tinto’s integration research when they suggested that when interactions in the educational environment between students and faculty become more comfortable, the more students are willing to adopt institutional norms and values.
This outcome increases their sense of belonging and “fit” within the institution, factors that are positively related to persistence and graduation (p. 310).

The importance of social integration was also confirmed in a 1995 study conducted by Mayo, Marguia, and Padilla (as cited by Henry, Wills, Nixon, 2005) which compared the college experience of African American students and white students. These authors found “that formal social integration (contact with representatives such as faculty members) had a greater effect on African American students’ academic performance at both historically black and traditional white institutions” (p. 198).

Similarly, Sanchez’s (2003) research suggested factors, such as academic and social integration, faculty-student interaction, and support from other people exert significant indirect effects by acting on achievement and commitment. Because social and academic integration has such a great influence on persistence, it can be hypothesized that factors that pull students away from campus activities or conflict with students’ ability to participate in educational opportunities that promote integration such an interacting with faculty should negatively impact students’ overall level of involvement or engagement. Retention literature has shown this to be the case.

Nora, Barlow, & Crisp (2005) further reported:

Among those factors that have been found to impact student persistence, two major components include formal and informal academic and social experiences of students. The engagement of the student in classroom discussion, collaborative learning experiences, student organizations, and contact with faculty are all part of the underlying process affecting the adjustment of student to college, their
academic performance, and their decisions to remain enrolled to graduation.

(p.136)

Bean (2005) supported the significant role that faculty members play in the academic integration of students. He found that faculty affect the students’ self-image and self-efficacy by the way in which they structure the course and interact with their students. Just as powerful is the connection between professor and student outside of class. Bean stated: “When students feel faculty members do not care about the students’ development, their bonds to the institution weaken” (p. 225).

Effective Educational Practices

Research by Kuh, Kinzie, Schuh, Whitt, & Associates (2005) studied the types of educational practices that impact student engagement which they term the “Key to Student Success” (p.7). Their findings demonstrated declining graduation rates and greater numbers of four-year college students attending part-time which equated to a new graduation standard denominator of six years. Yet they acknowledged that “what students do during college counts more for what they learn and whether they will persist in college than who they are or even where they go to college” (p. 8). They cite the research of Astin, 1991; Pace, 1980; and Pascarella & Terenzini, 1991, 2005 that revealed that “the time and energy students devote to educationally purposeful activities is the single best predictor of their learning and personal development” (p. 8).

High levels of student engagement are components that contribute to student success (Kuh, Gonyea, & Palmer, 2001). The best-known set of engagement indicators is the “Seven Principles of Good Practice in Undergraduate Education” (Chickering & Gamson, 1987). These principles indicated that level of academic challenge, time on task,
and participating in other educationally purposeful activities directly influenced the quality of students’ learning and their overall educational experiences (Pascarella, 2001). From these principles, Kuh, Gonyea, & Palmer identified “five clusters of such activities they call Benchmarks of Effective Educational Practice” shown in Figure 2.2 which include such activities as student faculty contact, cooperation among students, active learning, prompt feedback, time on task, high expectations, and respect for diverse talents and ways of learning” (p. 3). The common element and key to all these principles is engagement which is heavily dependent upon the students’ motivation and the amount of time that can be devoted to activities that promote and enhance such engagement.

Historical Review of the Impact of Student Employment

The impact of student employment, both on and off-campus in a variety of settings including career and non-career related has been heavily researched over the past twenty years or more. Researchers have discussed both the positive and negative impact employment has on persistence, drop-out rates, graduation, attainment of employment after graduation, and even the degree of debt after graduation.

The academic benefits documented by researchers have also associated college student employment with effective career decision making over the past two decades (Hammes & Haller, 1993; Stern & Nakata, 1991; Van De Water, & Augenblick, 1987).
Level of Academic Challenge
Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote high levels of student achievement by emphasizing the importance of academic effort and setting high expectations for student performance. 10 questions:

- Preparing for class (studying, reading, writing, rehearsing, and other activities related to your academic program)
- Number of assigned textbooks, books, or book-length packs of course readers
- Number of written papers or reports of 20 pages or more
- Number of written papers or reports between 5 and 19 pages

Active and Collaborative Learning
Students learn more when they are intensely involved in their education and are asked to think about and apply what they are learning in different settings. Collaborating with others in solving problems or mastering difficult material prepares students to deal with the messy, unscripted problems they will encounter daily during and after college. 7 questions:

- Asked questions in class or contributed to class discussions
- Made a class presentation

Student Interactions with Faculty Members
Through interacting with faculty members inside and outside the classroom, students see firsthand how experts think about and solve practical problems. As a result, their teachers become role models, mentors, and guides for continuous, lifelong learning. 6 questions:

- Discussed grades or assignments with an instructor
- Talked about career plans with a faculty member or advisor
- Discussed ideas from your reading or classes with faculty members outside of class

Enriching Educational Experiences
Complementary learning opportunities inside and outside the classroom augment the academic program. Experiencing diversity teaches students valuable things about themselves and other cultures. Used appropriately, technology facilitates learning and promotes collaboration between peers and instructors. Internships, community service, and senior capstone courses provide students with opportunities to synthesize, integrate, and apply their knowledge. Such experiences make learning more meaningful and, ultimately, more useful because what students know becomes a part of who they are. 11 questions:

- Talking with students with different religious beliefs, political opinions, or values
- Talking with students of a different race or ethnicity
- An institutional climate that encourages contact among students from different economic, social, and racial or ethnic backgrounds
- Using electronic technology to discuss or complete assignments
- Participation in internships or field experiences, community service, or volunteer work, foreign language coursework, study abroad, independent study or self-designed major, culminating senior experience, co-curricular activities

Supportive Campus Environment
Students perform better and are more satisfied at colleges that are committed to their success and cultivate positive working and social relations among different groups on campus. 6 questions:

- Campus environment provides support you need to help you succeed academically
- Campus environment helps you cope with your non-academic responsibilities (work, family, etc.)
- Number of written papers or reports fewer than 5 pages
- Coursework emphasizes: Analyzing the basic elements of an idea, experience or theory
- Coursework emphasizes: Synthesizing and organizing ideas, information, or experiences
- Coursework emphasizes: Making judgments about the value of information, arguments, or methods
- Worked harder than you thought you could to meet an instructor’s standards or expectations

The majority of previous studies assumed that students seek career-related employment mainly for financial incentives (e.g., Stem and Nakata, 1991; Ehrenberg and Sherman, 1987) but Mulugetta & Chavez (1996) found in their study that there were uni-dimensional motives for students seeking academic-year employment and job experience beyond the financial incentive motive. Besides the initial motivator of money, students cited personal fulfillment as the second most common reason. Whether working or not, those responding to the study perceived academic work experiences as contributing positively to their educational experience and in providing opportunities to the job market and for developing their career plans.

In later research studies conducted by ACE (2006), the reasons students cited for working changed little with the primary reasons being to pay tuition and living expenses but did include an aspect not reported in earlier studies. “Another important influence on students who work is their parents. Sixty-three percent of dependent students who work stated that their parents expect them to work while enrolled” (p. 3). The same study found that the parental expectation for the student to work did not vary by parental income.

As Luzzo and Ward (1995) stated, "Earning while learning provides the student with both financial assistance to help meet college expenses and practical experience which may lead to enhanced opportunities for employment after graduation.” Luzzo (1996) further reported the benefits of college student employment clearly demonstrate the importance of student employment experiences in the career decision-making process. Pascarella and Terenzini’s (1991) early review of research related to employment while enrolled suggested similarly that “working during college, particularly in a job related to one's major or initial career aspirations, has a positive net impact on career
choice, career attainment, and level of professional responsibility attained early in one's career" (p. 480). Most recently, Pascarella and Terenzini (2005) confirmed again that employment while enrolled influences career decision making, the development of career related job skills, and attainment of employment after college (p. 519-520).

Dennis’ (1988) early research found that student employment programs not only offered the advantage of productive work for students; they also increased a student’s chance for completing college. From Dennis’ survey of 100 financial aid administrators from colleges and universities all over the nation who represented 172,055 first-year students with a total enrollment of 833,790 students, he reported that working during the freshman year does indeed have a “positive impact on first-year students because it provides students with an inside view of the school” (p. 37).

Other early studies focusing on retention or persistence generally concluded that some work increases the chances of a student persisting through a degree (Murdock, 1987; Terkla, 1985; Voorhees, 1985). One study stated that "research supports that the retention and success of students are linked to meaningful involvements while in school. Work experience ranks as one of the most common productive involvements for all college students" (Bazin & Brooks, 1981, p. 25).

Class standing in college was also studied by Wolniak and Pascarella (2007) who reported that working on or off-campus during the third year of college generally had a positive influence on intellectual integration and cognitive development. They further found that the positive effects of working lessened as the students’ weekly work hours increased such that working off-campus for more than 16-20 hours per week had a negative impact on cognitive development.
Another factor that has been researched is the impact that financial resources have on student retention and persistence. Some studies have concluded that “students who work to make money for college are likely to be more motivated to complete college than students who earn money to maintain their lifestyles” (Bean, 2005).

Over the years, repeated studies have looked at factors such as the impact of living off-campus, commuting and off-campus student employment. Nora, Barlow, & Crisp (2005) reported that students with on-campus jobs, which permitted the student to remain in close proximity to faculty and an academic environment, were more likely to persist well beyond the first year. Their findings concluded that the students’ ability to successfully engage in academic and social activities on campus impacts academic performance and the students’ desire to continue to be enrolled.

The growing cost of books, tuition, room and board and fees creates pressures for students who must balance work, school and home responsibilities. The stress of needing sufficient financial resources to remain in college was found to negatively impact students’ decision to remain enrolled in college (Cabrera, Nora, & Castaneda 1992; Nora & Cabrera 1996; Nora, Cabrera, Hagedorn, & Pascarella 1996). This phenomenon added to the problem of retention forcing students to choose between working to remain enrolled and limited their opportunities to engage in in-class and out-of-class experiences which contributed to the students’ integration in the academic and social environment.

The location of the work has also been studied relative to its impact on student engagement. In studies utilizing earlier versions of the CSEQ, Aper (1994) found that students who work in academic or career-related jobs on-campus tend to have higher interactions with faculty and be involved more in learning-related extracurricular
activities than those who work under other circumstances. Other research has shown that work on-campus provides students with opportunities to integrate into the culture of the institution thereby providing a supportive environment for simultaneous work and enrollment. Students prefer this type of work environment because of convenience (Cheng & Alcantara, 2007, p. 306).

Student Employment Statistics

Regardless of the reasons for students being employed while enrolled, the numbers of hours they work represent a significant amount of time. Data from the 2003-2004 National Postsecondary Student Aid Study (NPAS) conducted by the U.S. Department of Education found that during the 2003-04 academic year, 78 percent of undergraduates worked while they were enrolled an average of 30 hours per week. The NPAS data also showed about one-quarter of full-time students worked full-time. Results of their study concluded that regardless of race, gender, ethnicity, enrollment status, income or educational and living expenses, or institutional type, 70-80 percent of students worked while enrolled.

ACE (2006) reported further from the 2003-2004 NPAS data “only one-third of working students spend 20 hours or fewer per week on the job” and “the vast majority of students work off-campus (91 percent)” (p. 4).

Similarly, data compiled by the U.S. Department of Labor, National Center for Educational Statistics, (NCES) for the same period of 2003-04 reported two-thirds of undergraduate students were employed with 25 percent of those working at least 35 hours per week.
More recent employment statistics showed 46 percent of all four-year college students aged 16-24 and 57 percent of all two-year college students aged 16-24 were employed in October 2008 (U.S. Department of Labor 2008). Department of Labor statistics further reported that 45 percent of full-time students enrolled in colleges and 79 percent of part-time students enrolled in college were employed.

Impact of Work While Enrolled

The U.S. Department of Education (1998) reported the effects of working related to activities students typically engage in as part of their educational experience. Students included in this study reported working not only limited the number of classes they could enroll in but that it also limited their access to the library and to classes they could include in their schedule due to time conflicts. The study found that the greater the number of hours worked the more their schedule and options for classes were impacted.

The American Council on Education (ACE) (2006) found similar limitations expressed by students when they surveyed the effects work has on students. With 78 percent of undergraduates working during the 2003-04 academic year, students reported that:

- work limits their class schedule (48 percent), followed by the number of classes they take (40 percent), class choice (34 percent), and access to facilities (31 percent). Not surprisingly, the likelihood that students experience these limitations increases with the number of hours that they work. Students who work off campus also are more likely to experience these limitations than those who work on campus. (p. 4)
The number of hours students work per week and its impact has been heavily researched with correlational studies linking it to a variety of factors impacting student success (Furr & Elling, 2000; Moore & Rago, 2007; Pike, Kuh, McKinley, 2008). There is evidence related to both the positive and negative impact that the number of hours worked has on student persistence, GPA attainment, and graduation rates (Beeson & Wessel, 2002; Choy & Berker, 2003; Dundes & Marx, 2006; Moore & Rago, 2007, 2009; Rago, Moore, & Herreid, 2005; Stern & Nakata, 1991; Van de Water, 1996). Additionally research conducted by Nonis & Hudson, (2006) studied the influence of work on time spent studying and concluded “the amount of time spent studying or at work had no direct influence on academic performance” (p. 151).

Wolniak and Pascarella (2007) reported from the research of Pascarella, Edison, Nora, Hagedorn, and Terenzini that working on or off-campus during the third year of college generally had a positive influence on intellectual integration and cognitive development. They further found that the positive effects of working lessened as the students’ weekly work hours increased such that working off campus for more than 16-20 hours per week had a negative impact on cognitive development.

There is further evidence that supports the negative consequence of student employment while in college. It has been found to reduce time to study, promote missed assignments and lectures, negatively impact GPA, inhibit the opportunity to attend full-time or pose conflicts when registering for required courses (Ford, Bosworth, & Wilson 1995; DeSimone, 2008; Furr & Elling, 2000; Hunt, Lincoln, & Walker, 2004).

Several analyses of national databases have concluded that work can have a negative impact on persistence (Choy, 2002; Ehrenberg & Sherman, 1987; King, 2002).
while some smaller, more focused homogeneous studies have found the opposite to be true, and work has a positive impact on persistence (Curtis & Nummer, 1991; Klum & Cramer, 2006).

Studies have concluded that working above a certain threshold of hours per week, usually part-time between 15 and 20 hours per week, has been found to negatively impact academic performance which in turn impacts persistence and graduation (Harding & Harmon, 1999; King, 2002; Pascarella & Terenzini, 1991; Perma, Cooper & Li, 2006; Stinebrickner & Stinebrickner, 2003). Conversely, a study conducted for the Washington Higher Education Coordinating Board indicated students working 15 to 20 hours per week tend to perform better academically than students who were not working or those working more than 20 hours per week (McCartan, 1988) while other research has shown that working 15 to 20 hours per week has no effect (Bradley, 2006; Furr & Elling, 2000; High, 1999; Nonis & Hudson, 2006; Pascarella & Terenzini, 2005). Tinto (1993) further reported: “It is quite evident that the external world of work and family are central to the experience of many students, especially those who commute, who work while in college and/or attend part-time” (p. 129). He warned that the impact of employment on the overall educational experience can be significant. He concluded that “employment not only limits the time one has for academic studies, it also severely limits one’s opportunities for interaction with other students and faculty. As a consequence, one’s social integration as well as one’s academic performance suffers” (p. 269).
College Student Experiences Questionnaire (CSEQ)

Numerous types of survey instruments have been employed over the years to assess the factors that contribute to student persistence and success. One such instrument is the College Student Experience Questionnaire (CSEQ) which is used to measure the quality and quantity participant involvement on campus. Developed by C. Robert Pace at the University of California, Los Angeles in 1979 and now in its 4th edition, the CSEQ has been administered by hundreds of higher education institutions representing all institutional types to assess the quality of the undergraduate experience (Pace & Kuh, 1998). Based upon Pace’s “quality of effort” model, which suggested that students benefit in relation to the amount of time and energy they invest in educationally meaningful activities, the CSEQ demonstrates the students’ time spent on task and energy devoted to activities. These activities representing the students’ quality of effort can be used as an indicator of the quality of the students’ educational experience which contributes to persistence and student success (Kuh, Pace, & Vesper, 1997; Palomba & Banta, 1999).

The CSEQ captures student self-reports relative to 151 items reflecting the students’ experiences in three categories: (a) the amount of time and energy they devoted to various activities, and (b) their perceptions of several dimensions of their institution’s environment, and (c) what the student gained from attending college (Pace, 1990). “The comprehensive nature of the CSEQ makes it possible for researchers to identify different combinations of survey items that measure useful constructs within the study of higher education” (Gonyea, Kish, Kuh, Muthiah, & Thomas, 2003, p. 7).
Kuh, Gonyea, & Williams (2005) described the purpose of the CSEQ is to assess the quality of effort students devote to educationally purposeful activities. They further suggested that “quality of effort is the single best predictor of what students gain from college; this measure can be used to estimate the effectiveness of an institution or its component organizations in promoting student learning” (p. 40).

Schools administering the CSEQ generally do so in the spring of the academic year to enable students to be able to report on the types of activities they have engaged in during the past school term. Schools do not usually administer this test annually as the results may have greater significance if done bi-annually or tri-annually to be able to capture changes in student responses over time (Pace & Kuh, 1998).

Summary

As the literature demonstrates, factors impacting student retention, persistence and student success have been studied in higher education research initiatives and through the use of student assessment surveys such as the College Student Experiences Questionnaire. Institutions of higher education are extremely motivated to examine the reasons why some students are more likely to complete the goal of obtaining a degree than others. This interest is fueled by institutions faced with budget deficits, high dropout rates, declining graduation rates and increasing pools of applicants. These concerns are compounded by the increasing demand for assessment and accountability from external organizations such as accrediting bodies and political entities that hold the power to contribute to or control the future of such institutions. For these reasons, institutions of higher education have been forced to examine their educational practices that contribute
to student engagement which the research has found impacts student retention, persistence, and success.

As has been described, researched and surveyed, the quality of effort displayed by students relative to their active engagement in the educational process is the key to their persistence and success. Factors that compete with or inhibit students’ social and academic integration such as employment have an impact on student success.

Even though there are many obstacles that students encounter in their quest for attainment of their educational goals, Miller (2005) suggested that “the careful observer of American higher education will not be surprised that students entering college expect to finish successfully and complete degrees” (p. 128). The literature review provides examples of the overwhelming influences that ultimately enhance or inhibit students’ level of student engagement including faculty interaction and thereby impact their quality of effort and attainment of their educational goals.

Even with such emphasis on the need to understand what the main influences are on student retention and persistence, Vincent Tinto (1987) reported that “research conducted to date has done little to provide a model of student persistence that provides guidelines to institutions creating policies, practices, and programs to enhance student success” (p.86). It can be hypothesized that the relationship between student-faculty interaction and student employment may be one of the factors that institutions should be addressing relative to its impact to student retention, persistence and student success.
CHAPTER THREE: RESEARCH METHOD

Introduction

This chapter describes the research design, including the research instrument, the College Student Experiences Questionnaire (Pace & Kuh, 1998) and data selection procedures. Further, Chapter Three describes the population, sampling methods, variables studied, and the form of data analysis employed.

A quantitative study was conducted utilizing secondary data obtained from the College Student Experiences Questionnaire (CSEQ) (4th ed.) provided by Indiana University Center for Postsecondary Research. The Center supports the National Survey of Student Engagement (NSSE) and its affiliate surveys Faculty Survey of Student Engagement (FSSE), Law School Survey of Student Engagement (LSSSE), Beginning College Survey of Student Engagement (BCSSE), and the College Student Experiences Questionnaire (CSEQ) assessment program that also includes its affiliate the College Student Expectations Questionnaire (CSXQ) (Indiana University Center for Postsecondary Research).

The CSEQ measures the quality of students’ experiences inside and outside the classroom, perceptions of the campus environment, and progress toward important educational goals and is usually administered near the end of the first year or later in the college experience. The CSEQ assesses the quality of effort students expend in using institutional resources and opportunities provided for their learning and development.
Quality of effort is a key dimension for understanding student satisfaction, persistence, and the effects of attending college. The more students engage in educational activities, the more they benefit in their learning and development (Pace & Kuh, 1998).

Research Design

A correlational study was conducted utilizing secondary analysis. The data used in this study were initially collected by Indiana University Center for Postsecondary Research through the administration of the CSEQ (4th ed.) by a multiple number of institutions (N = 11) geographically located throughout the United States from 2005 through 2009. The opportunity to analyze data from various demographic regions of the United States enabled the sample size to be large enough to draw a reliable national sample.

This research focused on the relationship between the number of hours students worked and their quality of effort as it related to their experiences with faculty. The research explored the relationship between the variable of the number of hours worked off-campus and gender and between the variable of the number of hours worked off-campus and class standing.

The three research questions were:

1. Is there a relationship between the number of hours students work off-campus and students’ quality of effort as it relates to their reported experiences with faculty?

2. Is there a relationship between the number of hours students work off-campus and their gender?
3. Is there a relationship between the number of hours students work off-campus and their class standing?

Population and Sample

This study utilized a purposeful sample of 1426 students’ responses to the CSEQ (4th ed.) collected between the years of 2005 and 2009 from eleven colleges and universities physically located in different geographic locations (e.g. Far West, Southeast, Plains, Great Lakes, Mid East) of the United States. A random sample of 1426 student cases provided by Indiana University Center for Postsecondary Research representing large public colleges and universities was used to support the research. The actual student enrollment at each of the selected institutions exceeded 10,000 as reported on the intuition’s 2008 U. S. Department of Education’s National Center for Educational Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS) report.

The sample was further defined by the inclusion of student responses solely from colleges and universities located in “large cities” or on the “urban fringe of a large city” geographically distributed throughout the Unites States with a population of 250,000 or greater as noted by the National Center for Education Statistics and defined by the 2000 United States Census Bureau. Based upon common demographic factors such as population size it was highly predictable that the location of the college in a large urban, metropolitan area would provide greater opportunities for students to gain employment off-campus than at colleges and universities whose geographical location may be in a
rural area or small town where the educational institution may possibly be the primary employer.

For the purposes of this study, responses to a purposefully selected subset of questionnaire responses were analyzed. Within the CSEQ section titled “Background Information” students must have responded to specific data elements including:

1. Sex - Responses permitted the selection of one of the following (a) male, (b) female.

2. What is your classification in college? - Responses permitted the selection of one of the following: (a) freshman/first year, (b) sophomore, (c) junior, (d) senior, (e) graduate student, or (f) unclassified. For purposes of this study, only students who selected the option of junior or senior were included in this sample to reduce the level of variability and permit the study of a more homogeneous population.

3. Where do you live during the school year? – Responses permitted the selection of one of the following: (a) dormitory of other campus housing; (b) residence (house, apartment, etc.) within walking distance of the institution; (c) residence (house, apartment, etc.) within driving distance; or (d) fraternity or sorority house. For purposes of this study, only students who reported their residence was a house or apartment, etc. within walking distance or driving distance were included in this sample because as research as shown proximity to campus makes a difference in the students’ level of engagement (Kuh, Gonyea, & Palmer, 2001).
4. How many credit hours are you taking this term? Responses permitted the selection of one of the following: (a) 6 or fewer; (b) 7 – 11; (c) 12 – 14; (d) 15 – 16; or (e) 17 or more. For purposes of this study, only students who reported that they were enrolled for 12 or more hours (full-time) were included in this sample to control for variables that were not included in this study.

5. During the time school is in session, about how many hours a week do you usually spend working on a job for pay? To provide information about your work experiences on and off campus, fill in one oval in each column. - The student chose between the options relative to the location of their work by selecting worked on-campus or off-campus or both and also indicated by a numerical value the number of hours they do or do not work per week with one of the following options: (a) None; I don’t have a job; (b) 1 to 10 hours per week; (c) 11-20 hours; (d) 21-30 hours; (e) 31-40 hours; and (f) more than 40 hours. For purposes of this study only students who reported that their employment is solely off-campus or that they did not have a job were included in this sample to eliminate variables that were not part of this study.

Additionally, within the CSEQ section titled “College Activities” students must have responded to the questions within the subsection “Experiences with Faculty.” This section asked students to rate the frequency of their experiences with faculty during the current school year on a scale from never; occasionally; often; or very often with a series of ten questions with varying levels and types of interaction with faculty (Pace & Kuh, 1998).
Variables

The independent variables studied included gender, class standing in college, and the number of hours students worked specifically off-campus. The dependent variables studied included the student’s perceived level of quality of effort as measured by their responses to the ten questions in the College Activities portion of the CSEQ specifically linked to experiences with faculty.

The first variable of gender represented the two possible responses of either male or female.

The second variable of class standing in college represented one of two options in the study: (1) junior or (2) senior. Freshmen/first-year, sophomore, graduate students or those unclassified were also response options on the CSEQ but were not included in the sample.

The third variable of time spent working off-campus were measures of time represented three ratio measurements of (1) not working, (2) working part-time 20 hours or less and (3) working full-time over 20 hours per week. Those indicated that they worked 1-10 hours a week along with those who responded they worked 11-20 hours were grouped together and reported within the definition of part-time employment. Those who responded that they worked 21-30 hours, 31-40 hours or more than 40 hours were grouped together and reported within the definition of full-time employment.

The dependent variable of Experiences with Faculty included within the College Activities portion of the CSEQ was multidimensional. The analysis of the responses using the scale and numerical values of 1 = never; 2 = occasionally; 3 = often; or 4 = very often examined each of the ten items descriptively as a sub-scale as well as analyzing the
total score of all sub-scale responses. The response of the students’ experiences with faculty during the current school year reflected their perceived levels and types of interaction with faculty. The questions that students were asked to respond to in the Experiences with Faculty section of the CSEQ are included in Figure 3.1, CSEQ Experiences with Faculty

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talked with your instructor about information related to a course you were taking (grades, make-up work, assignments, etc.).</td>
<td>Discussed your academic program or course selection with a faculty member.</td>
</tr>
<tr>
<td>Discussed your academic program or course selection with a faculty member.</td>
<td>Discussed ideas for a term paper or other class project with a faculty member.</td>
</tr>
<tr>
<td>Discussed your career plans and ambitions with a faculty member.</td>
<td>Worked harder as a result of feedback from an instructor.</td>
</tr>
<tr>
<td>Worked harder as a result of feedback from an instructor.</td>
<td>Socialized with a faculty member outside of class (had a snack or soft drink, etc.).</td>
</tr>
<tr>
<td>Socialized with a faculty member outside of class (had a snack or soft drink, etc.).</td>
<td>Participated with other students in a discussion with one or more faculty members outside of class.</td>
</tr>
<tr>
<td>Participated with other students in a discussion with one or more faculty members outside of class.</td>
<td>Asked your instructor for comments and criticisms about your academic performance.</td>
</tr>
<tr>
<td>Asked your instructor for comments and criticisms about your academic performance.</td>
<td>Worked harder than you thought you could to meet an instructor’s expectations and standards.</td>
</tr>
<tr>
<td>Worked harder than you thought you could to meet an instructor’s expectations and standards.</td>
<td>Worked with a faculty member on a research project.</td>
</tr>
</tbody>
</table>

**Figure 3.1 CSEQ Experiences with Faculty**

*College Students Experiences Questionnaire (4th ed.), (Pace & Kuh, 1998, p. 4).* Reprinted with permission from G. Kuh, Director, Indiana University Center for Postsecondary Research.

**Data Source and Instrument**

The College Student Experiences Questionnaire (4th ed.), a survey instrument distributed by Indiana University Center for Postsecondary Research, was used as the data source. It is widely used by institutions interested in documenting, understanding, and improving the student experience (Pace & Kuh, 1998).

The 1st edition of the CSEQ was developed and administered as a multi-institutional survey in 1979 by Dr. C. Robert Pace from the Center for the Study of Evaluation at the University of California, Los Angeles Graduate School of Education. In 1994, under the direction of George D. Kuh, the CSEQ Research program formally
moved its operation to Indiana University Center for Postsecondary Research.

The CSEQ has been revised three times. It was revised in 1983 (2nd edition) with a 3rd edition in 1990 followed by the 4th edition in 1998. The CSEQ has been administered to over 300,000 students at over 500 institutions representing all institutional types since 1979 with over 180,000 4th edition cases having been administered (Indiana University Center for Postsecondary Research, 2007).

The College Student Experiences Questionnaire (Pace & Kuh, 1998) is offered for any college or university that desires to have an inventory of the campus experiences of its students. The Center hosts this instrument to measure student involvement in their educational experience and to elicit their views related to the various aspects of their experiences within the collegiate setting. The CSEQ data has been cited in over 250 articles, books, and dissertations, and probably an equal number of institutional reports (Gonyea, Kish, Kuh, Muthiah, & Thomas, 2003).

The basis for the CSEQ is relative to Astin's student involvement theory in its focus on the level of effort students direct toward those activities associated with the learning environment (Aper, 1994). “All of the questions on the CSEQ reflect student behaviors that are highly correlated with desirable learning and personal development outcomes” (Kuh & Hu, 2001, p. 311). The questionnaire asks students to self-report on what they are putting into and getting out of their college experience. For example, the Estimate of Gains items ask students how much they think their college or university experience contributed to their growth and development. In this sense, the progress that students say they make is a value-added judgment (Pace, 1990).
Instrument Administration

The CSEQ survey instrument may be administered by participating institutions in hard copy or on the computer based upon their individual administration schedule. The questionnaire is eight pages in length and can be answered in about thirty minutes or less. They survey is anonymous and therefore does not require that students reveal their identity but asks that they:

provide thoughtful responses as the information obtained from those taking the survey will help administrators, faculty members, student leaders, and others to improve conditions that contribute to your learning and development and to the quality of the experience of those who come after you. (Pace, & Kuh, 1998. CSEQ, p. 1)

Institutions administering the CSEQ may chose when and the degree of frequency of which to capture student responses but it is traditionally done after the first semester in an academic year to allow for students to reflect on their experiences (Indiana University Center for Postsecondary Research).

Reliability and Validity of Data Source

The CSEQ is a survey questionnaire based upon students self-reports of their activities, perceptions and gains. An examination of the validity of self-reports (Baird, 1976; Lowman and Williams, 1987; Pace, 1985; Pike, 1995; Turner and Martin, 1984) indicates that they are generally valid under five conditions:

1. the information requested is known to the respondents,
2. the questions are phrased clearly and unambiguously (Laing, Sawyer, & Noble, 1988),
3. the questions refer to recent activities (Converse & Presser, 1989),

4. the respondents think the questions merit a serious and thoughtful response (Pace, 1985), and

5. answering the questions does not threaten, embarrass, or violate the privacy of the respondent or encourage the respondent to respond in socially desirable ways (Bradburn & Sudman, 1988).

Gonyea, Kish, Kuh, et al. (2003) reported that “experience over two decades indicates that these conditions are met with by the CSEQ” (p. 25). They further cited the following to support their views on the use of the CSEQ as a self-report data collection instrument when they stated:

Students are asked to recall only what they have done during the current school year, and items for the Quality of Effort (QE) scales are carefully selected and worded so that students know almost immediately whether they have done them. In pre-testing many of the items contained QE scales, students told Pace and his associates that they had no difficulty responding to them because of lack of clarity. (p. 25)

Gonyea, Kish, Kuh, et al. (2003) reported that “the evidence suggests that students respond conscientiously to the questions because no item was left blank by more than 4% of respondents” (p. 25).

The validity and reliability of the CSEQ has been reinforced by the research of Pace & Kuh, 1998; and Whitmire, 1999. Also, evidence of content validity has been provided by the Guttman-scale analysis and factor analysis (Kuh, Vesper, Connolly, & Pace, 1997). Evidence of construct validity has been demonstrated by examining whether
the relationships between various measures on the CSEQ and other variables are consistent with relevant research. CSEQ results have been found to be highly correlated with academic performance and other desired outcomes of college enrollment (Pike, 1995). The degree of reliability and validity make the CSEQ an appropriate source of data for this study. The data used in this study are a subset of responses to the CSEQ and satisfy all these conditions.

Further, student responses to the Activities and Gains section of the CSEQ are approximately normally distributed and the psychometric properties of the instrument indicate it is reliable. CSEQ Estimate of Gain scores are generally consistent with evidence of actual gains, such as results from achievement tests (Pace, 1985; Pike, 1995). Further, studies indicated that self-reported gains could be considered as proxies for outcome measures, although they cannot substitute for traditional achievement.

Data Analysis Procedures

Utilizing the Statistical Package for the Social Sciences (SPSS) software the methodology employed for the data analysis consisted of one-way analysis of variance (ANOVA); the post-hoc test of Tukey HSD test; and Pearson Chi-Square Test of Independence.

To address the first research question: Is there a relationship between the number of hours students work off-campus and students’ quality of effort as it related to their reported experiences with faculty, one-way ANOVA’s were used. ANOVA, a widely-used statistical procedure, compares the ratio of between-groups variance in individual’s scores with the amount of within-groups variance. Should the results reveal a
significantly high ratio, this would indicate that there is a greater difference between the
groups than within groups for a particular variable (Gall, Borg & Gall, 1996).

Based upon the statistical power analysis table provided by Gall, Borg, & Gall,
p. 189, using a sample size of 774 student cases would provide statistical significance at
the .05 level with a statistical power of .7 to reject a false null hypothesis utilizing
ANOVA for three groups. The sample size of 1426 student cases used in this study was
large enough to feel confident that if a difference existed, it would be detected. The
sample assumed a significance $\alpha=.05$ level, and a small effect size (.1), with statistical
power of .93. Further, only student cases that included complete responses were used in
this study thereby eliminating the need to impute missing values.

One-way analyses of variance (ANOVAs) were conducted to examine the
relationship between hours worked off-campus per week as represented by three distinct
groups: no work, part-time work; or full-time work and the students’ ten experiences with
faculty as measured by the CSEQ.

Based on the significance of the ANOVAs, a post-hoc multiple comparison
analysis, Tukey HSD, (honestly significant difference) test was used for all possible
pairwise comparisons. This procedure establishes a set of simultaneous intervals for each
pair of population means and enables the researcher to ferret out where the differences
lie. Stevens (1999) recommends the HSD procedure because “the Tukey procedure
examines a focused, meaningful, and easily interpreted set of comparisons, that is, all
paired comparisons… and is fairly powerful procedure for detecting difference” (p. 86).
The Tukey procedure enabled the researcher to examine all pairwise group comparisons
with the overall $\alpha$ level held in check.
To address the second research question: Is there a relationship between the number of hours students work off-campus and their gender; and the third research question: Is there a relationship between the number of hours students work off-campus and their class standing; Pearson Chi-Square Tests of Independence were performed to determine the relationship between the variables of class standing and work off-campus as well as the relationship between gender and work off-campus. The Pearson Chi-Square Test is a widely used statistical procedure to compare two components of categorical data (Agresti, 1996).
CHAPTER FOUR: RESULTS

Introduction

This chapter describes the research sample and study results. It is divided into four sections: (1) a description of the research sample; (2) descriptive statistics; (3) data analysis and research results; and (4) a summary of all results. Essential data are presented in table form and the results for each research question are presented separately.

Description of the Research Sample

The research sample consisted of 1426 juniors and seniors living off-campus who were enrolled in 12 or more credit hours and who completed the College Student Experiences Questionnaire (4th ed.) between 2005 and 2009. The random sample of student responses to the CSEQ (4th ed.) was provided by Indiana University Center for Postsecondary Research from their CSEQ database.

The eleven institutions represented by the students’ self-reports were large public colleges and universities with enrollments in excess of 10,000 unduplicated headcount for 2008 as reported on the intuition’s 2008 U. S. Department of Education’s National Center for Educational Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS) report. The institutions were primarily colleges and universities granting baccalaureate and masters degrees ($N = 8$) but also included a small number of doctoral and research universities ($N = 3$) which
were physically located in different geographic regions of the United States as reported by the CSEQ (e.g. Far West, Southeast, Plains, Great Lakes, Mid East). Further, the colleges and universities were located in “large cities” or on the “urban fringe of a large city” geographically distributed throughout the United States with a population of 250,000 or greater as noted by the National Center for Education Statistics and defined by the 2000 United States Census.

The sample was further limited to students who reported that they were enrolled in 12 or more hours; classified themselves as junior or seniors; reported that they lived off-campus; and either did not work or worked solely off-campus. Specifically, the variables representing the amount of work off-campus were defined by three ordinal measurements: (1) not working, (2) working 20 hours or less and (3) working over 20 hours per week.

The sample also included the students’ responses to a series of 10 questions on their “Experiences with Faculty” within the CSEQ section titled “College Activities.” This section asked students to rate the frequency of their experiences with faculty during the current school year on a scale from never; occasionally; often; or very often. Responses for these activities were coded as follows: 1 = never; 2 = occasionally; 3 = often; and 4 = very often.

Descriptive Statistics

The specific research sample characteristics presented in the tables and figures include gender; classification in college; the number of hours worked off-campus per week; and students’ frequency of experiences with faculty. The sample of 1426 students included more females \( N = 912, 64.0\% \) than males \( N = 514, 36.0\% \). Relative to the
students’ self-reported classification in college, the sample included more than twice as many seniors \( (N = 975, 68.4\%) \) as juniors \( (N = 451, 31.6\%) \).

There were minimal differences among the three categories of those not working \( (N = 510, 35.8\%) \); those working 1-20 hours per week \( (N = 439, 30.8\%) \); and those working greater than 20 hours per week \( (N = 477, 33.4\%) \). The proportion of all students working \( (N = 916, 64.2\%) \) to those not working \( (N = 510, 35.8\%) \) represented a ratio of nearly 2 to 1. Figure 4.1 illustrates the percent of full-time students by the number of hours worked including those who reported that they did not work at all.

![Figure 4.1 Percent of Full-Time Students and Number of Hours Worked](image-url)
Data Analysis and Research Results

This section reports the statistical treatment and the findings from the analysis of the data. In all statistical analyses, results were considered significant at $\alpha=.05$.

Research Question 1

Is there a relationship between the number of hours students work off-campus and students’ quality of effort as it related to their reported experiences with faculty? Prior to examining any potential relationship, a test to examine the reliability of the variances between the dependent variables of experiences with faculty was conducted. The reliability check used Cronbach’s Alpha to determine the correlation between the experiences with faculty ($N=10$). A single score representative of the combined totals of experiences with faculty (dependent variables) was created using a mean of their responses to the 10 items. The reliability for the item total was $\alpha=.894$ which reflected a high degree of intercorrelation thereby showing a strong relationship between all variables.

Further analysis examined the descriptive statistics associated with each variable in the study including the three categories of hours worked and each of the ten experiences with faculty survey items. Table 4.1 reports the descriptive statistics for the student responses to experiences with faculty which is followed by Figure 4.2 which displays the means of students’ responses to experiences with faculty based upon hours worked.
Table 4.1 Descriptive Statistics: Student Responses To Experiences With Faculty

<table>
<thead>
<tr>
<th>Experiences with Faculty</th>
<th>Work Hours</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
<th>Kurtosis</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talked with your instructor related to a course you were taking</td>
<td>No work</td>
<td>2.80</td>
<td>.837</td>
<td>510</td>
<td>-.941</td>
<td>.024</td>
</tr>
<tr>
<td></td>
<td>1-20 hours weekly</td>
<td>2.81</td>
<td>.841</td>
<td>439</td>
<td>-1.009</td>
<td>.050</td>
</tr>
<tr>
<td></td>
<td>21 or more hours weekly</td>
<td>2.75</td>
<td>.807</td>
<td>477</td>
<td>-1.973</td>
<td>.210</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.79</td>
<td>.828</td>
<td>1426</td>
<td>-.979</td>
<td>.093</td>
</tr>
<tr>
<td>Discussed your academic program/course selection with faculty member</td>
<td>No work</td>
<td>2.44</td>
<td>.881</td>
<td>510</td>
<td>-.635</td>
<td>.293</td>
</tr>
<tr>
<td></td>
<td>1-20 hours weekly</td>
<td>2.54</td>
<td>.880</td>
<td>439</td>
<td>-1.747</td>
<td>.239</td>
</tr>
<tr>
<td></td>
<td>21 or more hours weekly</td>
<td>2.47</td>
<td>.911</td>
<td>477</td>
<td>-1.776</td>
<td>.164</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.48</td>
<td>.891</td>
<td>1426</td>
<td>-.720</td>
<td>.229</td>
</tr>
<tr>
<td>Discussed term paper or class project with faculty member</td>
<td>No work</td>
<td>2.27</td>
<td>.899</td>
<td>510</td>
<td>-.604</td>
<td>.344</td>
</tr>
<tr>
<td></td>
<td>1-20 hours weekly</td>
<td>2.32</td>
<td>.871</td>
<td>439</td>
<td>-1.471</td>
<td>.385</td>
</tr>
<tr>
<td></td>
<td>21 or more hours weekly</td>
<td>2.30</td>
<td>.861</td>
<td>477</td>
<td>-1.442</td>
<td>.369</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.30</td>
<td>.877</td>
<td>1426</td>
<td>-.515</td>
<td>.361</td>
</tr>
<tr>
<td>Discussed career plans and ambitions with faculty member</td>
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</table>
One way analyses of variance (ANOVAs) were conducted to evaluate the relationship between the numbers of hours worked and the students’ responses to the ten experiences with faculty items from the CSEQ. The researcher noted that only one of the ten experiences with faculty items showed a degree of significance. Further analysis was done to study this item.
The item: Participated with other students in a discussion with one or more faculty outside of class differed significantly across work groups ($F(2, 1423) = 3.611, p = .027$).

Further analysis using Tukey revealed that there were significant differences within this item. Students who worked 1-20 hours weekly ($M=1.96, SD=.950$), participated in significantly more discussions with other students and faculty outside of class than students who did not work ($M=1.80, SD=.891$), $p = .023$.

These results were previously displayed in Table 4.1 Descriptive Statistics: Student Responses to Experiences with Faculty and further noted in Table 4.2 Multiple Comparisons of Hours Worked and Experiences with Faculty.
<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>(I) Work Off-Campus</th>
<th>(J) Work Off-Campus</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
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<tbody>
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<td></td>
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<td>Lower Bound</td>
<td>Upper Bound</td>
<td></td>
<td></td>
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<tr>
<td>Talked with your instructor related to a course you were taking (grades, make-up work, assignments, etc.)</td>
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<td>1-20 hours weekly</td>
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<td>.054</td>
<td>.992</td>
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<td>.053</td>
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<td>.055</td>
<td>.587</td>
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<td>No work</td>
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<td>.053</td>
<td>.644</td>
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<tr>
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<td>.059</td>
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<td>.057</td>
<td>.837</td>
<td>-.10</td>
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<td>Discussed ideas for a term paper or class project with a faculty member.</td>
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<td>.057</td>
<td>.581</td>
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<td>.056</td>
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<td>.057</td>
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<td>.035</td>
<td>.056</td>
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<td>Discussed your career plans and ambitions with a faculty member.</td>
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<td>.058</td>
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### Table 4.2 Multiple Comparisons of Hours Worked and Experiences with Faculty cont.

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<th>(I) Work Off-Campus</th>
<th>(J) Work Off-Campus</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
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<td>.051</td>
<td>.711</td>
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<td>.053</td>
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<td>.406</td>
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<td>.063</td>
<td>.406</td>
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### Table 4.2 Multiple Comparisons of Hours Worked and Experiences with Faculty cont.

Tukey HSD

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>(I) Work Off-Campus</th>
<th>(J) Work Off-Campus</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
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<td>.063</td>
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<td>.061</td>
<td>.388</td>
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<td>No work</td>
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<td>.063</td>
<td>.890</td>
<td>-.12 - .18</td>
</tr>
<tr>
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<td></td>
<td>21 or more hours weekly</td>
<td>.109</td>
<td>.064</td>
<td>.199</td>
<td>-.04 - .26</td>
</tr>
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<td></td>
<td>21 or more hours weekly</td>
<td>No work</td>
<td>-.080</td>
<td>.061</td>
<td>.388</td>
<td>-.22 - .06</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-20 hours weekly</td>
<td>-.109</td>
<td>.064</td>
<td>.199</td>
<td>-.26 - .04</td>
</tr>
</tbody>
</table>

| Worked with a faculty member on a research project.                            | No work             | 1-20 hours weekly   | .003                 | .055       | .998 | -.13 - .13              |
|                                                                                  |                     | 21 or more hours weekly | .008             | .054       | .987 | -.12 - .13              |
|                                                                                  | 1-20 hours weekly   | No work             | -.003                | .055       | .998 | -.13 - .13              |
|                                                                                  |                     | 21 or more hours weekly | .005             | .056       | .996 | -.13 - .14              |
|                                                                                  | 21 or more hours weekly | No work             | -.008                | .054       | .987 | -.13 - .12              |
|                                                                                  |                     | 1-20 hours weekly   | -.005                | .056       | .996 | -.14 - .13              |

* The mean difference is significant at the 0.05 level.
Research Question 2

Is there a relationship between the number of hours students work off-campus and gender? The distribution between work hours per week and gender showed differences between males not working ($N = 186$, 36.2%); and females not working ($N = 324$, 35.5%); between males working 1 to 20 hours per week ($N = 152$, 29.6%) and females working 1 to 20 hours per week ($N = 287$, 31.5%); and between males working more than 21 hours per week ($N = 176$, 34.2%) and females working more than 21 hours per week ($N = 301$, 33.0%). Based upon the sample, a greater proportion of females worked ($N = 588$, 64.5%); compared to the men ($N = 328$, 63.8%). Table 4.3 represents the distribution of hours worked by gender. A Chi-Square Test of Independence revealed that these differences were not statistically significant $\chi^2(2, N = 1426) = .575, p = .750$. Thus, there was no association between hours worked off-campus and gender.

<table>
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<tr>
<th>Work Off-Campus</th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td>Count</td>
<td>% within sex</td>
</tr>
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<td>186</td>
<td>36.2%</td>
</tr>
<tr>
<td>1-20 hours</td>
<td>152</td>
<td>29.6%</td>
</tr>
<tr>
<td>21 and greater hours</td>
<td>176</td>
<td>34.2%</td>
</tr>
<tr>
<td>Total</td>
<td>514</td>
<td>100.0%</td>
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</tbody>
</table>
Research Question 3

Is there a relationship between the number of hours students work off-campus and class standing? The distribution between work hours per week and class standing showed slight differences between juniors not working (\(N = 193\), 42.8%); and seniors not working (\(N = 317\), 32.5%); between juniors working 1 to 20 hours per week (\(N = 128\), 28.4%) and seniors working 1 to 20 hours per week (\(N = 311\), 31.9%); and between juniors working more than 21 hours per week (\(N = 130\), 28.8%) and seniors working more than 21 hours per week (\(N = 347\), 35.6%). Based upon the sample, a greater proportion of seniors worked (\(N = 658\) 67.5%); compared to the juniors (\(N = 258\), 57.2%). Table 4.4 represents the distribution of hours worked by class standing. A Chi-Square Test of Independence revealed a significant relationship between hours worked and class standing \(\chi^2(2, N = 1426) = 14.570, p = .001\). Thus, there is an association between hours worked and class standing with a greater proportion of seniors working.

Table 4.4 Distribution of Hours Worked by Class Standing

<table>
<thead>
<tr>
<th>Work Off-Campus</th>
<th>Class Standing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Junior</td>
<td>Senior</td>
</tr>
<tr>
<td>Count</td>
<td>% within class</td>
<td>Count</td>
</tr>
<tr>
<td>No work</td>
<td>193</td>
<td>42.8%</td>
</tr>
<tr>
<td>1-20 hours</td>
<td>128</td>
<td>28.4%</td>
</tr>
<tr>
<td>21 and greater hours</td>
<td>130</td>
<td>28.8%</td>
</tr>
<tr>
<td>Total</td>
<td>451</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Summary of All Results

This section summarizes the procedures, data, and data analysis from this study that was conducted to determine if relationships existed between the number of hours students worked and their quality of effort as it related to their experiences with faculty. Additionally, the research explored the relationship between the variable of the number of hours worked off-campus and gender and between the variable of the number of hours worked off-campus and class standing.

The data for this study were initially collected by Indiana University Center for Postsecondary Research through the administration of the CSEQ (4th ed.) by eleven large public colleges and universities institutions geographically distributed throughout the United States in large cities with a population of 250,000 or greater. This study utilized a purposeful sample of 1426 students’ responses to the CSEQ collected between the years of 2005 and 2009. A random sample of 1426 student cases provided by The Center was used to support the secondary analysis conducted in this research. A purposefully selected subset of CSEQ responses were analyzed which included: gender, classification in college, location of residence, current term enrollment, number of hours worked per week, and quality of effort as measured by the students’ responses to ten experiences with faculty questions.

Research Question 1: Is there a relationship between the number of hours students work off-campus and students’ quality of effort as it related to their reported experiences with faculty was addressed by examining the relationship between hours worked and each of the ten experiences with faculty. Through the use of ANOVA and Tukey LSD, it was revealed that those students who worked 1-20 hours weekly participated in
significantly more discussions outside of class with other students and faculty than students who did not work. No other significant findings were made concerning the remainder to the nine other questions related to experiences with faculty.

Research Question 2: Is there a relationship between the number of hours students work off-campus and gender was analyzed using a chi-square test of independence. The research revealed no significant relationship existed for any of the work groups which included: no work, 1-20 hours per week, and over 20 hours per week.

Research Question 3: Is there a relationship between the number of hours worked off-campus and class standing was analyzed using a chi-square test of independence. The research revealed that there was a difference in the proportions between the number of hours worked and the classifications of juniors and seniors. Seniors in this study worked in greater proportion to the juniors.

A summary and discussion of the findings, implications, and recommendations for future research is presented in Chapter Five.
CHAPTER FIVE: CONCLUSIONS

Introduction

The purpose of this study was to examine the relationship between employment (off-campus) and students’ frequency of involvement with specific educational opportunities (experiences with faculty). Identifying the effects of work on college students has many implications and even though there have been numerous studies done, little research could be found that examined the relationship between students who work and their level of interaction with faculty. It has been well documented that the more engaged students are, both inside and outside the classroom, the greater their opportunities to gain support and encouragement from faculty and staff (Astin, 1993). This engagement contributes to student success. Educational researchers have shown that frequent, meaningful interactions between students and their teachers are important to learning and personal development (e.g. Astin, 1977, 1985, 1993; Bean, 2005; Kuh, Kinzie, Schuh, Whitt, & Associates, 2005; Pascarella & Terenzini, 1979, 1981; Tinto, 1993).

It can be hypothesized that anything that takes students off-campus and away from the supportive educational environment may influence students’ access to engaging in activities such as interaction with faculty. Such activities support the students’ quality of effort which has been positively linked to academic achievement, satisfaction, and
persistence that ultimately results in retention and graduation (Gonyea, Kish, Kuh, et al., 2003).

In order to conduct this study, a purposeful selection of secondary data was randomly selected from the responses of students completing the College Students Experiences Questionnaire (4th ed.) at eleven large colleges and universities that were geographically dispersed throughout the United States. The sample was provided by the Indiana University Center for Postsecondary Research from the administration of the CSEQ (4th ed.) from 2005-2009. The study explored the relationship between the number of hours students worked off-campus (none, part-time or full-time) while living off-campus, (in an apartment or house within walking or driving distance) and the frequency (never; occasionally; often; or very often) of students’ experiences with faculty with a variety of options (activities associated with Quality of Effort) as measured by the College Student Experiences Questionnaire.

The primary goal of the study was to answer three research questions:

1. Is there a relationship between the number of hours students work off-campus (independent variable) and students’ quality of effort as it relates to their reported experiences with faculty (dependent variable)?

2. Is there a relationship between the number of hours students work off-campus and their gender?

3. Is there a relationship between the number of hours students work off-campus and their class standing?
Summary of the Findings

It is natural to assume that work takes away time students have to interact with faculty and their peers. Too much work has been shown to negatively impact the students’ GPA, graduation rates, time to degree completion, and reduces the opportunity for students to interact with faculty. Studies that have examined the degree of students’ relationships and interactions with faculty have shown that students who are engaged with faculty demonstrate greater persistence which impacts their retention and success. It was anticipated that the study results would show that students who had frequent interactions with faculty most often were students who did not work.

Through the analysis of students’ self-reported levels of engagement with faculty, this study found that the relationship between the number of hours juniors and seniors worked off-campus and their degree of involvement with faculty did not produce the results anticipated as related to their level of interaction with faculty. Students in this study did not report a significant degree of involvement with faculty on the CSEQ when compared to the amount of time working off-campus.

These findings were not consistent with some of the earlier research discussed in the review of literature that reported students who worked tended to have less opportunities to engage with faculty and that work negatively impacted their persistence and graduation. The findings in this study may be the result of the nature of the institutions and the characteristics of the students included in the study. It may be that the large, public colleges and universities, including research institutions represented in this study, may not be structured to facilitate significant levels of student-faculty interaction.
The findings may also be representative of a unique student population due to the limitation that only junior’s and senior’s responses were included in the study.

Further, after analyzing each of the individual ten experiences with faculty represented on the CSEQ (4th ed.), the results of this study revealed that only one of the ten experiences with faculty demonstrated significance. Specifically, the difference in the students’ response to participating with other students in a discussion with one or more faculty members outside of class was found to be statistically significant. Students who did not work were less likely than those who worked between 1 and 20 hours per week to participate in a discussion with other students and faculty outside of class. This finding is not necessarily what the researcher would have expected given the time constraints placed upon students who are working. Since the remainder of the dependent variables (N = 9) showed little significance, the research suggests that there must be other variables not included in this study that influence students’ interaction with faculty.

Even though the researcher was looking at the relationship between hours worked and the level of faculty interaction, it is interesting to note that the means of two of the dependent variables related to interaction with faculty were rated extremely low by all respondents which caused the researcher to consider possible reasons for the low frequency of interaction. Specifically, the question, socialized with a faculty member outside of class produced a mean score of 1.55 for all work groups including those who did not work. Additionally, the question, worked with a faculty member on a research project produced a mean score of 1.34 for all work groups including those who did not work. The response options were frequency ratings from 1 to 5 where 1 represented never and 5 represented very often. It can be postulated that these results may reflect the
lack of opportunities for students to socialize with faculty members outside of class or work on a research projects with faculty. Additionally, because of the types of institutions that are included in this study, undergraduates may not be encouraged or given opportunities to participate in research with faculty. Likewise, faculty at large research institutions, such as those included in this study, may not be encouraged or rewarded for this form of student engagement.

Further, a relationship between hours worked and gender was not found to be significant enough to support a finding that either males or females had greater involvement in work off-campus. Relative to class standing and its relationship to hours worked, the researcher found that a greater percentage of seniors worked compared to juniors in this study. The explanation for why these results aren’t intuitive from what research shows, which is that student engagement with faculty is highly correlated with student success, is discussed in the inferential observations that follow.

Inferential Observations

Based on the findings and conclusions of this study, several inferential observations can be drawn which may explain why students who were part of this study did not self-report a significant degree of involvement with faculty on the CSEQ when compared to the amount of time working off-campus.

It is inherent that students who are employed while attending college have less time for out-of-class activities than those of their counterparts who do not work. Participation in out-of-class activities, such as interaction with faculty, staff and other students may be dependent upon how students value the opportunities and integrate them into their daily lives. It can be postulated that because the students in this study
represented only junior and seniors, their ability to manage time and utilize college resources such as engagement with faculty has been honed over the course of their years of enrollment. That is, their degree of engagement with faculty may be dependent upon the time that the student has available; the degree of need for resources; and the accessibility to faculty or college resources. These students may be engaged with faculty as time and situation requires.

It also may be that students in this study formed more significant relationships with supervisors or employers which would reduce their need to interact with faculty. For example, those employed in pre-professional positions such as accounting might find it more important to interact with their co-workers and supervisors in the work environment than with their accounting professors. Interactions with persons at work may cultivate important professional contacts for networking opportunities and help students gain professional experiences necessary for employment upon graduation.

Further the developmental and maturity level of juniors and seniors may reflect their desire for reduced dependence upon faculty. This may be a possible explanation for the lack of interaction with faculty as demonstrated in this study. Junior and seniors may be seeking a reduced dependency upon faculty as students and greater independence as professionals in their chosen career fields.

It can also be hypothesized that the types of institutions, such as those represented in this study, do not promote or value a high degree of student interaction with faculty due to their size and mission. Further, research institutions may not reward faculty for their level of interaction with students and therefore students have fewer opportunities to engage with faculty outside the classroom such as participating in career discussions or
research. Also faculty need the skills and training to mentor and advise students that may not be provided at their institution.

It can be further hypothesized that because juniors and seniors have successfully navigated through three or more years of college, they may have learned how to allocate their time and use of educational resources in such a way as to support their persistence. These same students may also be taking lighter course loads or less demanding courses since their classes would be within their major field of study by this point in time. This would give them greater opportunity to work and less need to interact with faculty outside of class. Additionally, the nature of the juniors’ and seniors’ work may be more career related or of an academically relevant nature.

The findings relative to a greater proportion of seniors who were working in this study can be indicative of the need seniors have in securing employment upon graduation to repay college loans. Additionally, they may recognize that work experience is necessary to compete in today’s job market.

Since this study did not examine the other types of time commitments students may have in addition to working or in place of working, it may be possible that activities such as collegiate sports, drama, music, and student clubs and organizations may impact the time students have to be engaged in other educationally related activities. For example, students with commitments to intercollegiate athletics have little time to work and must focus their remaining time to academically related activities to meet GPA requirements for continued participation.

Further, if this study were to be conducted analyzing only the responses of freshman and sophomores, the results might reflect much less interaction with faculty or
greater interaction with faculty depending upon the students’ residence and/or their location of work. Whether working or not, prior studies of freshmen or sophomores’ frequency and degree of interaction with faculty have reported that these students’ experiences with faculty may be more infrequent. Researchers attribute this to the nature of the interaction which students may perceive as negative because interaction with faculty at this level of their educational attainment usually centers around student performance and generally faculty feedback tends to be less positive when related to grades and assessment of performance. Freshmen and sophomores may be less likely to interact with faculty for this reason.

Likewise, if this study were to be conducted surveying only the responses of students who reside on-campus and work on-campus, the results might reflect greater degrees of involvement with faculty. This may be due to the easy accessibility to faculty and the familiarity and comfort level of students with faculty and staff with whom they have more frequent contact. Working on-campus has been shown to promote a more nurturing and interactive environment with college faculty and staff and facilitates greater student-to-student interaction. Also, working off-campus may require transportation. Having a car provides the means to live off-campus and work off-campus which takes students away from the academic environment and its supportive services.

Finally, since students’ responses to hours worked were clustered into three groups: no work; 1-20 hours per week; and greater than 20 hours per week, it can be hypothesized that these broad groups may have limited the study’s findings. If the number of groups were to be expanded to reflect smaller ranges of hours worked, the study might yield different results.
Recommendations for Future Research

The findings of this study did not prove to be intuitive and did not resonate with existing literature that links the impact of student employment to student interaction with faculty and ultimately their persistence. The results do make this an interesting study and one that is worthy of further attention. Based on the findings, a number of recommendations are proposed for future research as it relates to student employment and students’ participation in activities that support student engagement and persistence. The researcher proposes the following:

1) Similar studies should be conducted to include the nature of the students’ employment and its location, either on or off-campus. Inclusion of these aspects in future studies would provide valuable information related to the types of employment students are engaged in and provide insight into how specific forms of employment and their location may relate to students’ engagement and persistence. For example, students majoring in accounting may be employed in a business setting or accounting firm off-campus which furthers the students’ application of knowledge gained in the classroom and helps define their career options. This career-related opportunity may provide much more relative hands-on experience than a position on campus that may or may not be career related.

2) Similar studies should be conducted to identify the type and level of time commitments by students working or not working. Activities such as intercollegiate athletics, drama, music, and student clubs and organizations require significant time commitment on students and may limit their availability to hold employment.
3) Future studies related to the relationship between work hours and student engagement should expand the number of work groups to reflect smaller ranges of hours worked. Examining a greater number of work groups may reveal the point at which the number of hours worked demonstrates greater significance.

4) Additional research related to the degree of student and faculty interaction and its relationship to the students’ classification in college should be expanded to include all classifications of students from freshmen to graduate students. This is suggested because limiting the study to just a select group of student classifications such as juniors and seniors does not provide a broad enough spectrum to detect significant differences in their levels of interaction. For example, junior and seniors may not require a significant amount of interaction with faculty as they wish to demonstrate greater independence where as freshman and sophomores may seek opportunities to gain feedback from instructors they view as supportive and nurturing. The opposite may also be studied as freshman and sophomores may exhibit hesitation when seeking assistance from faculty. Studies have shown that if the nature of the interaction is viewed as corrective it may not be welcomed by the student.

5) Studies should be conducted to examine the relationship of specific college majors to the level of engagement with faculty. It can be hypothesized that those with declared majors in the social or behavioral sciences may display a greater degree of interaction with faculty than those majoring in fields such as engineering or chemistry as the social and behavioral sciences are more focused upon human interaction and personal relationships.
6) Further research is needed to examine the impact the Internet has related to students who are taking on-line courses and their degree of interaction with faculty. Distance learners’ opportunities for interaction with faculty are much more limited due to their mode of instruction. Future editions of the CSEQ need to modify the Background Information portion of the survey to collect data on the mode of instruction the students are engaged in. The ability to compare responses from both distance learners and those engaged in face-to-face instruction may yield some interesting results as it relates to their engagement and use of college resources.

Summary

Overall this study did not find a significant relationship between the students’ level of off-campus employment and their self-reported levels of interaction with faculty as measured by the CSEQ (4th ed.). Significance between the variables of no work and part-time work (1-20 hours per week) was detected related to students’ level of participation with other students in a discussion with one or more faculty members outside of class. Students working 1-20 hours per week participated in significantly more discussions outside of class with other students and faculty than students who did not work. The researcher suspects this may be true because students may be more inclined to gather together with peers outside class for study groups, lab projects, and group assignments that may involve the participation of faculty outside of class. These types of activities are usually associated with class requirements and students, regardless of their work schedules, must make time for them as they may influence their grade in the course. Students who are not working have greater time and access to campus resources including access to faculty before and after class which they may not consider to be
interaction with faculty as measured by the questions on the CSEQ.

Further, this study also found that juniors’ and seniors’ reported experiences with faculty showed no relationship to their level of employment. There were no significant relationships found between hours spent working and levels of interaction with faculty regarding the discussion of programs, course work, class projects, grades, career plans, degree of effort or opportunity for socialization outside of class with other students or faculty. These findings suggest that there must be other, more significant variables other than work off-campus that impact students’ engagement with faculty and ultimately their persistence. Even though the researcher’s expectation that work-off campus would result in a lesser frequency of out-of-class contacts with faculty did not prove to be true, the fact still remains that a large percentage of students work at an ever increasing rate while enrolled. Further research related to the nature of their work, along with the time constraints of students who do not work but may be involved in other educational activities such as band, drama or sports, may yield insights into the relationship work has with other aspects of educational engagement.

The findings of this study and others that may build upon this research should guide practitioners as they assist students with coursework planning, career decision making, and participation in activities such as work that may take students away from educationally supportive activities. Understanding the importance of student engagement as an educationally purposeful activity should serve to remind those mentoring and advising students about the need to make more informed decisions regarding out-of-class activities such as work and its impact on the students’ educational success. Students want and deserve the best educational opportunities that will help them succeed. Educators and
those who support higher educational programs should be cognizant of the need for creating learning environments that build upon students’ in-class and out-of-class experiences and foster relationships that promote student success.
REFERENCES


This questionnaire asks about how you spend your time at college—with faculty and friends and in classes, social and cultural activities, extracurricular activities, employment, and use of campus facilities such as the library and student center. The usefulness of this or any other survey depends on the thoughtful responses of those who are asked to complete it. Your participation is very important and greatly appreciated.

The information obtained from you and other students at many different colleges and universities will help administrators, faculty members, student leaders, and others to improve the conditions that contribute to your learning and development and to the quality of the experience of those who will come after you.

At first glance, you may think it will take a long time to complete this questionnaire, but it can be answered in about 30 minutes or less. And you will learn some valuable things about yourself, as your answers provide a kind of self-portrait of what you have been doing and how you are benefiting from your college experience.

You do not have to write your name on the questionnaire. But as you will see on the next page we would like to know some things about you so that we can learn how college experiences vary, depending on students' age, sex, year in college, major field, where they live, whether they have a job, and so forth. To know where the reports come from, a number on the back page identifies your institution.

Your questionnaire will be read by an electronic scanning device, so be careful in marking your responses. **Please use only a #2 black lead pencil.** Do not write or make any marks on the questionnaire outside the spaces provided for your answers. **Erase cleanly any responses you want to change. It is very important to answer all questions; if you are uncertain about what a question means, use your best judgment.**

Thank you for your cooperation and participation!

This questionnaire is available from the Indiana University Center for Postsecondary Research and Planning, School of Education, 291 North Rose Avenue, Bloomington, IN 47405-1006. It is for use by individuals and institutions interested in documenting, understanding, and improving the student experience.
**BG INFORMATION**

**Directions:** Indicate your response by filling in the appropriate oval next to the correct answer.

### Age
- 19 or younger
- 20 - 25
- 26 - 29
- 30 - 35
- 40 - 55
- Over 55

### Sex
- male
- female

What is your marital status?
- not married
- separated
- married
- divorced

What is your classification in college?
- freshman/first-year
- sophomore
- junior
- graduate student
- unclassified

Did you begin college here or did you transfer from another institution?
- transferred
- started here

Where do you now live during the school year?
- dormitory or other campus housing
- residence (house, apartment, etc.) within walking distance of the institution
- residence (house, apartment, etc.) within driving distance
- fraternity or sorority house

With whom do you live during the school year?
- no one, I live alone
- one or more other students
- my spouse or partner
- my child or children
- my parents
- other relatives
- friends who are not students at the institution
- other people: who? ~

Do you have access to a computer where you live or work, or nearby that you can use for your school work?
- yes
- no

What have most of your grades been up to now at this institution?
- A
- B+
- B–, C+
- C, C–, or lower

Which of these fields best describes your major, or your anticipated major? You may indicate more than one if applicable.
- Agriculture
- Biological/life sciences (biology, biochemistry, botany, zoology, etc.)
- Business (accounting, business administration, marketing, management, etc.)
- Communication (speech, journalism, television/radio, etc.)
- Computer and information sciences
- Education
- Engineering
- Ethnic, cultural studies, and area studies
- Foreign languages and literature (French, Spanish, etc.)
- Health-related fields (nursing, physical therapy, health technology, etc.)
- History
- Humanities (English, literature, philosophy, religion, etc.)
- Liberal/interdisciplinary studies
- Mathematics
- Multidisciplinary studies (international relations, ecology, environmental studies, etc.)
- Parks, recreation, leisure studies, sports management
- Physical sciences (physics, chemistry, astronomy, earth science, etc.)
- Pre-professional (pre-dental, pre-medical, pre-veterinary)
- Public administration (city management, law enforcement, etc.)
- Social sciences (anthropology, economics, political science, psychology, sociology, etc.)
- Visual and performing arts (art, music, theater, etc.)
- Undecided
- Other: What?

Did either of your parents graduate from college?
- no
- yes, both parents
- yes, mother only
- yes, father only
- don’t know

Do you expect to enroll for an advanced degree when, or if, you complete your undergraduate degree?
- yes
- no

How many credit hours are you taking this term?
- 6 or fewer
- 7 - 11
- 12 - 14
- 15 - 18
- 17 or more

During the time school is in session, about how many hours a week do you usually spend outside of class on activities related to your academic program, such as studying, writing, reading, lab work, rehearsing, etc.?
- 5 or fewer hours a week
- 6 - 10 hours a week
- 11 - 15 hours a week
- 16 - 20 hours a week
- 21 - 25 hours a week
- 26 - 30 hours a week
- more than 30 hours a week
- a week
APPENDIX A: (Continued)

During the time school is in session, about how many hours a week do you usually spend working on a job for pay? To provide information about your work experiences on and off campus, fill in one oval in each column.

<table>
<thead>
<tr>
<th>ON-CAMPUS</th>
<th>OFF-CAMPUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>None; I don't have a job</td>
<td>○</td>
</tr>
<tr>
<td>1 - 10 hours a week</td>
<td>○</td>
</tr>
<tr>
<td>11 - 20 hours</td>
<td>○</td>
</tr>
<tr>
<td>21 - 30 hours</td>
<td>○</td>
</tr>
<tr>
<td>31 - 40 hours</td>
<td>○</td>
</tr>
<tr>
<td>More than 40 hours</td>
<td>○</td>
</tr>
</tbody>
</table>

If you have a job, how does it affect your school work?
- ○ I don't have a job
- ○ My job does not interfere with my school work
- ○ My job takes some time from my school work
- ○ My job takes a lot of time from my school work

How do you meet your college expenses? Fill in the response that best approximates the amount of support from each of the various sources.

- All or Nearly All
- More than Half
- About Half
- Less than Half
- Very Little
- None

- Self (job, savings, etc.)
- Parents
- Spouse or partner
- Employer support
- Scholarships and grants
- Loans
- Other sources

What is your racial or ethnic identification? (Fill in all that apply)
- ○ American Indian or other Native American
- ○ Asian or Pacific Islander
- ○ Black or African American
- ○ Caucasian (other than Hispanic)
- ○ Mexican-American
- ○ Puerto Rican
- ○ Other Hispanic
- ○ Other: What?

COLLEGE ACTIVITIES

DIRECTIONS: In your experience at this institution during the current school year, about how often have you done each of the following? Indicate your response by filling in one of the ovals to the right of each statement.

Library
- Used the library as a quiet place to read or study materials you brought with you.
- Found something interesting while browsing in the library.
- Asked a librarian or staff member for help in finding information on some topic.
- Read assigned materials other than textbooks in the library (reserve readings, etc.).
- Used an index or database (computer, card catalog, etc.) to find material on some topic.
- Developed a bibliography or reference list for a term paper or other report.
- Gone back to read a basic reference or document that other authors referred to.
- Made a judgment about the quality of information obtained from the library, World Wide Web, or other sources.

Computer and Information Technology
- Used a computer or word processor to prepare reports or papers.
- Used e-mail to communicate with an instructor or other students.
- Used a computer tutorial to learn material for a course or developmental/remedial program.
- Participated in class discussions using an electronic medium (e-mail, list-serves, chat groups, etc.).
- Searched the World Wide Web or Internet for information related to a course.
- Used a computer to retrieve materials from a library not at this institution.
- Used a computer to produce visual displays of information (charts, graphs, spreadsheets, etc.).
- Used a computer to analyze data (statistics, forecasting, etc.).
- Developed a Web page or multimedia presentation.
<table>
<thead>
<tr>
<th>Course Learning</th>
<th>Experiences with Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed the assigned readings for class.</td>
<td>Talked with your instructor about information related to a</td>
</tr>
<tr>
<td></td>
<td>course you were taking (grades, make-up work, assignments,</td>
</tr>
<tr>
<td></td>
<td>etc.).</td>
</tr>
<tr>
<td>Took detailed notes during class.</td>
<td>Discussed your academic program or course selection with a</td>
</tr>
<tr>
<td></td>
<td>faculty member.</td>
</tr>
<tr>
<td>Contributed to class discussions.</td>
<td>Discussed ideas for a term paper or other class project with</td>
</tr>
<tr>
<td></td>
<td>a faculty member.</td>
</tr>
<tr>
<td>Developed a role play, case study, or simulation</td>
<td>Discussed your career plans and ambitions with a faculty</td>
</tr>
<tr>
<td>for a class.</td>
<td>member.</td>
</tr>
<tr>
<td>Tried to see how different facts and ideas fit</td>
<td>Worked harder as a result of feedback from an instructor.</td>
</tr>
<tr>
<td>together.</td>
<td>Socialized with a faculty member outside of class (had a</td>
</tr>
<tr>
<td></td>
<td>snack or soft drink, etc.).</td>
</tr>
<tr>
<td>Summarized major points and information from your</td>
<td>Participated with other students in a discussion with one or</td>
</tr>
<tr>
<td>class notes or readings.</td>
<td>more faculty members outside of class.</td>
</tr>
<tr>
<td>Worked on a class assignment, project, or</td>
<td>Asked your instructor for comments and criticisms about your</td>
</tr>
<tr>
<td>presentation with other students.</td>
<td>academic performance.</td>
</tr>
<tr>
<td>Applied material learned in a class to other areas</td>
<td>Worked harder than you thought you could meet an instructor's</td>
</tr>
<tr>
<td>(your job or internship, other courses,</td>
<td>expectations and standards.</td>
</tr>
<tr>
<td>relationships with friends, family, co-workers,</td>
<td>Worked with a faculty member on a research project.</td>
</tr>
<tr>
<td>etc.).</td>
<td></td>
</tr>
<tr>
<td>Used information or experience from other areas of</td>
<td></td>
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<tr>
<td>your life (job, internship, interactions with</td>
<td></td>
</tr>
<tr>
<td>others) in class discussions or assignments.</td>
<td></td>
</tr>
<tr>
<td>Tried to explain material from a course to</td>
<td></td>
</tr>
<tr>
<td>someone else (another student, friend, co-worker,</td>
<td></td>
</tr>
<tr>
<td>family member.)</td>
<td></td>
</tr>
<tr>
<td>Worked on a paper or project where you had to</td>
<td></td>
</tr>
<tr>
<td>integrate ideas from various sources.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing Experiences</td>
<td>Art, Music, Theater</td>
</tr>
<tr>
<td>Used a dictionary or thesaurus to look up the</td>
<td>Talked about art (painting, sculpture, artists, etc.) or the</td>
</tr>
<tr>
<td>proper meaning of words.</td>
<td>theater (plays, musicals, dance, etc.) with other students,</td>
</tr>
<tr>
<td></td>
<td>friends, or family members.</td>
</tr>
<tr>
<td>Thought about grammar, sentence structure, word</td>
<td>Went to an art exhibit/gallery or a play, dance, or other</td>
</tr>
<tr>
<td>choices, and sequences of ideas or points as you</td>
<td>theater performance, on or off the campus.</td>
</tr>
<tr>
<td>were writing.</td>
<td>Participated in some art activity (painting, pottery, weaving,</td>
</tr>
<tr>
<td></td>
<td>drawing, etc.) or theater event, or worked on some theatrical</td>
</tr>
<tr>
<td></td>
<td>production (solo, duet, worked on scenery, etc.), on or off</td>
</tr>
<tr>
<td></td>
<td>the campus.</td>
</tr>
<tr>
<td>Asked other people to read something you wrote</td>
<td>Talked about music or musicians (classical, popular, etc.)</td>
</tr>
<tr>
<td>to see if it was clear to them.</td>
<td>with other students, friends, or family members.</td>
</tr>
<tr>
<td>Referred to a book or manual about writing style,</td>
<td>Attended a concert or other music event, on or off the</td>
</tr>
<tr>
<td>grammar, etc.</td>
<td>campus.</td>
</tr>
<tr>
<td>Revised a paper or composition two or more times</td>
<td>Participated in some music activity (orchestra, chorus,</td>
</tr>
<tr>
<td>before you were satisfied with it.</td>
<td>dance, etc.) on or off the campus.</td>
</tr>
<tr>
<td>Asked an instructor or staff member for advice</td>
<td>Read or discussed the opinions of art, music, or drama critic.</td>
</tr>
<tr>
<td>and help to improve your writing.</td>
<td></td>
</tr>
<tr>
<td>Prepared a major written report for a class</td>
<td></td>
</tr>
<tr>
<td>(20 pages or more).</td>
<td></td>
</tr>
</tbody>
</table>
**APPENDIX A: (Continued)**

**DIRECTIONS:** In your experience at this institution during the current school year, about how often have you done each of the following? Indicate your response by filling in one of the ovals to the right of each statement.

<table>
<thead>
<tr>
<th>Campus Facilities</th>
<th>Student Acquaintances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used a campus lounge to relax or study by yourself.</td>
<td>Became acquainted with students whose interests were different from yours.</td>
</tr>
<tr>
<td>Met other students at some campus location (campus center, etc.) for a discussion.</td>
<td>Became acquainted with students whose family background (economic, social) was different from yours.</td>
</tr>
<tr>
<td>Attended a cultural or social event in the campus center or other campus location.</td>
<td>Became acquainted with students whose age was different from yours.</td>
</tr>
<tr>
<td>Went to a lecture or panel discussion.</td>
<td>Became acquainted with students from another country.</td>
</tr>
<tr>
<td>Used a campus learning lab or center to improve study or academic skills (reading, writing, etc.).</td>
<td>Had serious discussions with students whose political opinions were very different from yours.</td>
</tr>
<tr>
<td>Used campus recreational facilities (pool, fitness equipment, courts, etc.)</td>
<td>Had serious discussions with students whose religious beliefs were very different from yours.</td>
</tr>
<tr>
<td>Played a team sport (intramural, club, intercollegiate).</td>
<td>Had serious discussions with students whose race or ethnic background was different from yours.</td>
</tr>
<tr>
<td>Followed a regular schedule of exercise or practice for some recreational sporting activity.</td>
<td>Had serious discussions with students from a country different from yours.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clubs and Organizations</th>
<th>Scientific and Quantitative Experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attended a meeting of a campus club, organization, or student government group.</td>
<td>Memorized formulas, definitions, technical terms and concepts.</td>
</tr>
<tr>
<td>Worked on a campus committee, student organization, or project (publications, student government, special event, etc.).</td>
<td>Used mathematical terms to express a set of relationships.</td>
</tr>
<tr>
<td>Worked on an off-campus committee, organization, or project (civic group, church group, community event, etc.).</td>
<td>Explained your understanding of some scientific or mathematical theory, principle or concept to someone else (classmate, co-worker, etc.)</td>
</tr>
<tr>
<td>Met with a faculty member or staff advisor to discuss the activities of a group or organization.</td>
<td>Read articles about scientific or mathematical theories or concepts in addition to those assigned for a class.</td>
</tr>
<tr>
<td>Managed or provided leadership for a club or organization, on or off the campus.</td>
<td>Completed an experiment or project using scientific methods.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal Experiences</th>
<th>Practice to improve your skill in using a piece of laboratory equipment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Told a friend or family member why you reacted to another person the way you did.</td>
<td>Showed someone else how to use a piece of scientific equipment.</td>
</tr>
<tr>
<td>Discussed with another student, friend, or family member why some people get along smoothly, and others do not.</td>
<td>Explained an experimental procedure to someone else.</td>
</tr>
<tr>
<td>Asked a friend for help with a personal problem.</td>
<td>Compared the scientific method with other methods for gaining knowledge and understanding.</td>
</tr>
<tr>
<td>Read articles or books about personal growth, self-improvement, or social development.</td>
<td>Explained to another person the scientific basis for concern about scientific or environmental issues (pollution, recycling, alternative sources of energy, acid rain) or similar aspects of the world around you.</td>
</tr>
<tr>
<td>Identified with a character in a book, movie, or television show and wondered what you might have done under similar circumstances.</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX A: (Continued)

CONVERSATIONS

**DIRECTIONS:** In conversations with others (students, family members, co-workers, etc) outside the classroom during this school year, about how often have you talked about each of the following?

<table>
<thead>
<tr>
<th>Topics of Conversation</th>
<th>Never</th>
<th>Occasionally</th>
<th>Often</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current events in the news</td>
<td></td>
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<tr>
<td>Social issues such as peace, justice, human rights, equality, race relations</td>
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<td></td>
<td></td>
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<tr>
<td>Different lifestyles, customs, and religions</td>
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<td></td>
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<tr>
<td>The ideas and views of other people such as writers, philosophers, historians</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>The arts (painting, poetry, dance, theatrical productions, symphony, movies, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science (theories, experiments, methods, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computers and other technologies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social and ethical issues related to science and technology such as energy, pollution, chemicals, genetics, military use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The economy (employment, wealth, poverty, debt, trade, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International relations (human rights, free trade, military activities, political differences, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information in Conversations</th>
<th>Never</th>
<th>Occasionally</th>
<th>Often</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referred to knowledge you acquired in your reading or classes</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Explored different ways of thinking about the topic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Referred to something one of your instructors said about the topic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subsequently read something that was related to the topic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changed your opinion as a result of the knowledge or arguments presented by others</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persuaded others to change their minds as a result of the knowledge or arguments you cited</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

READING/Writing

<table>
<thead>
<tr>
<th>More than 20</th>
<th>Between 11 and 20</th>
<th>Between 5 and 10</th>
<th>Power Less than 5</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>During this current school year, about how many books have you read? Fill in one response for each item listed below.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textbooks or assigned books</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assigned packets of course readings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-assigned books</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>More than 20</th>
<th>Between 11 and 20</th>
<th>Between 5 and 10</th>
<th>Power Less than 5</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>During this current school year, about how many exams, papers, or reports have you written? Fill in one response for each item listed below.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essay exams for your courses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term papers or other written reports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OPINIONS ABOUT YOUR COLLEGE OR UNIVERSITY

**How well do you like college?**
- [ ] I am enthusiastic about it.
- [ ] I like it.
- [ ] I am more or less neutral about it.
- [ ] I don’t like it.

**If you could start over again, would you go to the same institution you are now attending?**
- [ ] Yes, definitely
- [ ] Probably yes
- [ ] Probably no
- [ ] No, definitely
THE COLLEGE ENVIRONMENT

Colleges and universities differ from one another in the extent to which they emphasize or focus on various aspects of students' development. Thinking of your experience at this institution, to what extent do you feel that each of the following is emphasized? The responses are numbered from 7 to 1, with the highest and lowest points illustrated. Fill in the oval with the number that best represents your impression on each of the following seven-point rating scales.

Emphasis on developing academic, scholarly, and intellectual qualities
Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on developing aesthetic, expressive, and creative qualities
Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on developing critical, evaluative, and analytical qualities
Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on developing an understanding and appreciation of human diversity
Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on developing information literacy skills (using computers, other information resources)
Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on developing vocational and occupational competence
Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on the personal relevance and practical value of your courses
Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

The next three ratings refer to relations with people at this college. Again, thinking of your own experience, please rate the quality of these relationships on each of the following seven-point rating scales.

Relationships with other students
Friendly, Supportive, Sense of belonging 7 6 5 4 3 2 1 Competitive, Uninvolved, Sense of alienation

Relationships with administrative personnel and offices
Helpful, Considerate, Flexible 7 6 5 4 3 2 1 Rigid, Impersonal, Bound by regulations

Approachable, Helpful, Understanding, Encouraging 7 6 5 4 3 2 1 Remote, Discouraging, Unsympathetic

Go to next page
Appendix A: (Continued)

College Students Experiences Questionnaire (4th ed.), Reprinted with permission from G. Kuh, Director, Indiana University Center for Postsecondary Research.
Cathy Jane Hakes was born and raised in St. Petersburg, Florida. She attended public schools in Pinellas County, Florida. She attended St. Petersburg Junior College (presently known as St. Petersburg College) and graduated in 1971 with an Associate of Arts Degree in General Education. In 1973, she graduated from the University of South Florida (USF) with a Bachelor of Arts degree in Physical Education. She returned to USF and earned her Master of Arts degree in Physical Education in 1977 and her Doctorate of Education in Educational Leadership in 2010.

Cathy Hakes began working in the field of higher education in 1980 at St. Petersburg Junior College (SPJC) as an adjunct instructor. Throughout her 26 years with SPJC, she held several administrative positions within the student services division. Her interest in student employment was sparked by her duties as the Coordinator of the Job Placement Center where she developed and supervised several work-study programs, a cooperative education program, the Career Center, and Volunteer Services. Cathy was also active in the National Association of Student Employment Administrators and served as its president from 1994-1995. From these experiences, she became a proponent of the value of student employment and work experience.

In 2006, Cathy and her family moved to Georgia where she is currently employed as the Director of Accreditation and Certification Activities at Georgia Gwinnett College in Lawrenceville, GA.