

Taylor University
Pillars at Taylor University

Master of Arts in Higher Education Thesis Collection

2014

The Co-Curriculum and the Core Curriculum: Exploring the Relationship Between Student Involvement and Academic Outcomes

Natalie D. Berger
Taylor University

Follow this and additional works at: <http://pillars.taylor.edu/mahe>



Part of the [Higher Education Commons](#)

Recommended Citation

Berger, Natalie D., "The Co-Curriculum and the Core Curriculum: Exploring the Relationship Between Student Involvement and Academic Outcomes" (2014). *Master of Arts in Higher Education Thesis Collection*. 67.
<http://pillars.taylor.edu/mahe/67>

This Thesis is brought to you for free and open access by Pillars at Taylor University. It has been accepted for inclusion in Master of Arts in Higher Education Thesis Collection by an authorized administrator of Pillars at Taylor University. For more information, please contact aschu@tayloru.edu.

THE CO-CURRICULUM AND THE CORE CURRICULUM: EXPLORING THE
RELATIONSHIP BETWEEN STUDENT INVOLVEMENT
AND ACADEMIC OUTCOMES

A thesis

Presented to

The School of Social Sciences, Education & Business
Department of Higher Education and Student Development
Taylor University
Upland, Indiana

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Higher Education and Student Development

by

Natalie D. Berger

May 2014

© Natalie Berger 2014

**Higher Education and Student Development
Taylor University
Upland, Indiana**

CERTIFICATE OF APPROVAL

MASTER'S THESIS

This is to certify that the Thesis of

Natalie Danielle Berger

entitled

The Co-Curriculum and the Core Curriculum: Exploring the Relationship Between
Student Involvement and Academic Outcomes

has been approved by the Examining Committee for the thesis requirement for the

Master of Arts degree
in Higher Education and Student Development

May 2014

Skip Trudeau, Ed.D. Date
Thesis Supervisor

Thomas G. Jones, Ed.D. Date
Member, Thesis Hearing Committee

Scott Moeschberger, Ph.D. Date
Member, Thesis Hearing Committee

Tim Herrmann, Ph.D. Date
Director, M.A. in Higher Education and Student Development

Abstract

Higher Education leaders have long been interested in the relationship between the curricular and co-curricular components of a four-year undergraduate institution (Fried, 2007). Leaders of traditional four-year residential universities are especially interested in this relationship as a potential value-added factor supporting their intentionally student-focused, highly interactive program. Astin's (1999) theory of student involvement points out that the more energy a student exerts in her or his experience, the better she or he will perform academically. Astin's theory applies both within and outside of the classroom. Kuh's seminal research (1995) focused on the effects of student engagement in extracurricular activities outside of the classroom and with faculty and staff in levels of student learning. His research confirmed the powerful impact of the co-curriculum on student learning (Kinzie & Kuh, 2007).

This research project was designed as a quantitative correlational study for the purpose of measuring the impact of the co-curriculum as an integral component in student academic success. It examined a group of 180 seniors at a private, liberal arts, four-year institution in the Midwest. The researcher collected and scored student essays, which measured student ability in academic outcomes. Students also completed a survey asking questions about involvement in seven areas of campus: residence hall activities, all-campus events, leadership, multicultural, spiritual, intellectual, and athletics. Scores from the essays and the surveys were matched and then analyzed. It was found that

students who were more involved in the areas of the co-curriculum including multicultural, all-campus events, leadership, and residence hall events had higher outcome scores than those students who were less involved in these areas.

Acknowledgements

Two years ago, I never could have imagined pursuing a Master's in Higher Education, let alone completing my own original research. Yet today I can say that I have researched, presented, and understood a critical issue in Higher Education and Student Development. In the course of the last year and a half, I have been blessed to know, learn from, and experience the relationship of incredible people. Without these people, I would not have been able to complete this research or my degree.

My husband. You have been my biggest supporter and encourager. Despite my insecurities, inabilities, and humanity, you continually push me to be better than I ever believed I could be. Thank you for loving me, and for believing in the best in me and disregarding the worst. Thank you for bringing me joy, and reminding me that I am a learner at heart, and I love this. Thank you for inspiring me to keep pushing on. My father. You have taught me that no matter where I come from, I need to work hard, push through, and produce the best work I am capable of. You have made me not a perfectionist, but a seeker after excellence. You believe in my ability to be anything and everything. Thank you for showing me how to laugh, and love, and learn. My friends. Megan Wilhelmson, Aubrey Shetler, Allie Hymas, Elyse Snelson, Jillian Abendroth, Matt McCourt. I could name so many of you who have taught me how to seek truth, and relationship, and God. Thank you for inspiring me to pursue Higher Education. Thank you for encouraging me when I am down, and for laughing at me when I need humbled. My mom. You have taught me how to be strong, how to push forward, and how to forgive and seek restoration. My God. I could not do anything without You.

I would like to dedicate this research to my husband, who stood patiently by me as I wrestled with myself and with this research. Thank you for loving, supporting, encouraging, and pushing me.

Table of Contents

Abstract	iii
Acknowledgements	v
List of Tables	ix
Chapter 1 Introduction	1
Defining the Problem	1
Chapter 2 Literature Review	5
The Relationship Between Involvement and the Co-Curriculum	5
Liberal Learning and Outcomes	11
Connecting Liberal Education and an Integrated Learning Environment	15
Chapter 3 Methodology	17
Participants	17
Instruments	17
Data Collection	19
Analysis	20
Chapter 4 Results	21
Scale Reliability	21
Factor Analysis	22
Inter-Scale Correlations	23
Research Question	23

Multiple Regression	26
Summary	26
Chapter 5 Discussion	28
Reviewing the Findings	29
Implications for Practice	32
Limitations	34
Further Study	35
Conclusion	36
References.....	38
Appendix A: Student Involvement Inventory.....	41
Appendix B: Position Analysis Paper Assignment.....	47
Appendix C: Position Analysis Assignment Rubric.....	49

List of Tables

Table 1. Reliability Analysis of Involvement Scales.....	Error! Bookmark not defined.	1
Table 2. Factor Analysis of Rubric Categories.		22
Table 3. Correlations of Total Essay Score and Survey Scales.		25
Table 4. Multiple Regression.....		26

Chapter 1

Introduction

Defining the Problem

Twenty-first century undergraduates in America's top colleges and universities have extensive opportunities to be involved on campus. Whether electing to engage in course-related activities or joining an intramural team, today's college students have many opportunities to participate in curricular and co-curricular projects, study and service learning trips, and intercollegiate academic and athletic competitions. These experiences have the potential to be transformative (Kuh, 1995).

Student involvement is defined as “the amount of physical and psychological energy that the student devotes to the academic experience” (Astin, 1999, p. 518). An involved student contributes significant time and energy to his or her studies, attends extracurricular activities, and has consistent and frequent interactions with other members of the campus community (Astin, 1999). Astin (1999) explains, “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 that program” (p. 519). The more time and energy a student devotes to something, the more involved he or she is, and the better he or she will perform as well as learn. While this is evident within the classroom, students do not spend all their time studying. A significant portion of students' time and energy is devoted to co-curricular activities, which include engaging

in extracurricular activities; interacting with faculty, staff, and peers; and living in a campus residence (Kuh, 1995). However, many academic affairs professionals believe academic gain to be the most important component of a student's college experience (Astin, 1993). While the value of academic pursuits is often assumed, the value of co-curricular activities is not as evident (Kuh, 1991).

According to Kinzie and Kuh (2007), universities which focus on student learning present varied opportunities for learning both inside and outside of the classroom. Because students are consistently involved in both areas of the university, the relationship between these two parts of an institution is important to consider. Boyer (1990) established the idea that the campus curriculum should be integrative, including not only academics, but campus life and community as well. According to Boyer (1987), "all parts of campus life—recruitment, orientation, curriculum, teaching, residence hall living, and the rest—must relate to one another and contribute to a sense of wholeness" (p. 8). In this case, the co-curriculum and curriculum are closely aligned, working toward the same goal of student learning. A university that prescribes to Boyer's system "recognizes the essential integration of personal development with learning; it reflects the diverse ways through which students may engage, as whole people with multiple dimensions and unique personal histories, with the tasks and content of learning" (Keeling, 2004, p. 3). All components of the curriculum and co-curriculum contribute to student learning, and integrating these areas will only increase student learning (Keeling, 2004). The American College Personnel Association (1994) states that:

The key to enhancing learning and personal development is not simply for faculty to teach more and better, but also to create conditions that motivate and inspire

students to devote time and energy to educationally purposeful activities, both inside and outside the classroom. (p. 1)

The conditions both inside and outside of the classroom are important to student learning. Aligning the goals between the curriculum and co-curriculum would create what Kuh (1996) termed a “seamless learning environment,” which he described as the best way to create an effective learning environment. If the curriculum and co-curriculum have the same outcomes, they can partner together to create a holistic campus community. It is important for student and academic affairs professionals to begin recognizing the ways in which the curriculum and co-curriculum interact, because separation between these two serves as a block to effective learning environments (Schroeder & Hurst, 1996).

If a primary outcome of education is student learning (Fried, 2007; Keeling, 2004), both the co-curriculum and the curriculum should promote collaboration, in order to create the best learning environment. The potential to develop transformative curricular and co-curricular experiences for students is enhanced when intentional partnerships are developed between academic affairs and student development faculty delivering the general education curriculum. As “the part of a...curriculum shared by all students. It [general education] provides broad learning...and forms the basis for developing important intellectual, civic, and practical capacities” (“Association,” n.d.). General education, or the core curriculum, should promote student learning, and it can do so through student ability in the established core outcomes. These outcomes provide effective standards against which to measure student involvement. The purpose of the current study was to examine the relationship between the ability in core curriculum outcomes and the co-curriculum, with the intent to discover if there was a positive

correlation between these two variables. Therefore, the study sought to answer the question, what is the relationship between co-curricular involvement and abilities in liberal education outcomes at a small, private, liberal arts institution?

Chapter 2

Literature Review

The Relationship Between Involvement and the Co-Curriculum

Defining student involvement. Students “need a broad set of essential skills and abilities in addition to a strong knowledge base to achieve success in today’s global society” (Rhodes, 2010, p. 14). Astin’s (1999) theory of student involvement offered one perspective on how students best gain these skills. Student involvement can be defined as “the amount of physical and psychological energy that the student devotes to the academic experience” (Astin, 1999, p. 518). According to Astin (1999), a highly involved student is someone who “devotes considerable energy to studying, spends much time on campus, participates actively in student organizations, and interacts frequently with faculty members and other students” (p. 518). The highly involved student is an ideal, as this student is someone who devotes time and energy across campus. While the motivational component of involvement is important in understanding why a student might be engaged, the behavioral component is critical in understanding what student involvement looks like (Astin, 1999).

Astin (1999) also expressed that “involvement occurs along a continuum” (p. 519). Students may express varying levels of involvement in different areas; one student might be highly involved academically, while another is particularly involved in her or his residence hall. The varying levels of involvement can be measured both qualitatively

and quantitatively. That is, the amount of time a student puts into something can be a measure of involvement, or a student's ability in an area could be another measure of her or his involvement.

Student involvement theory accurately describes the educational experience of a student, in that it provides a more holistic perspective of the student's time at the university, as well as accounts for a student's role in his or her learning experience. Rather than simply measuring student learning through academic ability as represented by GPA or test scores, involvement theory measures student learning through how actively involved students are on campus (Astin, 1985). Astin's (1999) theory of involvement "emphasizes active participation of the student in the learning process" (p. 522). Students should be actively engaging their learning environment if they are to learn from their time in college; "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 that program" (Astin, 1999, p. 519). According to Astin (1999), students learn more when they are more involved.

Kuh (1996) described two key factors that influence student learning and development, which are "interacting in educationally purposeful ways with an institution's...faculty staff and peers" and "directing a high degree of effort to academic tasks" (p. 135). These factors parallel Astin's (1999) theory of involvement. They present ways students can be involved across campus, and Kuh (1996) articulated that these methods of involvement impact student learning. Similarly, Astin's (1999) involvement theory asked for students to be involved in order to learn. Student involvement theory includes student investment in the college experience overall, not just academically

(Astin, 1999). Through interacting with faculty and peers, as well as putting effort into academics, students will have the opportunity to learn, because of their increased involvement (Astin, 1999; Kuh, 1996).

According to Pascarella and Terenzini (2005), the extent to which students grow “in general cognitive skills during college appears to be a direct result of students’ quality of effort or involvement in college” (p. 174). Astin’s (1999) theory provided a connection between a student’s effort and how much they learn. As “learning environments... must be planned, created, and sustained with the student learner as the focus” (Schroeder & Hurst, 1996, p. 174), recognizing the factors that contribute to student learning is helpful in creating these environments. According to Kinzie and Kuh (2007), institutions that have student-centered cultures “set high expectations consistent with the differing characteristics, talents, and goals of their students and intentionally organize their resources to expose and encourage students to take advantage of a range of learning experiences” (p. 18). An institution that has student learning at its core should recognize the value of student involvement to student learning and create an environment that encourages student involvement.

The co-curriculum as a component of student learning. Student involvement is not exclusive to the classroom. Astin (1999) stated “involvement takes many forms, such as absorption in academic work, participation in extracurricular activities, and interaction with faculty and other institutional personnel” (p. 528). The college experience includes the entirety of a students’ time at college, including the “co-curriculum.” The co-curriculum is generally defined as inclusive of extracurricular activities; interacting with faculty, staff, and peers; and living in a campus residence

(Kuh, 1995). Essentially, the co-curriculum includes any non-classroom experience that might be conducive to student learning. Kuh (1991) defined a high quality out-of-class experience as “active participation in activities and events that are not part of the curriculum but nevertheless complement the institution’s educational purposes” (p. 7). While activities such as living in residence halls and having coffee with professors may not initially seem valuable because they are not specifically academic, many researchers would argue that there is value to the co-curriculum (Kuh, 1995; Pascarella & Terenzini, 2005). Involvement in the co-curriculum gives students opportunities to put into practice what they are learning in the classroom (Kuh, 1996).

The co-curriculum contributes in significant ways to student learning, “ranging from gains in critical thinking to relational and organizational skills, attributes that are highly correlated with satisfaction and success after college” (Kuh, 1995, p. 150). While not every aspect of the co-curriculum is necessarily beneficial (Anaya, 1996), it composes a significant portion of students’ time and energy and, therefore, should be considered as an integral piece of the student experience. In addition, the co-curriculum is an area that invites significant student involvement. As the co-curriculum ranges from campus living to any extracurricular activity, it is very broad (Kuh, 1995) and provides space for student involvement. Astin (1999) pointed out that “involvement takes many forms” (p. 528) and contributes to student learning in all facets of the university. The co-curriculum, as a component of the university, is an area in which students can learn outside of the classroom.

The seamless learning environment: Connecting learning in and out of the classroom. The co-curriculum, while important to student learning on its own, should

not be seen in isolation. Kuh (1996) made a call for what he described as a seamless learning environment. Seamless learning environments encourage students to take advantage of learning both inside and outside of the classroom, as well as to “use their life experiences to make meaning of material introduced in classes...and to apply what they are learning in class to their lives outside the classroom” (Kuh, 1996, p. 136). In the past, “higher education traditionally has organized its activities into ‘academic affairs’ (learning, curriculum, classrooms, cognitive development) and ‘student affairs’ (co-curriculum, student activities, residential life, affective or personal development)” (ACPA, 1994, p. 1). However, that should not continue to be the case, as students clearly learn both inside and outside of the classroom (Astin, 1999; Kuh, 1996; Pascarella & Terenzini, 2005). According to Boyer (1987), “all parts of campus life—recruitment, orientation, curriculum, teaching, residence hall living, and the rest—must relate to one another and contribute to a sense of wholeness” (p. 8). The seamless learning environment brings together the curriculum and co-curriculum and points them out as different but integral to student learning. The goal of a seamless learning environment is to “elicit the convergence of all the student’s learning experiences” and to help the student discover connections between diverse experiences (Schroeder & Hurst, 1996, p. 1975). A seamless learning environment should help students recognize that what they learn inside the classroom, and what they do outside the classroom, is connected. The seamless learning environment is the picture of an ideal campus, one in which all components work together to promote student learning.

The goal of an institution should be to equip students through an efficient but also encouraging experience (Kuh, 1996). Student affairs and academic affairs should partner

together in order to create this seamless environment for students, which will encourage increased student learning (Kuh, 1996). It is important to recognize that:

students and institutional environments contribute to what students gain from college...the key to enhancing learning and personal development is...to create conditions that motivate and inspire students to devote time and energy to educationally purposeful activities, both in and outside the classroom. (ACPA, 1994, p. 1)

The seamless learning environment does just this; it creates an environment that is most conducive to student learning. The best kind of environment will be one where students are motivated to make connections across the curriculum and campus.

Why an integrated education is valuable to student learning. Traditional forms of higher education have emphasized the separation between academic and student affairs. Fried (2007) described this paradigm, saying “student affairs is the province for training the touchy-feely activities, while information mastery activities are the territory of academic affairs” (p. 2). In today’s information-rich, experience-focused society this strict separation is no longer conducive to student learning (Fried, 2007). Instead, professionals should work toward “the integrated use of all higher education’s resources in the education and preparation of the whole student” (Keeling, 2004, p. 3). Rather than maintaining a separation between departments, colleges should strive for collaboration across all learning environments which students encounter (Schroeder & Hurst, 1996).

Keeling (2004) described a concept of learning that ties closely with the concept of an integrated campus; learning “recognizes the essential integration of personal development with learning; it reflects the diverse ways through which students may

engage, as whole people with multiple dimensions and unique personal histories, with the tasks and content of learning” (p. 3). This concept of learning can be helpful in connecting all the pieces of a seamless learning environment, which is an environment in which student learning is connected both within and outside of the classroom. Student learning, according to Keeling’s (2004) definition, should take into account the amount of effort a student puts in, not just mentally, but as a whole person. The theory of involvement aligns with Keeling’s theory of learning, in that both take into consideration the relationship between involvement and learning. According to Astin (1999), “the greater the student’s involvement in college, the greater will be the amount of student learning and personal development” (p. 528-529). Furthermore, Keeling’s (2004) concept of learning considers the entire experience of the student, beyond their academic learning. Accordingly, “through an integrated learning experience, a student’s picture of the world can become more comprehensive and more inclusive and, ultimately, improve their relationships and their life” (Fried, 2007, p. 3). An integrated learning environment, in which the curriculum and co-curriculum are aligned toward the same goals, is the optimal environment for student learning.

Liberal Learning and Outcomes

When students enter college, they enter with certain expectations. They hope that they will graduate, get a job, and have a solid career. However, more and more professionals are dissatisfied with the quality of college graduates (“Association,” 2007; Schneider, 2003). Because of this increasing dissatisfaction, the Association of American Colleges and Universities (AAC&U) developed the Liberal Education and America’s Promise (LEAP) initiative. This initiative is designed to champion liberal education, as

well as to explore and attempt to define liberal education. According to Schneider (2003), although liberal education has looked very different across the years, “it has always been concerned with important educational aims: cultivating intellectual and ethical judgment, helping students comprehend and negotiate their relationship to the larger world, and preparing graduates for lives of civic responsibilities and leadership” (p. 2).

Understanding the purpose of liberal education can be key in creating a holistic campus environment that keeps student learning at its focus.

The AAC&U’s definition of liberal education will be used for the purpose of the current research. According to the AAC&U, “liberal education is a philosophy of education that empowers individuals with broad knowledge and transferable skills, and a strong sense of value, ethics, and civic engagement” (“Association,” n.d.). The idea of a liberal education is that it is broad and provides not only content knowledge, but also transferable skills; liberal education should provide knowledge and abilities that can be used in various situations and work environments. The value behind this kind of education is that it gives students access to high impact educational practices. High impact educational practices are important because “these practices typically demand that students devote considerable time and effort to purposeful tasks; most require daily decisions that deepen students’...commitment to their academic program and the college” (Kuh, 2008, p. 28). A liberal education not only provides an overarching view of education that is not limited by discipline, but also recognizes the importance of the entire college experience. According to Schneider and Shoenberg (1998), liberal education “is a conception of education that holds at its core a vision of, and conscious preparation for, a world lived in common with others” (p. 32). Taken broadly, this

conceptualization of a liberal education encompasses the entirety of a students' experience, including their time after leaving college. This form of education provides a philosophy of student learning that encompasses all ways in which students can learn and equips them to go into the world post-graduation.

Through liberal education, educators “have the potential to make college learning more engaged, better connected with communities beyond the campus, more ‘hands-on,’ and, in the long run, more educationally powerful” (Schneider, 2003, p. 4). By considering the entirety of the college experience, liberal education creates an environment in which students can participate in optimal learning. The liberal education environment is in effect that of the seamless learning environment that Kuh (1996) discussed. It is a place where boundaries are fluid, not linear, and students make connections across the curriculum.

Role of general education as a component of a liberal education. General education and liberal education are very similar, but they are not the same thing. While a liberal education is focused overall on providing students with opportunities to develop transferable skills, general education is “the part of a liberal education curriculum shared by all students. It provides broad learning...and forms the basis for developing important intellectual, civic, and practical capacities” (“Association,” n.d.). General education is the part of liberal education that implements the goals of liberal education. However, because general education is not always clearly outlined, it can become what Boyer and Levine (1981) termed the spare room in the curriculum. Boyer and Levine (1981) explained that general education is “the easiest place to dump those concerns that everyone agrees are serious, but for which no one seems willing to take responsibility” (p. 3). Because of this,

it is important both to assess and understand the purpose of general education. According to Penn (2011), “general education outcomes are continuing to move away from a grouping of discipline-based...courses toward an emphasis on transferable, complex, cross-discipline student learning outcomes” (p. 111). While the movement reflects the trends evident in liberal education, it is still important to have a more concrete understanding of general education (Boyer & Levine, 1981). Boyer and Levine (1981) explained, “minute attention to any one component in isolation cannot compensate for the lack of a unifying vision of what a general education curriculum should be” (p. 33). It is important to begin evaluating just what general education looks like in relation to a holistic campus environment.

General education, as a component of a liberal education, should be evaluated with the essential learning outcomes in mind. The general education should be the primary means through which students learn the outcomes. Using the LEAP Initiative outcomes, Nelson Laird, Niskode-Dosset, and Kuh (2009) performed a study designed to evaluate the role of general education courses in achieving these essential learning outcomes, specifically the degree of emphasis faculty members who were teaching general education courses placed on essential learning outcomes verses faculty who were teaching other courses. The research stated that “essential learning outcomes are the goals, and GECs [general education courses] are the building blocks for achieving the goals” (Nelson Laird et al., 2009, p. 66). The study found that “faculty teaching GECs place more emphasis on a variety of essential learning outcomes than their counterparts teaching non-GECs” (Nelson Laird et al., 2009, p. 80). If the goal of a liberal education is student learning, particularly in the area of essential learning outcomes, then it seems that

general education is a particularly valuable area of emphasis, both because faculty are more aware of the outcomes in these courses (Nelson Laird et al., 2009) and because the courses themselves are designed as an integrated core “that introduces students not only to essential knowledge, but also to connections across the disciplines, and...to the application of knowledge to life beyond the campus” (Boyer, 1987, p. 91). General education is a means by which colleges can help students achieve essential learning outcomes, regardless of their course of study.

Connecting Liberal Education and an Integrated Learning Environment

Student learning should be the goal of higher education, but not just for the purposes of finding a job. Ultimately, students should gain a set of transferable skills that not only help them as employees, but as citizens (“Association,” 2007; Fried, 2007; Keeling, 2004). These desired skills can be aligned with the AAC&U’s essential learning outcomes, which are designed to equip students in just this way.

While professionals believed in the past that student learning was limited to the arena of academic affairs (ACPA, 1994; Boyer, 1987; Fried, 2007; Keeling, 2004), trends in the literature show an increasing emphasis on the co-curriculum as a significant piece of student learning. Learning through the college experience is no longer limited to academics, as “students can learn in all domains of their lives” (Fried, 2007, p. 3). Ultimately, it is valuable not just to recognize the importance of the co-curriculum, but to see the value in connecting what students learn outside of the classroom, to what they learn inside of the classroom (Kuh, 1996; Schroeder & Hurst, 1996). Through this connection, the ideal learning environment can be created (Fried, 2007).

Because general education plays such a significant role in a student's ability in essential learning outcomes (Nelson Laird et al., 2009), and because the co-curriculum seems to be significant to student learning, the connection between these two areas is important to explore. If a student is involved in general education, then he or she ideally should be gaining in essential learning outcomes. Similarly, a student involved in the co-curriculum should have increased learning. If, ultimately, colleges and universities are striving for an integrated curriculum that identifies the connections between co-curricular and curricular involvement, then combining these two areas should show increased student learning. So, how do areas of the co-curriculum—including leadership involvement, athletics, residence hall living, all-campus events, spiritual, and multicultural experiences—impact how well students perform in curricular outcomes? Based on the literature, the more a student is involved in the co-curriculum, the more opportunities he or she will have to learn. Therefore, there should be a positive relationship between these two outcomes.

Chapter 3

Methodology

The purpose of the current study was to determine the relationship between co-curricular involvement and achievement in liberal arts learning outcomes at a small, liberal arts institution. The study utilized correlational methods to investigate the relationship between co-curricular involvement and learning outcomes abilities.

Participants

Participants were graduating seniors enrolled for at least two years in a small, Christian, liberal arts university in the Midwest. A convenience sample was conducted using an existing senior capstone course of 183 students. Seniors were defined as any student participating in the seminar with senior credit standing, who had attended the university for at least two years. As these students had a minimum of two years opportunity to gain skills in the institutionally-defined, liberal arts outcomes and had also had at least two years to be involved in the co-curriculum, they were strong candidates for the purposes of the research.

Instruments

Involvement. The first instrument was an inventory questionnaire that measured student involvement in the institution's co-curricular programming (Appendix A). This inventory included a series of questions that asked about student level of involvement in seven categories: leadership, multicultural, all-campus events, residence hall events,

intellectual, athletic, and spiritual. These areas of the co-curriculum were established based on the relevant literature (Astin, 1999; Kuh, 1996). Scales were built for each category, and students received scores for each category as well as the inventory over all. Students completed the survey online through SurveyMonkey.com and included basic demographic information, such as age and major. While reliability was not available for this new inventory, it was tested for scale reliability, and all scales were found to have reliability. In addition, the inventory appeared to have a high degree of face validity as it closely aligned with previous research and literature-based involvement constructs.

Core Outcomes. Existing course data was utilized for the purpose of the research. An essay assignment was used in which students practiced several of the skills described as core outcomes according to the university studied, including student ability to present two opposing arguments without bias and student ability to recognize his or her own bias when presenting opinions (Appendix B). The rubric associated with this essay was the instrument used to evaluate how well students were able to perform in the areas described (Appendix C). As the essay asked students to perform in these areas and was not based on self-report, the associated rubric functioned as an accurate measure of student ability. Each outcome was represented by a standard on the rubric. Scores for each standard represented student achievement in each of the curricular outcomes. Students received scores for each individual standard, ranging from 0 to 50.

Raters.

Training. While reliability and validity were not available, inter-rater reliability was built into the essay instrument, through training and measurement. Four raters were recruited from a masters in Higher Education program at the university being studied.

These raters were first-year students and were offered compensation for their time. Two other raters included the Director of Assessment from the university and the researcher. Raters participated in a calibration session that ensured all evaluators reached a consensus regarding rubric standards and utilized identical evaluation methods. For this calibration session, raters were asked to evaluate several essays based on the rubric. They then shared results and worked together to understand what the most accurate scores were based on using the rubric. In this way, raters were able to reach a consensus regarding the rubric standards.

Reliability. Inter-rater reliability was built into the rubric evaluation. Five essays were selected randomly for every rater to evaluate. The scores for these essays were compared after the evaluation, and it was determined that the measurement was consistent.

Data Collection

Students were given six weeks to complete the essay assignment and submit their work using the institution's web-based course management system. Prior to evaluating the essays, the evaluators took part in a calibration session in order to gain inter-rater reliability. Meanwhile, IRB approval was sought before distributing the student involvement survey. When IRB approval was received, the researcher presented the survey to participants, who were offered extra credit for completion of the survey. Informed consent was provided on the first page of the survey, informing students that while their names were solicited in order to connect survey scores with rubric scores, their scores were kept confidential, and their identities played no part in the research

beyond the initial matching of rubric scores to survey responses. Students had two weeks to complete the survey.

Analysis

A multiple regression was performed on one criterion, measuring seven predictor variables. In addition, the reliability of each instrument was tested using a Cronbach Alpha score. A bivariate correlation was performed, analyzing the correlation between the seven predictor variables, each other, and the criterion variable. A factor analysis of the rubric categories was performed to determine if the rubric scores measured one component.

Chapter 4

Results

Scale Reliability

In order to evaluate the reliability of the involvement instrument, each scale was analyzed for its reliability. Based on the Cronbach's Alpha for each scale, it was determined that the Athletics scale was not reliable, with a Cronbach's Alpha of .604, while all other scales had high reliability. Table 1 illustrates the analysis of the scales.

Table 1

Reliability Analysis of Involvement Scales

Scale	Cronbach's Alpha	N of items	Mean	Variance	Std. Deviation
Spiritual	.770	5	13.39	12.818	3.580
Intellectual	.681	6	13.00	10.831	3.291
All-Campus Events	.817	14	38.24	82.077	9.060
Wing/Hall Events	.790	7	21.42	16.218	4.027
Multicultural	.692	8	14.17	14.082	3.753
Athletics	.604	3	6.76	7.014	2.648
Leadership	.877	20	34.73	81.658	9.037
Rubric Scale	.712	5			

Factor Analysis

A factor analysis was performed on the rubric categories in order to determine if the total essay score measured one component (Mertler & Vannatta, 2002). The results of the factor analysis of the rubric categories found that there was only one extraction; all rubric categories contributed to the overall essay score in a way that was not significant enough to analyze each individual rubric category. The factor analysis showed that one component was extracted with a total eigenvalue >1 at 2.542, and no other components were extracted with an eigenvalue above 1. Table 2 illustrates these relationships.

Table 2

*Factor Analysis of Rubric Categories**

Rubric Category		Component 1				
Position 1		.782				
Position 2		.691				
Personal		.636				
Sources		.668				
Quality		.776				
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.542	50.833	50.833	2.542	50.833	50.833
2	.844	17.683	68.515			
3	.727	14.545	83.060			
4	.453	9.066	92.126			
5	.394	7.874	100.000			

Note. *1 components extracted.

Inter-Scale Correlations

Prior to exploring the research question, the student involvement survey was analyzed to determine if there were any relevant inter-scale correlations. A bivariate correlation was selected to analyze the relationships within the student involvement scales, in order to determine if there was a linear relationship between the predictor variables and criterion variable, as well as if there is a linear relationship between the predictor variables (Mertler & Vannatta, 2002). The correlation determined whether student involvement in different areas of campus had any correlations. It was found that there was a positive correlation between a student's involvement in spiritual (SP) aspects of campus and his or her involvement in all-campus events (ACE), multicultural activities (M), leadership positions (L), and wing/hall events (WH). There was also a positive correlation of multicultural (M) involvement and leadership (L) involvement with all scales (all-campus events (ACE), multicultural (M), leadership (L), wing/hall events (WH), spiritual (SP), and intellectual (IN) excluding athletic (ATH) involvement). It was found that students who had high levels of athletic (ATH) involvement had significant negative correlations to intellectual and multicultural involvement and did not have any significant positive correlations (See Table 3).

Research Question

Using a bivariate correlation, the research question "What is the relationship between co-curricular involvement and student performance in core curriculum outcomes?" was considered. Results showed a positive correlation between student involvement in the areas of the co-curriculum including intellectual involvement, all-campus events, multicultural activities, leadership involvement, and wing/hall events and

students' total essay score. The areas of all-campus events, multicultural involvement, leadership, and wing/hall events were all significant at the 0.01 level. Intellectual involvement was found to be significant at the 0.05 level. The Pearson's r for leadership (.266) was found to be the most significant, with multicultural (.247) and wing/hall events (.235) being strong, as well. There was a negative correlation between total essay score and athletics (Pearson's r -.115); however, it was not significant. Table 3 illustrates these correlations.

Table 3

Correlations of Total Essay Score and Survey Scales

		Total Essay Score	SP	IN	ACE	M	AT	L	WH
Total Essay Score	P.'s <i>r</i>	1	.117	.167*	.231**	.247**	-.115	.266**	.235**
	Sig		.146	.038	.004	.002	.154	.001	.003
	N	155	155	155	155	155	155	155	155
SP	P.'s <i>r</i>	.117	1	-.001	.479**	.426**	-.035	.278**	.481**
	Sig	.146		.985	.000	.000	.667	.000	.000
	N	155	155	155	155	155	155	155	155
IN	P.'s <i>r</i>	.167*	-.001	1	.217**	.307**	-.335**	.261**	.085
	Sig	.038	.985		.007	.000	.000	.001	.295
	N	155	155	155	155	155	155	155	155
ACE	P.'s <i>r</i>	.231**	.479**	.217**	1	.551**	.035	.375**	.658**
	Sig	.004	.000	.007		.000	.667	.000	.000
	N	155	155	155	155	155	155	155	155
M	P.'s <i>r</i>	.247**	.426**	.307*	.551**	1	-.257**	.385**	.470**
	Sig	.002	.000	.000	.000		.001	.000	.000
	N	155	155	155	155	155	155	155	155
AT	P.'s <i>r</i>	-.115	-.035	-.335**	.035	-.257**	1	-.024	-.074
	Sig	.154	.667	.000	.667	.001		.768	.360
	N	155	155	155	155	155	155	155	155
L	P.'s <i>r</i>	.266**	.278**	.261**	.375**	.385**	-.024	1	.434**
	Sig	.001	.000	.001	.000	.000	.768		.001
	N	155	155	155	155	155	155	155	155
WH	P.'s <i>r</i>	.235**	.481**	.085	.658**	.470**	-.074	.434**	1
	Sig	.003	.000	.295	.000	.000	.360	.001	
	N	155	155	155	155	155	155	155	155

Note. *Correlation is significant at the .05 level (2-tailed).

**Correlation is significant at the .01 level (2-tailed).

Multiple Regression

A standard multiple regression was performed to determine how the predictor variables impacted the criterion variable (Mertler & Vannatta, 2002). It was found that the Leadership variable was the most significant, with a beta of .156, and the Multicultural variable was the second most significant, with a beta of .108. The model had an overall significance of .008. The Athletic variable was not included in the regression, because of the low reliability of the scale (See Table 1). See Table 5 for an illustration of the regression.

Table 5

Multiple Regression

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	139.118	9.136		15.227	.000
Spiritual	-.220	.466	-.045	-.472	.637
Intellectual	.393	.457	.073	.862	.390
All-Campus Events	.109	.221	.056	.495	.621
Multicultural	.507	.474	.108	1.069	.287
Leadership	.278	.161	.156	1.726	.086
Wing/Hall Events	.418	.487	.095	.858	.393

Summary

According to the data gathered and analyzed, there was a relationship between student involvement in co-curricular activities in the areas of leadership, multicultural,

wing/hall events, and all-campus events, and student abilities in core curriculum outcomes. The bivariate correlation showed these relationships to be significant. Furthermore, the multiple regression showed that leadership involvement had the highest impact on core curriculum outcomes abilities. In addition, the involvement scales were shown to be reliable.

Chapter 5

Discussion

Many theorists (Astin, 1999; Fried, 2007; Kuh, 1996; Pascarella & Terenzini, 2005) have postulated that the more students are involved in their college experience, the more they will learn. The American Association of Colleges and Universities based their conception of Liberal Education on this postulation; a Liberal Education is designed to educate the entire student, taking into account the student's involvement outside academics ("Association," n.d.). According to Astin (1999), "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 that program" (p. 519). Following Astin's (1999) statement, it makes sense that student involvement in co-curricular activities should have a positive relationship with their ability in the core curriculum; the more a student is involved, the higher the educational value. According to the present study, there was a positive relationship between student involvement and student abilities in academic outcomes. Based on the positive correlations found through the current research, the theorists' (Astin, 1999; Fried, 2007; Kuh, 1996; Pascarella & Terenzini, 2005) postulation was supported: As student involvement in the co-curriculum increases, student ability in academics also increases.

The results of the present research showed four areas of involvement that had strong positive correlations to student ability in core curriculum outcomes: leadership

involvement, multicultural involvement, all-campus event involvement, and wing/hall event involvement. According to Kuh (1995), the co-curriculum should contribute to student learning in many ways, “ranging from gains in critical thinking to relational and organizational skills, attributes that are highly correlated with satisfaction and success after college” (p. 150). The findings of the current research aligned with Kuh’s (1995) supposition of the relationship between the co-curriculum and academic outcomes; a strong positive correlational relationship was shown between the two. This relationship holds significance for the institution, as it quantitatively demonstrates that student involvement in the co-curriculum correlated to student ability in core outcomes. Kuh’s (1996) concept of the seamless learning environment, Astin’s (1999) theory of involvement, the AAC&U’s (2007) Liberal Education, all rely on the assumption that the co-curriculum and the core curriculum should be integrated. The present study was a step toward statistically proving that the integration should exist.

Reviewing the Findings

Four areas of involvement demonstrated a positive relationship to student outcomes abilities: multicultural, residence hall events, all-campus events, and leadership involvement. There was a positive correlation between multicultural involvement and the total essay score of .247. While not very strong, the correlation was sufficient to interpret. As the multicultural scale asked questions about student involvement ranging from attendance at multiculturally-oriented campus events to involvement in cross-cultural travel experiences, it followed that these types of events held academic value, as shown by the positive correlation. The essay asked students to present two sides of a controversial topic. Many multicultural experiences force students to engage with new

ideas and worldviews dramatically different from their own. Students need to engage these activities, because they enable them to practice in the world what they learn in the classroom. Long term, this practice would enable students to enter the world as more globally minded and civically engaged (“Association,” n.d.), which has a direct relationship to the core outcomes as described by the AAC&U.

In addition to the positive relationship to multicultural events, there was a positive relationship between involvement in residence hall activities (defined for the purpose of the survey as wing/hall events, based on the campus culture and understanding of residence hall activities) and core curriculum outcomes. The wing and hall involvement scale asked questions regarding student involvement within their residence halls. The positive relationship demonstrated that a student who was more involved in his or her residence hall also performed better academically. There was a positive relationship between students living on campus and academic performance. The strength of this relationship was likely due to students experiencing what they learn in the classroom in a more practical, life-experience based way. Not only did this relationship begin to highlight the value of students living on campus, it pointed out a significant area for practitioners to continue developing.

Students who were involved in all-campus events also performed better in core curriculum outcomes. This relationship was likely due to similar reasons as both multicultural and residence hall activities; the nature of the events is such that students engage with others and come face to face with the practical implications of the theoretical lessons they learn in class. These kinds of events allow students the opportunity to further their abilities in areas from knowledge of human cultures and the physical world to

personal and social responsibility (AAC&U, 2007). The value in these events is that students get personal, hands on experience; they are able to participate in a more integrated community, in which their academic knowledge comes face to face with practical knowledge.

Finally, there was a positive relationship between involvement in leadership and ability in core curriculum outcomes. Leadership positions give students many opportunities to engage their academic values in practical ways. Student leaders have to work with students from a variety of backgrounds and experiences, and they have to work together to come to solutions and strive to find ways to engage students in different areas. In addition, student leaders not only attend campus and hall events, but coordinate and run them, which requires them to consider the needs across campus and attempt to understand the best ways in which students can learn and fill those needs. For these reasons, and many others, it makes logical sense that students involved in leadership would have higher scores in academic outcomes; leadership involvement creates significant opportunities for students to work with academic outcomes in ways that enable them to integrate an understanding of them into their everyday lives.

While there was a positive relationship between areas of the co-curriculum and student essay scores, this relationship did not extend to all areas of the co-curriculum measured. Athletics, spiritual, and intellectual areas of involvement did not show a significant positive correlation to student ability in core curriculum outcomes. The lack of correlation in these areas could be for several reasons. With regard to athletics, the scale was found to have a mid-level of reliability, and was therefore excluded from the multiple regression (Mertler & Vannatta, 2002). Because it was a less reliable scale, the

results could be less reliable as well, which would lead to a lack of a correlation. Another alternative would be that students who were involved in athletics had less time to commit to academics, and therefore did not perform as well in core curriculum outcomes. As regards the spiritual scale, it was interesting to note that while there was no correlation between spiritual involvement and student essay score, there was inter-scale correlation between spiritual involvement and several other scales, including multicultural, leadership, all-campus events, and wing/hall events. These correlations showed a positive relationship between spiritual involvement and other types of involvement, which implied an indirect relationship of spiritual involvement to core curricular outcomes abilities. Finally, the intellectual scale did not show a significant positive relationship to the total essay score. This finding was surprising, as the intellectual scale would seem to be most closely aligned with student performance in core outcomes; a student highly involved in intellectual activities likely would perform well academically (Kuh, 1996).

Implications for Practice

While each involvement scale provided different implications for practice, overall these research findings served to support the argument laid out in the literature; student involvement in co-curricular activities had a positive correlation to student ability in core curriculum outcomes (Kuh, 1996). The correlation was significant for practice, because it showed that academic performance was not separated from a student's experience outside of the classroom. To this end, the entire student experience should be taken into consideration when evaluating a student's education. At a small, private, liberal arts institution, student involvement in the co-curriculum should be actively supported, as this involvement will likely have a positive relationship to student ability academically.

Specific implications for practice include creating more leadership positions on campus and opportunities for freshmen to engage in leadership. As student involvement in leadership had the highest correlation to academic outcomes, it follows that increased involvement in leadership should increase ability in academic outcomes. As there were currently fewer positions for freshmen, yet there was a strong correlation, these types of opportunities should be made available as early as possible; engaging freshmen in leadership should begin to develop their ability in these outcomes more strongly and earlier. Another suggestion for practice is to have faculty be more directly involved in developing and promoting all-campus events. If faculty can understand the value of student involvement across campus, they should encourage students to engage in events that promote their learning. Faculty can also partner with student activities in developing programs, as this partnership should make the relationship between the co-curriculum and the classroom even stronger.

The studied institution involved students in the residence hall activities very well. By having a residential campus, where the majority of students live on campus for all four years, the institution created multiple opportunities for students to engage in residence hall events. In the case of the institution studied, living on campus should continue to be promoted. Other campuses should encourage student engagement in residence hall events and activities reflective of communal living. For those institutions that have many students living off campus, students should be given opportunities to engage in residence hall type communities off campus, which could include living communally and holding events that are similar to those occurring in the residence halls.

Finally, institutions should continue to engage in discussions on the relationship between the co-curriculum and the core curriculum. While many institutions focus on the academic ways in which the core curriculum can be implemented, the co-curriculum provides many areas in which these outcomes can be further promoted, implemented, and integrated. For this reason, institutions should find ways to promote a positive relationship between academia and student development, as student development professionals are often the primary implementers of co-curricular activities. A positive relationship between these two often separated areas of campus would contribute to a more integrated campus, which would provide further alignment between the co-curriculum and the core curriculum. Faculty and staff should engage in intentional conversations to discuss the ways in which the co-curriculum and core curriculum can be more intentionally aligned and ways this alignment can be articulated across campus, to students, faculty, and staff.

Limitations

There are several limitations to the current study. First, while there were positive correlations between student involvement and student ability in core curriculum outcomes, the correlations were not very high, which could indicate the relationship was not as strong as expected. Furthermore, the research had not been performed previously. The involvement survey and essay rubric were two new instruments. While both had high face validity, and the survey proved to be statistically reliable, it would be beneficial to utilize these instruments further in order to attain more reliability and validity. With regard to the results, while the relationship between student involvement in leadership (or any other involvement) and core curriculum outcomes could result from selection bias

(i.e., a student involved in leadership may also have a tendency to higher academics), this bias was not necessarily the reason for the positive correlation. Students were selected randomly, and the study included approximately half of the senior seminar class.

Another limitation of the study was found in the multiple regression performed. While the model was found to be significant at the .008 level, there was no single independent variable that proved to be a significant predictor. Leadership involvement was significant enough to interpret, however, it was not much higher than other predictor variables. This lack was likely due to the multicollinearity of the independent variables; they were highly correlated and, therefore, essentially contained the same or similar information (Mertler & Vannatta, 2002). Because of the multicollinearity, the independent variables worked together to create significance in the model overall, although they were indistinguishable in a multiple regression. The independent variables measured different areas of involvement on campus, yet the areas of involvement were highly correlated. Overall the model was significant; involvement did, in some ways, predict outcomes abilities. However, the individual scales were so highly related that they did not show up as different in the multiple regression (Mertler & Vannatta, 2002). It was for this reason that it was difficult to determine anything about the data beyond simple correlation.

Further Study

As an initial study, the present research provided significant information for further exploration of the relationship between student involvement in co-curricular activities and student abilities in core curriculum outcomes. First, only two outcomes were measured, critical thinking and writing proficiency, while the institution studied had

many more academic outcomes. It would be beneficial to explore further research that measured more outcomes, particularly as not all co-curricular activities would be expected to have a direct relationship with writing proficiency or critical thinking. Another possibility for further research would include pursuing a longitudinal study, that looked at multiple courses and outcomes across a period of time, in order to determine if the results stayed consistent over time. In addition, it would be beneficial to perform the study at other liberal arts institutions to see if the results proved consistent across campuses. Another potential area for further study would be to isolate the variables in the co-curriculum and determine if there was a relationship between the individual areas of the co-curriculum and academic performance. In particular, it would be interesting to explore leadership involvement, measuring for student bias toward academic ability. Finally, it would be beneficial to repeat the research in order to explore the significance of the *r*-squared value. While it was not significant in the present research project, further research could show the *r*-squared value to be significant for research of this subject.

Conclusion

Student involvement in the co-curriculum is articulated in the literature as being valuable to student learning (Astin, 1999; Fried, 2007; Kuh, 1996). The current study sought to determine quantitatively if there was a relationship between student involvement in the co-curriculum and student ability in core curriculum outcomes. It was found that there was a positive relationship between the two independent and predictor variables. The positive relationship supported the literature and suggested that student involvement in co-curricular activities should be taken more seriously as an academically-valuable component of the institutional environment and student college

experience. In particular, leadership, multicultural, all-campus event, and wing/hall event involvement had a positive relationship with student ability in core curriculum outcomes. While further research should be done to prove these results consistent, it was valuable to discover that student involvement across campus was inter-related; the co-curriculum and the core curriculum cannot and should not be divorced.

References

- Association of American Colleges and Universities, National Leadership Council for Liberal Education & America's Promise. (2007). *College learning for the new global century*. Retrieved from <http://www.aacu.org/leap/index.cfm>
- American College Personnel Association. (1994). *Student learning imperative*. Retrieved from <http://www.acpa.nche.edu/sli/sli.htm>
- Anaya, G. (1996). College experiences and student learning: The influences of active learning, college environments and cocurricular activities. *Journal of College Student Development*, 37, 611-622.
- Astin, A. W. (1985). *Achieving educational excellence*. San Francisco, CA: Jossey-Bass.
- Astin, A. W. (1993). *What matters in college?: Four critical years revisited*. San Francisco, CA: Jossey-Bass.
- Astin, A. W. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, 40(5), 18-29. Retrieved from <http://www.jcsdonline.org/> (Original work published 1984).
- Boyer, E. L. (1987). *College: The undergraduate experience in America*. New York, NY: Harper & Row.
- Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. San Francisco, CA: Jossey-Bass.

- Boyer, E. L., & Levine, A. (1981). *A quest for common learning: The aims of general education*. Washington, DC: Carnegie Foundation for the Advancement of Teaching.
- Fried, J. (2007). Higher education's new playbook: Learning reconsidered. *About Campus* 12(1), 2-7.
- Keeling, R. P. (Ed.). (2004). *Learning reconsidered: A campus-wide focus on the student experience*. Washington, DC: American College Personnel Association & National Association of Student Personnel Administrators.
- Kinzie, J., & Kuh, G. D. (2007). Creating a student-centered culture. In G. L. Kramer (Ed.), *Fostering student success in the campus community* (pp. 17-43). San Francisco, CA: Jossey-Bass.
- Kuh, G. (1991). *Involving colleges: Successful approaches to fostering student learning development outside the classroom*. San Francisco, CA: Jossey-Bass.
- Kuh, G. D. (1995). The other curriculum: Out-of-class experiences associated with student learning and personal development. *Journal of Higher Education*, 66, 123-155. Retrieved from http://muse.jhu.edu/journals/journal_of_higher_education/
- Kuh, G. D. (1996). Guiding principles for creating seamless learning environments for undergraduates. *Journal of College Student Development*, 37, 135-148. Retrieved from <http://www.jcsdonline.org/>
- Kuh, G. D. (2008). Why integration and engagement are essential to effective educational practice in the twenty-first century. *Peer Review*, 10(4), 27-28.

- Nelson Laird, T. F., Niskode-Dossett, A. S., & Kuh, G. D. (2009). What general education courses contribute to essential learning outcomes. *JGE: The Journal of General Education*, 58(2), 65-84.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. (Vol. 2). San Francisco, CA: Jossey-Bass.
- Penn, J. D. (2011). Future directions for assessing complex general education student learning outcomes. *New Directions for Institutional Research*, (149), 109-117. doi:10.1002/ir.384
- Rhodes, T. (2010). Since we seem to agree, why are the outcomes so difficult to achieve? *New Directions for Teaching and Learning*, (121), 13-21.
- Schneider, C. G. (2003). *Practicing liberal education: Formative themes in the re-invention of liberal learning*. Retrieved from http://www.aacu.org/publications/practicing_liberal_education.cfm
- Schneider, C. G., & Schoenberg, R. (1998). Contemporary understandings of liberal education. *Liberal Education*, 84(2), 32-37.
- Schroeder, C. C., & Hurst, J. C. (1996). Designing learning environments that integrate curricular and co-curricular experiences. *Journal of College Student Development*, 37, 174-181. Retrieved from <http://www.jcsdonline.org/>

Appendix A
Student Involvement Inventory

Demographics

Name:

Age:

Gender:

Transfer Student:

Years at Taylor:

Spiritual [4-21]

How often do you attend spiritual renewal week events?

Occasionally attend some events (1)

Most days most semesters (2)

All or nearly all days all semesters (3)

Please indicate how often you attend the following.

Chapel

Small Group

Never attended (1) Rarely attended (2) Occasionally attended (3)

Frequently attended (4) I did not sign up for a small group (n/a)

Please indicate how often you attend the following.

Sunday Night Community (previously Vespers)

Church Services

Never (1) Once a month (2) Twice a month (3) Three times a month (4)

Four times a month (5)

Intellectual [6-25]

How often do you participate in the following.

Meeting with faculty outside of class

Attending non-course related speakers and/or lectures

Never (1) Rarely (2) Occasionally (3) Frequently (4)

Please indicate the frequency with which you attended the following activities.

Plays (student directed or main stage)

Classical music or choral performances

Never (1) Rarely (2) Occasionally (3) Frequently (4)

How often did you participate in the following?

Taylor Theater productions (as an actor or crew member)

No Productions (1) 1-2 Productions (2) 3-4 Productions (3)

More than 4 Productions (4)

How many years did you participate in the following?

Music ensemble (e.g. Orchestra, Chorale, Taylor Ringers, etc.)

I did not participate (1) 1 year (2) 2 years (3) 3 years (4) 4 or more
years (5)

All-Campus Events [14-42]

How often did you attend or participate in the following campus events?

Airband

Never (1) 1 time (2) 2 times (3) 3 times (4) 4 times (5)

Nostalgia Night

Never (1) 1 time (2) 2 times (3) 3 times (4) 4 times (5)

Reject Show

Never (1) 1 time (2) 2 times (3) 3 times (4) 4 times (5)

Welcome Weekend Hoe Down

Never (1) 1 time (2) 2 times (3) 3 times (4) 4 times (5)

My Generation Night

Never (1) 1 time (2) 2 times (3) 3 times (4) 4 times (5)

Sing Noel

Never (1) 1 time (2) 2 times (3) 3 times (4) 4 times (5)

Silent Night/Habecker's Halapaloosa

Never (1) 1 time (2) 2 times (3) 3 times (4) 4 times (5)

Cardboard Boat Regatta

Never (1) 1 time (2) 2 times (3) 3 times (4) 4 times (5)

Parent's Weekend

Never (1) 1 time (2) 2 times (3) 3 times (4) 4 times (5)

Taylathon

Never (1) 1 time (2) 2 times (3) 3 times (4) 4 times (5)

Youth Conference

Never (1) 1 time (2) 2 times (3) 3 times (4) 4 times (5)

Sex and the Cornfields

Never (1) 1 time (2) 2 times (3) 3 times (4) 4 times (5)

How often did you attend "Study Break"?

Never (1) 1-2 times (2) 3-5 times (3) 6 or more times (4)

How often did you attend other events not listed but open to anyone on campus?

Never (1) Rarely (2) Occasionally (3) Frequently (4)

Wing/Hall Events [5-15]

Please respond to the following question.

How many years did you live in campus housing?

I did not live in campus housing (1) One year (2) Two years (3)

Three years (4) Four or more years (5)

How often did you attend the following?

Wing/Floor Retreat

Never (1) Once (2) Twice (3) Three or more times (4)

I did not live on campus (n/a)

How often did you participate in the following?

Brother-Sister Wing Event

Never (1) Rarely (2) Occasionally (3) Frequently (4)

Pick-a dates

Never (1) Rarely (2) Occasionally (3) Frequently (4)

Open House (your wing or other wings)

Never (1) Rarely (2) Occasionally (3) Frequently (4)

Floor Educationals

Never (1) Rarely (2) Occasionally (3) Frequently (4)

Programmed Residence Hall Events not listed (e.g. guest speakers, cook outs, etc)

Never (1) Rarely (2) Occasionally (3) Frequently (4)

For other events, please list.

Multicultural Events [8 – 22]

How often did you attend the following?

Mosaic Night

Never (1) 1 time (2) 2 times (3) 3 times (4) 4 times (5)

How often did you attend events for the following?

World Religions Week

Never (1) Rarely (2) Occasionally (3) Frequently (4)

World Opportunities Week

Never (1) Rarely (2) Occasionally (3) Frequently (4)

Social Justice Week

Never (1) Rarely (2) Occasionally (3) Frequently (4)

How often did you participate in the following?

Lighthouse

Never (1) 1 time (2) 2 times (3) 3 or more times (4)

Spring Break Trips

Never (1) 1 time (2) 2 times (3) 3 or more times (4)

Semester Abroad

Never (1) 1 time (2) 2 times (3) 3 or more times (4)

International Academic Trip During J-Tern

Never (1) 1 time (2) 2 times (3) 3 or more times (4)

Athletics

How often did you participate in the following?

Intercollegiate Athletics

I did not participate (1) 1 year (2) 2 years (3) 3 years (4) 4 years (5)

How often did you participate in the following?

Intramural Athletics

Never (1) Rarely (2) Occasionally (3) Frequently (4)

How often did you attend the following?

Never (1) Rarely (2) Occasionally (3) Frequently (4)

Leadership [13-38]

How often did you participate in the following?

Leadership Networking Night (LNN)

Never (1) Once (2) Two or more times (3)

How often did you attend the following?

Pursuit (Previously Lit at Nit)

Never (1) Rarely (2) Occasionally (3) Frequently (4)

How often did you attend events for the following?

National Student Leadership Conference

Never (1) Rarely (2) Occasionally (3) Frequently (4)

For how many years did you hold the following positions?

Personnel Assistant

Never (1) 1 year (2) 2 years (3) 3 years (4) 4 years (5)

Discipleship Assistant

Never (1) 1 year (2) 2 years (3) 3 years (4) 4 years (5)

Discipleship Coordinator

Never (1) 1 year (2) 2 years (3) 3 years (4) 4 years (5)

Orientation Leader

Never (1) 1 year (2) 2 years (3) 3 years (4) 4 years (5)

Orientation Cabinet Leader

Never (1) 1 year (2) 2 years (3) 3 years (4) 4 years (5)

Taylor Student Outreach Position

Never (1) 1 year (2) 2 years (3) 3 years (4) 4 years (5)

Taylor World Outreach Position

Never (1) 1 year (2) 2 years (3) 3 years (4) 4 years (5)

CREW/Other Admissions Position

Never (1) 1 year (2) 2 years (3) 3 years (4) 4 years (5)

Student Ambassador

Never (1) 1 year (2) 2 years (3) 3 years (4) 4 years (5)

Chapel Coordinator

Never (1) 1 year (2) 2 years (3) 3 years (4) 4 years (5)

Other position and number of years

Appendix B

Position Analysis Paper Assignment

Each student will select a topic for which they can analyze multiple valid perspectives (e.g., What is the appropriate Christian position on capital punishment?). Students are encouraged to select a topic around which they have significant questions and would enjoy exploring in greater depth. This is not the time to write a paper about an issue with which you are already very familiar. You should currently feel some ambiguity regarding your topic and use this assignment as an opportunity to explore and reach a more informed conclusion.

Students should consult the list of suggested topics and submit their proposed topic for instructor approval by February 27th. After the topic has been approved, students should write a 5-7 page paper (plus a bibliography) that describes two opposing or conflicting perspectives related to their topic. These descriptions should fairly and accurately describe the positions and include an analysis of their strengths and weaknesses. Students are expected to explain and analyze the nuances of these arguments and should avoid broad generalizations or straw-man arguments when describing a particular position. Students should appropriately cite 4-5 credible sources to support each perspective. Credible sources include scholarly books/journals and major print media (e.g. New York Times, Washington Post, the Economist, etc.). Cable news, and their corresponding websites, are often rich sources of opinions, but lack the depth of analysis and academic credibility required for this assignment. Finally, the paper should include the student's personal perspective or opinion on the topic and an analysis of the student's potential biases related to the topic. Sources may be cited using the style most commonly used in your major (e.g. MLA, APA, Chicago, etc.). Whatever style you choose, please be

consistent.

Please refer to the evaluation rubric below for specific assignment expectations. This rubric will be used to evaluate your work.

Appendix C

Position Analysis Assignment Rubric

	Needs Improvement	Average	Above Average	Exemplary
Position #1 Analysis	Points Range: 0-34 The student's summary does not clearly explain the perspective.	Points Range: 35-39 The student's summary of this perspective is accurate but may be lacking in clarify and/or fairness.	Points Range 40-44 The student's summary of this perspective is explained clearly, accurately, and fairly. The argument's strengths and weaknesses are discussed.	Points Range 45-50 The student's summary of this perspective is explained clearly, accurately, and fairly. Strengths, weaknesses, and nuances of the argument are explained and demonstrate the student's ability to critically examine an argument.
Position #2 Analysis	Points Range: 0-34 The student's summary does not clearly explain the perspective.	Points Range: 35-39 The student's summary of this perspective is accurate but may be lacking in clarify and/or fairness.	Points Range 40-44 The student's summary of this perspective is explained clearly, accurately, and fairly. The argument's strengths and weaknesses are discussed.	Points Range 45-50 The student's summary of this perspective is explained clearly, accurately, and fairly. Strengths, weaknesses, and nuances of the argument are explained and demonstrate the student's ability to critically examine an argument.
Personal Perspective and Analysis of Personal Biases	Points Range 0-34 The student's perspective on the selected topic is unclear.	Points Range 35-39 The student's perspective on the selected topic is clear.	Points Range: 40-44 The student's perspective on the selected topic is clear, thoughtful, and fair to conflicting perspectives.	Points Range: 45-50 The student's perspective on the selected topic is clear, thoughtful, and fair to conflicting perspectives. The student provides an analysis of his/her potential biases and how they might affect his/her conclusions.

Quality of Cited Sources	Points Range: 0-16 Fewer than two pertinent sources were cited for each of the two positions. In all cases, the cited sources were not appropriate for citation in academic work. Sources are not cited appropriately or consistently.	Points Range: 17-19 Fewer than four pertinent sources were cited for each of the two positions. In most cases, the cited sources were not appropriate for citation in academic work. Sources are cited, but not with consistent style.	Points Range: 20-22 Four pertinent sources are cited for each of the two positions. In some cases, the cited sources were not appropriate for citation in academic work. Sources are cited appropriately and consistently.	Points Range: 23-25 Four or five credible and reliable sources are cited for each of the two positions. These sources may include scholarly books/journals or major and reputable print media (e.g. New York Times, Washington Post, Economist, etc.) Sources are cited appropriately and consistently.
Organization, Clarity, Spelling, Grammar, and Required Length	Points Range: 0-16 The paper is not well-organized and many sentences are unclear. The paper has many spelling and grammatical mistakes. The length requirement was not met.	Points Range: 17 – 19 The organization of the paper is not clear. Several sentences need to be clarified as well. The paper also has several spelling and grammatical mistakes. The length requirement was not met.	Points Range: 20 – 22 The paper is well-organized, but a few sentences are unclear. The paper also has a few spelling and grammatical mistakes. The paper is 5-7 pages in length.	Points Range: 23 – 25 The paper is well-organized and the style is appropriate for academic writing and clear. The paper is absent of spelling and grammatical mistakes. The paper is 5-7 pages in length.

