

Student Engagement and Character at
Council of Christian College and University (CCCU) Institutions

By

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Abstract

The focus of this research is in the area of student engagement and character at schools affiliated with the Coalition of Christian Colleges and Universities. As the researcher, I specifically used a data set purchased from the National Survey of Student Engagement. Such a study is important in order to test my hypothesis that the more engaged a student is, the higher his or her self-reported gains in character will be. Findings from this research indicate that seniors have higher self-reported gains in character development than freshmen and seniors rated their institutions higher than freshmen on all the benchmarks except Supportive Campus Environment. In addition, results show that all of the relationships between the student engagement benchmarks and character were significant and positive. More specifically, Supportive Campus Environment was the most strongly correlated with the dependent variable of character. Supportive Campus Environment was also the best predictor of character for freshmen and seniors combined, freshmen, and seniors. For seniors, Supportive Campus Environment, Active and Collaborative Learning and Enriching Educational Experiences were the best predictors of character. For freshmen, Academic Challenge and Student-Faculty Interaction were the best predictors of character. In addition, the same variables were not predictive for both groups. Student-Faculty Interaction was not predictive for seniors, but it was predictive for freshmen while Active and Collaborative Learning was not predictive for freshmen, but it was predictive for seniors.

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Chapter 1

The purpose of this study is to examine the relationship between character and college student engagement among freshmen and seniors attending Christian colleges. Each of the components of this study will be introduced briefly and explained.

The development of a person's character has long been an important postsecondary outcome (Dalton, 1985; Ehrlich, 2000; Good & Cartwright, 1998; Reuben, 1996; Riley, 2005; Stokes & Regnerus, 2009). While there are many ways of defining and measuring character, this study focuses on previous work by Kuh and Umbach to help outline the construct (2004). Kuh and Umbach define character as "a window into the personality, a constellation of attitudes, values, ethical considerations, and behavioral patterns that represent what people believe and value, how they think, and what they do" (p. 37). Additionally, when people have character it means they strive to live a life of integrity and personal responsibility (Kuh and Umbach).

The construct used in this study differs slightly from that used by Kuh and Umbach (2004) because certain items did not seem to fit with their definition of character and what I hoped to measure. For the purpose of this study, character is operationalized as eight dimensions. The eight dimensions are modified from the self-reported gains section of the National Survey of Student Engagement (NSSE) and serve as the outcome measure of this study. The NSSE is secular in nature which might not seem ideal in a study on Christian colleges, but it is by far the best measure of character found for this type of study. In order to see how well the eight dimensions of character hung together, an exploratory factor analysis and Cronbach's alpha reliability were run. Results of both the exploratory factor analysis and the Cronbach's alpha reliability were such that

character will be one construct rather than eight. A more detailed discussion of the process and decision will take place in chapter 3.

The dimensions of character used in this study are:

1. Knowledge of self:
 1. Understanding self (gnself)
 2. Understanding people of other racial and ethnic backgrounds (gndivers)
 3. Working effectively with others (gnothers)
2. Ethical development and problem solving:
 1. Developing a personal code of ethics (gnethics)
 2. Solving complex real-world problems (gnprobsv)
3. Civic responsibility:
 1. Contributing to the welfare of one's community (gncommun)
4. Processing information:
 1. Learning effectively on one's own (gningq)
 2. Thinking critically and analytically (gnanaly)

The details of these variables and their justification for use are discussed in more depth later.

Some institutions believe fervently in the importance of character. So much so that they make it central to their mission (Good & Cartwright, 1998; Kuh, 2000; Mayhew and King, 2008; McClellan, 1999) and curriculum (Mayhew & King; Pascarella & Terenzini, 2005). Mayhew and King (2008), cite preparation for citizenship, character, moral leadership, and service to society as themes in some college mission statements. As a tangible example, one of the institutions used in this study claims to have a curriculum that “fosters spiritual maturity, strength of character, and moral virtue as the foundation for successful living” and even teaches a mandatory freshmen seminar that focuses on developing character and personal morals (Houston Baptist University Catalog, 2010, p. 17).

While many colleges and universities might care about character, this study focuses on how a subset of Christian Colleges, as defined by being a member of the Council for Christian Colleges and Universities (CCCCU), facilitates the character development of their students. The CCCCU consists of 110 Christ-centered higher education institutions. CCCCU institutions were chosen for this study because, according to Kuh and Umbach (2004), many Christian liberal arts colleges have strong ties to their founding denominations and claim to have an environment where character-related ideas are emphasized in the curriculum and out-of class practices. In addition, character is important to CCCCU member institutions. In 2006, Paul R. Corts, who currently serves as President of the CCCCU, interviewed Presidents of CCCCU member schools and the CCCCU Board of Directors. Each person he interviewed agreed that character, moral leadership, and providing a moral compass were overriding aspirations of CCCCU member institutions.

Recognizing the importance of character as a major outcome of CCCCU member institutions, this study seeks to examine the relationship between character and student engagement. Student engagement is “the time and energy students devote to educationally sound activities inside and outside of the classroom, and the policies and practices that institutions use to induce students to take part in these activities” (Kuh, 2003 p. 25). Student engagement is measured using the National Survey of Student Engagement (NSSE). The NSSE is a survey used to measure the extent to which college students are engaged in educationally purposeful activities (Kuh, 2001).

The NSSE consists of 28 questions clustered together in five benchmarks: Level of Academic Challenge, Active and Collaborative Learning, Student Interactions with

Faculty Members, Enriching Educational Experiences, and Supportive Campus Environment (Kuh, 2001). Engagement (through the five benchmarks) serves as the key independent variable in this study. All the benchmarks are included as independent variables, and will be discussed later in this study, because they are not mutually exclusive, but instead are “complementary and interdependent” (Kuh et. al., 2005). Studying one or two without studying the others could negatively impact the findings of this study (Kuh).

In order to check the reliability of the benchmarks, an alpha reliability was run on student engagement as a whole, the individual benchmarks, and the individual benchmarks for both freshmen and seniors. Reliability on the benchmarks and student engagement was not ideal, but I decided to leave the benchmarks as they were since Kuh (2001) said that studying one or two without the others could negatively impact the findings of a study. A more detailed discussion of this process and decision will take place in chapter 3.

The glue that holds this study together is Chickering and Reisser’s (1993) theory of Identity Development. Their theory includes seven vectors that make up a person’s identity during their college years. All college students move through the vectors at different rates and often revisit vectors they previously worked through (Chickering and Reisser). The vectors are developing competence, managing emotions, moving through autonomy toward interdependence, developing mature interpersonal relationships, establishing identity, developing purpose, and developing integrity (Chickering and Reisser). The vector that most closely fits with this study is the concept of developing integrity, which the authors define as a more “humanized value system in which the

interests of others are balanced with one's own interests" (as cited in Evans, Forney, and Guido-DiBrito, 1998, p. 40).

Chickering and Reisser's (1993) theory is critical to this study because it helps explain how college students grow and develop in college via the mechanisms of challenge and support and the role the college environment plays in influencing student growth through challenge and support. The engagement benchmarks are intricately linked with the concepts of challenge and support. In addition, Chickering's theory supports the idea that there might be a difference between freshmen and seniors in terms of their level of character as a result of having engaged in the campus environment for longer periods of time.

Using data from the National Survey of Student Engagement (NSSE), this study examined the relationship between student engagement and character of students at Christian colleges (specifically those who were members of the CCCU). According to Kuh (2005), "student engagement data often point to aspects of student and institutional performance that a college or university can address almost immediately to improve the quality of the student experience" (p. 12). In the end, this study accomplished what Kuh referred to above and provided interesting information to faculty and staff working at Christian institutions and specifically the CCCU.

The hypothesis of this study is that the more engaged a student is, the higher his or her self-reported gains in character will be. 'Gains' would be the self-reported increase in character a student reports after attending a college or university. Determining the extent to which this is true at CCCU institutions is important. It is important because a positive relationship between student engagement and character

would reinforce the importance of student engagement to a student's success in college and make the argument that student engagement is not only important for success in college, but is also important to the future of college graduates.

According to Kuh and Umbach (2004), it is important to the future of college graduates because people with high levels of character are more likely to “work toward the public good, with integrity and personal responsibility that reflect their examined understanding of their ethical responsibility to self and the larger community” (p. 37). In addition, this study is important because it added to the broader research on Christian institutions and on character in college students.

Background of the Study

In order to organize the literature and provide a framework under which this study can be better understood, the next section is divided into four different sections: character, identity development theory, student engagement, and Christian college. The four sections are essential because each one is an important element of this study and provides background information for better understanding all the variables.

Character

As stated earlier, Kuh and Umbach (2004) defined character as a set of behavioral patterns that represent what people believe and what they do. The most important research pertaining to the aforementioned definition is the research done by Kuh and Umbach. The authors used descriptive statistics to create a profile of dimensions for character. The dimensions were formed based on responses to items from the self-reported gains section of the NSSE (Kuh & Umbach).

The dimensions of character chosen for this study are similar to Kuh and Umbach's with some slight variations. As an example, instead of referring to general knowledge as one of the headings, I renamed it processing information because it seemed to better describe the individual items listed below it. In addition, under general knowledge (now renamed processing information), Kuh and Umbach referred to concepts like writing and speaking clearly and effectively which seem to have little to do with their, and consequently my, definition of character. Consequently those items were removed from the dimensions. A more detailed explanation of the differences between Kuh and Umbach's dimensions and the items chosen for this study will be discussed in the literature review.

Kuh and Umbach (2004) found that students at religious colleges rated themselves as having experienced greater gains in character development than students at non-religious colleges. In addition, they reported that educationally purposeful activities enhanced students' self-reported gains in character across all the institutions in their study and students who had discussions with people of opposing political and social views, who were involved in community service, and had exposure to diversity were likely to report higher levels of character. As one might imagine, discussions with people of opposing political and social views and being exposed to diversity might not happen at a CCCU member institution as easily as other colleges because the student population at CCCU member schools tends to be somewhat homogenous. This does not mean that character cannot exist on campuses that do not provide the aforementioned types of experiences; it is however a challenge worth noting in this study.

Even though this study is an extension of Kuh and Umbach's (2004) work, it is significantly different in several ways. The most obvious difference is in the selection of institutions. Kuh and Umbach included doctoral, masters, baccalaureate, and religiously-affiliated colleges in their sample. This study is focused on institutions affiliated with the CCCU because they have traditionally prided themselves for being focused on the character development of their students (Frame, 2007).

Another difference between the Kuh and Umbach (2004) study and my study is the sample selection. Kuh and Umbach only looked at senior students in their study. In my study I looked at first year and senior students. This is important because character develops and evolves over time. According to Chickering and Reisser's (1993) theory of identity development, which consists of seven stages or tasks, college students develop throughout their college years. Whereas Chickering and Reisser were not specifically describing character in their theory, many parallels can be made between their stages or tasks and how a college student develops into a person of character. Significant differences in self-reported gains of character for first year versus senior students may indicate that the CCCU and their members are positively impacting the character of their students. A more detailed description of Chickering and Reisser's theory of identity development will take place later in this study.

Furthermore, the definition of "religiously-affiliated colleges" was very broad in Kuh and Umbach's (2004) study (it included Catholic institutions as well as schools loosely linked to their religious roots) whereas my study only included members of the CCCU. Using other schools could have altered the results of this study since not all religiously affiliated schools, or even Christian schools, are the same. By specifically

choosing an organization with member institutions that have a similar purpose, I hope to learn more about the relationship between college student engagement and character and how CCCU member schools accentuated the character of their students.

Character is important to this study because it is an outcome of great interest and importance to the CCCU and its member institutions. According to Frame (2007), part of the CCCU's mission is to increase the character of their students. As an example, Anderson University (a member of the CCCU since 1982) professes in its mission statement to “graduate people with a global perspective who are competent, caring, creative, generous individuals of character and potential” (Anderson University Catalog, 2010-2012). In the opinion of Christian colleges, character development is one of many unique contributions they make to higher education (Frame).

Identity Development Theory

Identity Development Theory served as the conceptual framework for this study and is essential because it helped better articulate the importance of character and how the concept is woven through the seven vectors (Chickering and Reisser, 1993). More specifically, it helps one fully understand character because it outlines ways in which college students' character develops and evolves in college. Equally important to this study, and in understanding Identity Development theory, is the role of the college environment in influencing the development of college students. According to Chickering and Reisser, educational environments have a lot of influence when it comes to students and the seven vectors. Some examples include institutional objectives and size, interaction of faculty and students, curriculum, and support from student affairs programs and services (Chickering and Reisser). In short, it is the aforementioned

concepts, or more specifically challenge and support, which assist students in moving through the seven vectors.

Chickering and Reisser's theory takes into account "emotional, interpersonal, ethical, and intellectual aspect of development" (as cited in Evans, Forney, Guido-DiBrito, 1998, p. 38). It consists of seven vectors that are not sequential, but each vector does build upon the other and they become increasingly more complex. According to Evans, Forney, and Guido-DiBrito, the vectors can be defined as series of stages or tasks. Chickering and Reisser (1993) describe the vectors as "major highways for journeying toward individuation" (p. 35).

The first vector is developing competence (Chickering and Reisser, 1993). Developing competence consists of three parts: intellectual competence, physical competence, and interpersonal competence. Intellectual competence is the acquisition of information and improvement of critical thinking and reasoning skills (Evans, Forney & Guido-DiBrito, 1998). Physical competence is improvement in athletics, wellness, and other manual activities (Chickering and Reisser). Interpersonal competence involves communication, leadership, and working well with others (Chickering and Reisser).

The second vector is managing emotions (Chickering and Reisser, 1993). This vector involves accepting and learning to properly express and control your emotions (Evans, Forney & Guido-DiBrito, 1998). According to Evans, Forney, and Guido-DiBrito, Chickering's original theory envisioned in 1969 focused on aggression and sexual desire while his later work included emotions like "anxiety, depression, anger, shame, and guilt, as well as more positive emotions such as caring, optimism, and inspiration" (p. 38).

The third vector is moving through autonomy toward interdependence (Chickering and Reisser, 1993). This vector represents emotional independence or the “freedom from continual and pressing needs for reassurance, affection, or approval from others” (Chickering & Reisser, p. 117).

The fourth vector is developing mature interpersonal relationships (Chickering & Reisser, 1993). This includes being able to appreciate others for their differences and having the capacity to build long and healthy relationships with others (Evans, Forney & Guido-DiBrito, 1998).

The fifth vector is establishing identity (Chickering & Reisser, 1993). According to Evans, Forney, and Guido-DiBrito (1998), identity includes “comfort with body and appearance, comfort with gender and sexual orientation, a sense of one’s social and cultural heritage, a clear self-concept and comfort with one’s roles and lifestyle” (p. 40). In addition, it means having self-esteem and personal stability (Chickering & Reisser).

The sixth vector is developing purpose (Chickering & Reisser, 1993), which means a student must develop a purpose for why he or she is attending college, his or her career goals, and his or her personal aspirations (Evans, Forney & Guido-DiBrito, 1998).

The seventh and final vector is developing integrity (Chickering & Reisser, 1993). This vector consists of three parts: humanizing values, personalizing values, and developing congruence (Chickering & Reisser). Students in this vector move from a very rigid way of thinking to accepting and appreciating others’ beliefs (Chickering & Reisser). This vector obviously is important because it is most closely related to this study and the concept of character. A person of great character would most likely be the kind of person who was accepting and appreciating of others’ beliefs.

As stated earlier, this theory can be seen as the glue that holds this study together because it provides an explanation for how students develop in the college years and specifically helps to explain why there might be a difference in character between the freshman and senior years in college. Chickering and Reisser (1993) were not specifically describing character in their theory, but many of the personality characteristics they used are closely aligned with the aforementioned definition of character used in this study. More specifically, an argument could be made that their theory provides an explanation for better understanding how someone becomes a person of character in the context of the college environment. Chickering and Reisser's theory also places a heavy emphasis on the role of the college environment in influencing student growth through the presence or absence of challenge and support.

Student Engagement

According to applicable literature (Astin, 1993; Kuh, 2001; Kuh, 2003; Kuh et al., 2005; Pace, 1984; Pascarella & Terenzini, 1991, 2005), student engagement is the amount of energy and time students put toward their educational and extracurricular activities in college. Student engagement also includes the degree to which colleges and universities provide learning opportunities and services to their students. According to Wolf-Wendel, Ward, and Kinzie (2000), student engagement is what the student does and the institution does to help the student succeed.

One could call these activities, both for students and colleges, effective educational practices. According to Huh and Kuh (2002), a student highly involved in effective educational practices will be highly engaged in their collegiate experience. A student who is not involved in effective educational practices will be (dis)engaged in

their collegiate experience. The concept of being engaged is important because student engagement is related to several positive outcomes such as student satisfaction, good grades, educational gains, persistence, and graduation (Astin, 1993; Kuh et al., 2005; Pascarella & Terenzini, 1991, 2005). Specifically, Kuh et al. (2007) found engagement in effective educational practices positively related to academic outcomes such as freshman and senior grades and persistence in the second year of college.

According to Kuh (2007), effective educational practices are marked by six conditions. They are:

1. Devoting large amounts of time and effort to tasks that help students be successful.
2. Interacting with faculty and peers on projects that extend over long periods of time.
3. Experience diversity by being in contact with people different from themselves.
4. Frequent feedback from faculty and staff about one's performance.
5. Opportunity for students to see how they are learning works in different settings.
6. Participation in activities that are considered part of an academically challenging curriculum.

As stated earlier, the five student engagement benchmarks are Level of Academic Challenge, Active and Collaborative Learning, Student Interactions with Faculty Members, Enriching Educational Experiences, and Supportive Campus Environment (Kuh, 2001). All five student engagement benchmarks were chosen for this study

because according to Kuh et al., the benchmarks are not mutually exclusive, but instead are “complementary and interdependent” (Kuh et al., 2005).

From a practical standpoint, all five benchmarks were included because they could potentially lead to higher levels of character in students. They also were included because they all are needed to help students live a life of integrity (Kuh, 2010). As an example, Level of Academic Challenge was included because according to Kuh those general education skills are required to lead a reflective and civic-minded life which is an essential dimension of character. In addition, Active and Collaborative Learning was included because it includes participation in a community-based project, and Student-Faculty Interaction is included because it includes working well with others. Enriching Educational Experiences was included because it involves learning about and accepting differences in people, and Supportive Campus Environment was included because it not only includes support from faculty, but also support from one’s peers.

In addition, I thought it was important to examine the relationship between Academic Challenge and character because sometimes academics are seen as subpar at Christian colleges. According to Schuman (2010), this is usually because such colleges “accept certain doctrines and understandings on the basis of faith, not evidence” (p. 15). Therefore, I contend that it is important to include Academic Challenge to investigate the role of high quality academics in the context of Christian colleges and universities to either reinforce its existence or demonstrate that it is lacking.

Student engagement, and specifically the five benchmarks, are important to this study because they provide a framework for what students need, and colleges must offer, in order to have truly successful college students. In addition, the theory outlines

activities students can engage in that will likely lead to success. However, there are researchers and higher education professionals who believe the data are not reliable enough. Hence the reason NSSE has been working on new items in hopes of getting better reliability (personal e-mail communication with Amber Lambert, 2011). In addition, NSSE has been working on a new version of the survey for the last three years and has even pilot-tested it for the last two.

This idea of the NSSE not being reliable enough is such big news in the higher education community that the entire fall 2011 *Review of Higher Education* was dedicated to student engagement and the problems some see with the NSSE survey instrument. Both Porter (2009) and Olivas (2011) have questioned the validity and reliability of the NSSE. More specifically, they have cited vaguely worded questions, the concept of self-reporting and its reliability, and the reliability of the five benchmarks. All of these concerns are discussed and addressed in chapter 2 and 3 of this dissertation.

Christian College

One of the CCCU's goals is to facilitate the moral development of its students (Stokes & Regnerus, 2009). This can easily be related to the development of character and specifically the definition used in this study. As an example, one item outlined in the definition used for this study refers to "developing a personal code of ethics." Conversely, student engagement is important to Christian colleges because it has been linked to positive outcomes like persistence in the second year of college (Kuh, Cruce, Shoup, Kinzie & Gonyea, 2008). It is for this reason that a study is needed that explores the relationship between engagement and character of students at Christian colleges.

Over 900 religiously-affiliated degree-granting institutions of higher education exist in the United States (United States Department of Education, 2010). However, according to Schuman (2010), there is a big difference between being religiously-affiliated and actually being Christian and more specifically being one of the 110 members of the CCCU. Founded in 1976, the CCCU's mission is to advance the cause of Christian higher education and to help institutions transform student lives by faithfully relating scholarship and service to the Bible (Council for Christian Colleges and Universities, 2010).

In order to be eligible for membership, all CCCU member schools must be regionally accredited and offer a comprehensive undergraduate curriculum (Council for Christian Colleges and Universities, 2010). According to Stark and Latucca (1997), this usually manifests itself in a classical core curriculum because CCCU institutions believe the classics improve students' ability to think and to appreciate knowledge all while transferring the skills they learn to other areas of their lives. They must demonstrate institutional integrity, high ethical standards, prove they are financially stable, and only employ Christians for full-time faculty and administrative positions (Council for Christian Colleges and Universities).

The CCCU encompasses 29 denominations and 325,000 students in its 110 institutions (Council for Christian Colleges and Universities, 2010). As an organization, the CCCU acts as a resource for its member institutions, puts on conferences, and is involved in representing member schools when it comes to important legislation (Patterson, 2001). In addition, they offer experiential learning opportunities that send

students from CCCU schools all over the world (Council for Christian Colleges and Universities).

CCCU institutions are important to this study because, based on the recommendation of Wu (2007), it is important to do research on CCCU institutions because of their unique influence in the higher education community; as stated earlier, the present study is limited to only CCCU institutions.

Purpose of the Study

The purpose of this research study is to examine the relationship between student engagement and character at a subset of Christian colleges – those that are members of CCCU. Data were collected from NSSE for all the four-year CCCU institutions with enrollments under 1,500 (Catholic institutions and Christian colleges not affiliated with CCCU were not included because they have their own extensive research that is beyond the scope of this study). More specifically, I used the NSSE data to explore the relationship between the five student engagement benchmarks and character of students at CCCU institutions. The question posed to each student on the NSSE that was meant to measure character was, “To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?”, which is question #11 on the NSSE survey (Kuh and Umbach, 2004, p. 41). Responses were scored on a four-point scale measuring the progress or gains for each student. The range was from “very little” to “very much.”

To accomplish the stated purpose of this study and to test the hypothesis of a positive relationship between engagement and character, the following are the research questions:

- 1) Are there differences in self-reported gains in character development for freshmen versus seniors?
- 2) What specific dimensions of character and the benchmarks distinguish students who attend CCCU schools?
- 3) Are there significant differences in benchmarks and character development for freshmen and seniors?
- 4) What factors, with particular attention to the benchmark indicators, predict students' self-reported gains in character development at CCCU institutions?

In this study, I controlled for gender, ethnicity, grades and age. According to prior research that will be outlined later in chapter 2, grades, year in school, and age might influence the relationship between character and student engagement (Baxter & Magolda, 1992; Bebeau & Thoma, 2003; Finger, Borduin, & Baumstark, 1992; Lindsay et. al, 2007; Rest, 1979; Rest & Thoma, 1985; Rykiel, 1995; Whiteley & Associates, 1982; Whiteley, Bertin, & Berry, 1980; Wilson, Rest, Boldizar, & Deemer, 1992). Gender and ethnicity are controlled for in this study because they are not variables that can be controlled by the student.

My hypothesis for this study was that seniors would have a greater gain in character than freshmen. In addition, I believed that there would be a positive relationship between student engagement (all five of the benchmarks) and character.

However, some benchmarks might be more important to character development of freshmen as compared to that of seniors. My hypothesis was based on literature by Kuh and Umbach (2004) who found a relationship between character development and student engagement in their study across institutional types. It was also based on my conceptual framework by Chickering and Reisser (1993) because they provide a rationale for believing that seniors will report greater gains in character than first year students because they have been in school for a greater number of years..

Importance of the Study

As stated above, most colleges, especially Christian ones, identify the development of character as an important educational outcome (Dalton, 1985; Ehrlich, 2000; Good & Cartwright, 1988; Reuben, 1996; Stokes & Regnerus, 2009). However, some conservative social commentators criticize character in American society and declare America is in a period of social decay (Bennett, 1998; Hunter, 2000; Putnam, 2003). The critics point to increases in lying and cheating (Begley, 2000), classroom disruption, drug abuse, and gambling (Levine & Cureton, 1998) as evidence for their arguments. According to Kantrowitz and Naughton (2001) and Sax (2003), political involvement among college students has also decreased. The concept of American society and social decay is linked to this study because character is the kind of outcome that could positively impact some of the aforementioned things occurring in our country right now.

Generally speaking, the research asserts that high levels of character are associated with positive outcomes. As an example, according to Duckworth and Seligman (2006), high levels of character have been associated with improved academic

performance. More specifically, they found students who identified with the character trait of self-discipline experienced improved academic performance. However, the problem with Duckworth and Seligman (2006) and other research claiming to measure character, is that the definition and methodology used for each study is different. This makes it difficult to discern the literature and assert how character is defined and measured in each study.

Evidence is conflicting on how effective Christian colleges are at developing character (Buier et al., 1989; Good & Cartwright, 1998; King & Mayhew, 2005; McNeel, 1991). By studying the relationship between student engagement and character at CCCU institutions, valuable information was gained to help Christian colleges with the above behavior issues and the overall character of their students. In addition, the findings will address a gap in the research literature and yield recommendations to CCCU institutions on how, through student engagement, to develop the character of their students.

Why should we care about fostering character at Christian colleges and universities? I would contend we should care for two reasons. First, we do not really know if colleges and universities that are part of the CCCU are good at cultivating character even though they argue they are. Some research shows strength in this area (Bergen, Longman, & Schreiner, 2010) while other research does not (Schuman, 2010). Some members of the CCCU proclaim on their websites, and in their college catalogues, the importance of character and how they as an institution cultivate it. Other members do not mention it anywhere (not on their websites or in their catalogues). It would be valuable if this research showed that CCCU institutions are good at cultivating character because it would confirm they do what they say they do. It would also be valuable

because it could identify best practices that could be used at all CCCU institutions. Second, it is possible that college administrators, regardless of where they work, could learn something about student engagement and character from this study and go back and improve their campuses. For the above reasons, it is important to do this study.

Conclusion

The purpose of this chapter was to lay a proper foundation for understanding the particulars of this study. This may seem like a minimal task, but it is not easy when so many variables exist and so much needs to be explained. However, now that a proper foundation has been laid, it is time to delve more deeply into each variable and define more clearly all aspects of the study. Chapter two will accomplish this task.

Chapter 2: Review of the Literature

The focus of this study is to see if there is a relationship between student engagement and character at Coalition of Christian Colleges and Universities (CCCU) institutions. Character will be explored first. More specifically, both character and moral development will be outlined. Whereas character and moral development are not the same concept, a discussion of both is needed since the theory of moral development is so foundational to the study of character. Methodologies and influences on character and moral development will also be analyzed. Third, student engagement theory and its contributing theories, including a detailed explanation of the NSSE and the NSSE benchmarks, will be covered.

A discussion of Christian higher education is also warranted in order to understand the setting for this study. This will include the history and unique campus environment of Christian higher education, concluding with an overview of the Coalition of Christian Colleges and Universities including its origin, purpose, and current challenges. Finally, a summary will be included that assesses the overall literature in each of the aforementioned areas, highlights holes in the literature, and addresses how the literature informs what is being done for this study.

Character

Promoting the character of students has been a goal of colleges and universities since they were first founded (Lucas, 1994; Morrill, 1980; Reuben, 1996). This is especially true of religiously-affiliated colleges of the early 1800s that made it their mission to graduate students who were “wiser and more sensitive to their moral and ethical responsibilities” (Pascarella & Terenzini, 2005, p. 245). However, this interest in

the development of character has persisted in the 21st century as colleges and universities have continued to include moral and spiritual development in their mission statements (McClellan, 1999).

In an effort to better understand character in this study, this section will highlight several areas in the research. It will begin with the chosen definition of character for this study and continue with a discussion of the vast number of terms used to describe character. Next, there will be a discussion of character and how it relates to moral development. Whereas the terms character and moral development are not interchangeable, a discussion of the aforementioned items will include similarities and differences in the two concepts and the rationale for including moral development in this literature review. The section will end with an overview of the measurements used in character and moral development research and the influences on both at colleges and universities.

Defining Character

The definition of character used for this study is “a window into the personality, a constellation of attitudes, values, ethical considerations, and behavioral patterns that represent what people believe and value, how they think, and what they do” (Kuh & Umbach, 2004, p. 37). Additionally, when someone has character it means they strive to live a life of integrity and personal responsibility (Kuh & Umbach). This definition was chosen because this study is an extension of their previous work on character.

In Kuh and Umbach’s original research the below dimensions were chosen to represent character. They used descriptive statistics to create a profile of the dimensions. The items were chosen because, according to Kuh (2010), they were the best proxies for

character. Additionally, general knowledge, which is heading number four below, was included because “without general education skills and competencies it might be challenging for someone to live a reflective and civic-minded life (an essential dimension of character)” (personal e-mail communication with George Kuh, 2010). The original items were:

1. Knowledge of self:
 1. Understanding self
 2. Understanding people of other racial and ethnic backgrounds
 3. Working effectively with others
2. Ethical development and problem solving:
 1. Developing a personal code of ethics
 2. Solving complex real-world problems
3. Civic responsibility:
 1. Voting in local, state, and national elections
 2. Contributing to the welfare of one’s community
4. General knowledge :
 1. Acquiring a broad, general education
 2. Learning effectively on one’s own
 3. Writing clearly and effectively
 4. Speaking clearly and effectively
 5. Thinking critically and analytically

Kuh’s original dimensions have been altered for this study because I do not feel that all the dimensions correspond with what I have learned about character. As an example, I do not feel that behaviors like voting in elections, acquiring a broad general education, writing clearly and effectively, and speaking clearly and effectively are qualities a person of character would have to possess. In my opinion, the above items seem like items that would measure responsibility or how broadly educated a person is (not necessarily a measure of character).

For purposes of this study, the items are:

1. Knowledge of self:
 1. Understanding self (gnself)
 2. Understanding people of other racial and ethnic backgrounds (gndivers)
 3. Working effectively with others (gnothers)
2. Ethical development and problem solving:
 1. Developing a personal code of ethics (gnetics)
 2. Solving complex real-world problems (gnprobsv)
3. Civic responsibility:
 1. Contributing to the welfare of one's community (gncommun)
4. Processing information:
 1. Learning effectively on one's own (gningq)
 2. Thinking critically and analytically (gnanaly)

Other research besides Kuh and Umbach refers to morality, responsibility, values, integrity, moral reason, and moral education, among other things when referring to character (Swaner, 2004). From a Christian perspective, character includes “reasoning, one’s attitudes, volition, commitment, lifestyle, and personal relationship with God” (Dirks, 1988, p. 324).

A more scholarly definition comes from Davidson, Lickona, and Khmelkov (2008) who define performance character as:

...diligence, perseverance, a strong work ethic, a positive attitude, ingenuity, and self-discipline—needed to realize one’s potential for excellence in any performance environment, such as academics, extracurricular activities, the workplace, and throughout life (p. 373).

On the other hand, character consists of:

...integrity, justice, caring, respect, and cooperation--needed for successful interpersonal relationships and ethical conduct. Character

enables us to treat others—and ourselves—with respect and care and to act with integrity in our ethical lives (p. 374).

My definition of character is consistent with what Kuh and Umbach (2004) created for their study. The several items that did not seem to fit were removed because they did not seem to make sense. My definition of character fits even better with the aforementioned definitions by Swaner (2004) and Davidson, Lickona, and Khmelkov (2008). Unfortunately, they do not have a construct that would allow me to measure character. My definition of character does not seem to fit with Dirks (1988) only because he referred to a personal relationship with God which is not mentioned in the general literature on character (only the literature on Christian college campuses). Dirks' definition does seem to support this study since the sample will only include Christian colleges, but it is not a variable that is available through NSSE.

In addition, my definition of character and its dimensions are also closely related to Kohlberg's theory of moral development because Kohlberg acknowledges that concepts like moral development develop on a continuum or series of stages similar to the development of character. More specifically, the dimensions of character chosen for this study are very similar to Kohlberg's higher levels or stages of moral development.

Character as Moral Development

It might seem a stretch to say that character is moral development. As a researcher, I can acknowledge that. However, traditionally the study of character in college students "has been focused on the cognitive aspect of moral character using Lawrence Kohlberg's theory of moral reasoning" (Chen, 2005, p. 3). The research on character education is based on researchers' experiences and opinions rather than a

scientific theory like moral development (Pascarella, 1997). Next, there is not one agreed upon definition or method of measurement for character like there is for moral development, which means the research is somewhat disjointed. In fact, the definition and method of measurement used for this study has only been used one other time in the original work done by Kuh and Umbach (2004).

Kohlberg's theory, on the other hand, has been used for over fifty years and has been validated in thousands of studies. In my opinion, that makes it important to provide a description of Kohlberg's theory and provide supplemental information on the similarities of the two constructs.

In 1958 Kohlberg provided nine moral dilemmas to 84 adolescent boys. Through interviews he recorded their reactions to the moral dilemmas and found that moral development progresses from focusing on one's self, to those close to them like family, to those in other groups like their community and finally to the world (Snarey & Samuelson, 2008). In essence, his theory posits that moral development occurs on a continuum or through a series of stages (sometimes this continuum or series of stages is according to age, but not exclusively). More specifically, the six stages consist of obedience and punishment orientation; instrumental purposes and exchange; mutual interpersonal expectations; social system and conscience maintenance; prior rights and social contracts; and universal ethical principles.

Kohlberg's (1958) initial theory has not changed much over the past 50 years, although he has added to it through his continued research. More specifically, he created moral types and social-moral atmosphere levels to explain moral cognition and development (Snarey & Samuelson, 2008). According to Kohlberg (1976), moral types

consist of two groups (heteronymous and autonomous). Each group is categorized by nine criteria which consist of hierarchy, intrinsicality, prescriptivity, universality, freedom, mutual respect, reversibility, constructivism, and choice. The creation of moral types expanded Kohlberg's theory because it allowed for either type to occur at any time during a person's life (Gibbs, Clar, Joseph, Green, Goodrick, & Makowski; 1986). In addition, moral type focuses more on the content of moral reasoning than the structure of moral reasoning, and moral type helps clarify moral reasoning and moral action (Snarey & Samuelson).

Most importantly, the terms moral development and character can easily be related. As an example, according to Colby, Kohlberg, Gibbs, and Lieberman (1983), moral development progresses in a predictable pattern where people start by making moral decisions in hopes of avoiding punishment or seeking rewards (pre-conventional stages) all the way to making moral decisions guided by universal ethical principles (conventional and post-conventional stages). A person guided by universal ethical principles would likely be a person who lives a life of integrity and personal responsibility which is a component of the definition of character used in this study (Kuh & Umbach, 2004).

Additionally, some colleges and universities have historically used Kohlberg's moral dilemmas as a tool to develop students' character (Chen, 2005). In some ways, this solidifies the relationship between moral development and character. As an example, John M. Whitely started the Sierra project in the 1970's which used the scenarios in a specially designed curriculum to teach character to students at the University of California-Irvine (Whitely & Yokota, 1988).

Lastly, some of the research uses character and moral development as complimentary terms. As an example, one of the most recent works in the field is called the Handbook of Moral and Character Education (Nucci & Narvaez, 2008). It outlines a vast amount of research in the field, some for character, but a sizeable amount more for moral development, and defines the terms similarly.

Measuring Moral Development and Subsequently Character

Moral development is usually measured with the Moral Judgment Interview (MJJ) created by Colby or the Defining Issues Test (DIT) developed by Rest (Pascarella & Terenzini, 2005). The MJJ and the DIT are not being used in this study, but they are included in this section since they are the most widely used instruments in the field. In addition, literature using the MJJ and the DIT is utilized in this literature review since Kuh and Umbach's (2004) measure of character has only been used once in the literature and the concept of moral development is foundational to understanding character. A more comprehensive review, beyond the one study by Kuh and Umbach, is needed in order to fully understand the overall literature of college students and character.

Both instruments (MJJ and DIT) use a series of moral dilemmas to measure a person's level of moral development as outlined by Kohlberg (1981b; 1984). As an example, Rest (1988; 1983), who created the DIT, found that students were better at dealing with ethical issues the more years they were in college. According to Chen (2005), these methods work well to assess an individual's level of moral cognition, but they should not be used at the institutional level for assessing educational practices when it comes to character. Chen (2005) created one example of a survey used to measure character. His example was chosen for this section since it is one of the most recent

surveys of character in addition to the survey by Kuh and Umbach used in this study. Chen's goal was to create a survey to measure character and complete a study that would find out if character was different at private four-year, faith-based and private nonsectarian colleges and universities. Chen's new survey instrument, also not used in this study, was called the Character Education Values and Practices Inventory (CEVPI). Results of Chen's study pertaining to the development and use of the CEVPI are not as relevant to this study as are the results from Chen's surveys of senior administrators. As a first step in Chen's (2005) research, he surveyed senior administrators at institutions of higher education in order to find out what values they believed defined character. Out of 44 terms, private four-year faith-based colleges chose the terms trustworthy, just, fair, civic-minded, committed, honesty, responsibility, caring, compassionate, and respectful to define character.

As stated earlier, the research on character is extremely broad and includes all types of terms including character. However, there are many ways to measure character. Whereas I am not using the aforementioned measurements, they still provide a framework for better understanding my study. All the terms, along with the definition of character provided by Davidson, Lichona, and Khmelkov (2008) and previous findings by Kuh and Umbach (2004) provide the justification for the items chosen to represent character in this study.

Influences on Moral Development and Subsequently Character

As stated earlier, there is not one agreed upon definition or method of measurement for character. There is also not a lot of depth to the study of character, at least character as defined by Kuh and Umbach (2004), which is the reason moral

development is being used in this section. Most of the literature concerning character uses Kohlberg's theory of moral development as the foundation for understanding how people progress from low levels to high levels of moral development. Hence the reason this section outlines the influences on moral development instead of specifically character. However, since the terms are similar (as outlined above), this section pertains to moral development as well as character. It is also included because it provides a rationale for the items I have chosen to control for in this study.

The research asserts that college has a positive impact on moral development (Baxter & Magolda, 1992; Bebeau & Thoma, 2003; Finger, Borduin, & Baumstark, 1992; Lindsay et. al, 2007; Rest, 1979; Rest & Thoma, 1985; Rykiel, 1995; Whiteley & Associates, 1982; Whiteley, Bertin, & Berry, 1980; Wilson, Rest, Boldizar, & Deemer, 1992). However, not much research exists as to which institutional types are most effective. Christian institutions often claim to have a campus environment that is conducive to the development of character, morals, and values (Fisher, 1995). Such colleges attribute this to the fact that the aforementioned concepts are central to their institutional missions and/or religious heritage (Fisher; Kuh & Umbach, 2004).

As noted above in the section on the CCCU, the literature on institutional type and moral development is unique because it is usually divided into groups where private liberal arts colleges and Christian institutions are one in the same. As an example, McNeel (1994) and Good and Cartwright (1998) both looked at moral development of students at liberal arts colleges, Bible colleges, and research universities. However, most of the liberal arts colleges in the study were religiously-affiliated and were the types of institutions that made it a personal goal to develop students' personal faith. Very similar

results were found in both studies indicating that the largest freshman to senior gains were found at the private liberal arts colleges, followed by the large public universities, and finally Bible colleges (Good & Cartwright; McNeel).

As stated earlier, it is problematic to assume that all gains in moral development occur because of the institution itself (Stokes & Regnerus, 2009). Some believe that although Christian institutions might be good at increasing the moral development of their students, prospective students may in fact be selecting certain colleges because they themselves already have those desirable qualities and want an institution that will allow them to grow in that area (Kuh & Umbach). However, it is worth noting that the freshmen at the liberal arts college in the McNeel (1994) study started with the highest scores compared to other schools in moral reasoning but also made the greatest gains from the freshman to senior year.

Past research has indicated that some student characteristics influence moral development. For example, year in college was the strongest predictor of moral development (Bebeau & Thoma, 2003; Finger, Borduin, & Baumstark, 1992; Lindsay et al., 2007; Wilson, Rest, Boldizar, & Deemer, 1992). More specifically, persisting to higher levels of post-secondary education has a positive impact on moral development (Finger, Borduin, & Baumstark, 1992; Rest, 1979; Rest & Thoma, 1985; Rykiel, 1995; Whiteley & Associates, 1982; Whiteley, Bertin, & Berry, 1980; Wilson, Rest, Boldizar, & Deemer, 1992), with the most obvious gains occurring during the first and second year (Baxter & Magolda, 1992).

Most of the research indicates that moral development is not related to gender (Baldizan & Frey, 1995; Crandall, Tsang, Goldman, & Pennington, 1999; Galotti,

Kozberg, & Farmer, 1991; Know, Fagley, & Miller, 1998; McNeel, Schaffer & Juarez, 1997; Walker, 1984, 1991), but when gender differences are found, female students score higher on moral development than male students (King & Mayhew, 2004; Lindsay, Barnhardt, DeGraw, King & Magolda, 2007; Pascarella & Terenzini, 2005). King and Mayhew and Lindsay, Barnhardt, DeGraw, King and Magolda found no distinguishable effects of race on development of moral development. Nonetheless, I will use gender and race as control variables.

The overview of moral development, and subsequently character, is needed in order to fully appreciate its potential relationship with student engagement. Additionally, the section concerning what influences both was essential in determining the variables that could influence the relationship between student engagement and character. As stated earlier, the variables controlled for in this study will be gender, ethnicity, grades, and age. According to the aforementioned research, grades and age might impact the relationship between character and student engagement. Gender and ethnicity are controlled for in this study because they are not variables that can be controlled by the student. Overall, I looked at the variables that predict character for freshmen and seniors.

Student Engagement

George Kuh's (2001) theory of student engagement was conceptualized in 2001. Foundational to Kuh's work was Astin's (1984) theory of involvement, Pace's (1980) quality of effort measures, and Chickering and Gamson's (1987) seven principles for good practice in undergraduate education. An explanation of a student engagement's contributing theories as stated above, student engagement itself, the National Survey of

Student Engagement and the benchmarks are covered in order to fully explain student engagement theory. Lastly, an overview of the research concerning student engagement at CCCU institutions will be discussed.

Theories Contributing to Student Engagement

Several theories need to be explained in order to fully understand student engagement theory since they are foundational to its existence. These theories are linked to student engagement because, like student engagement, they outline what the student and the college do to help a student succeed in college. As an example, Astin's (1984) theory of involvement posits that the more a student puts into the academic and social aspects of college, the more he or she will get out of his or her educational experience. More specifically, Astin contends that involved students are ones that "devote considerable energy to academics, spend much time on campus, participate actively in student organizations and activities, and interact often with faculty" (Astin, 1984, p.292).

Related to Astin's involvement theory is his Input-Environment-Outcome (IEO) model that acknowledges student inputs and environment as essential to student learning (outcomes). According to Astin (1991), inputs are characteristics that students bring with them to college. They might include things like educational background, reason for selecting an institution, life goals, and financial status. Environment is anything and everything that happens while the student is in school that might have an impact on the student's educational outcomes. Environment includes educational experiences, extra-curricular activities, programs, interventions, and exposure to faculty, peers, and roommates. Outputs are the student's characteristics after exposure to the environment. They manifest themselves in various ways like grade point average, exam scores, and degree completion and in the case of this study gains in character (Astin, 1991).

Pace (1980) acknowledges the responsibility of colleges and universities in providing adequate services and facilities for their students but believes student success is much more contingent on a student's quality of effort and whether or not the student utilizes facilities and experiences provided by colleges and universities. According to Pace, physical facilities include things like libraries, classrooms, student unions, residence halls and laboratories. Events and experiences include contact with faculty, involvement in clubs and organizations, meaningful relationships and conversations with peers, and opportunities related to better self-understanding. His theory suggests that it is important for researchers to examine institutions' offerings, but more important is the need to study what the student does with those offerings.

Chickering and Gamson's (1987) "Seven Principles for Good Practice" was created to help students, faculty, staff, and administrators create an environment that would improve learning and teaching. This guide also encourages contact between students and faculty, develops reciprocity and cooperation among students, encourages active learning and giving prompt feedback, emphasizes time on task, communicates high expectations, and respects diverse talents and ways of learning.

The above theories are important to this study because they acknowledge, just like student engagement theory that the outcome of any college experience is dependent on either what the institution does or what the student does to ensure success (or in some cases both). It is obvious that each theorist believes differently how much is the institution's responsibility versus the student's responsibility, but the concept is fundamentally the same. Effort of some kind is needed to ensure a positive outcome in college.

Student Engagement Theory

According to Kuh (2003; 2009), student engagement is very straightforward. The more students study, the more they know about the subject they are studying. The more students get feedback from faculty and staff members, the more they understand what they are learning. It is effective educational practices that are the kinds of behaviors that make students “more adept at managing complexity, tolerating ambiguity, and working with people from different backgrounds or with different views” (Kuh, 2007, p. 5).

According to Kuh, effective educational practices are marked by six conditions that include:

1. Devoting a considerable amount of time and effort to activities that increase their commitment to their discipline and the college.
2. Activities that put students in constant contact with faculty and peers over extended periods of time.
3. Involvement in activities that increase exposure to diversity and contact with others who are different from oneself.
4. Working closely with faculty and getting frequent feedback from them.
5. Exposure to activities beyond the classroom like service learning, study abroad, and internships.
6. Everything is done in the context of a coherent, academically challenging curriculum.

In essence, effective educationally practices are the kinds of behaviors that mean higher levels of student engagement. Higher levels of student engagement in educationally purposeful activities are valuable for several reasons. One of the most

obvious reasons they are valuable is they sometimes facilitate persistence. According to Kuh, Cruce, Shoup, Kinzie, and Gonyea (2008), student engagement is positively related to persistence in the second year of college.

National Survey of Student Engagement

Student engagement is measured using the National Survey of Student Engagement (NSSE). In the spring of 1998, Peter Ewell brought together a design team that consisted of Alexander Astin, Gary Barnes, Arthur Chickering, John Gardner, George Kuh, Richard Light, and Ted Marchese, with input from C. Robert Pace (Kuh, 2001; NSSE, 2001). The team hoped to create a survey to gather information about student engagement and provide colleges and universities information that would assist them in immediately improving the quality of the student experience at their respective institutions (Kuh, 2005).

What they created was the NSSE, an instrument that surveyed student behaviors. As previous research had shown, positive student behaviors had a direct impact on a students' academic and social development and, consequently, their engagement (NSSE, 2001; Kuh, 2001). The survey was piloted in the Spring and Fall of 1999 with the first national survey administered in Spring 2000. Unfortunately, in recent years, the reliability of the NSSE has been attacked by many who question why specific items are included in the survey, cite the vaguely worded questions and self-reporting method, and question the construction of the five benchmarks (Porter, 2011; Olivas, 2011).

Benchmarks

The National Survey of Student Engagement consists of 28 questions (NSSE, 2001). The researchers clustered the questions into five groups called benchmarks. The

benchmarks are important because they are indicative of a truly successful college student experience. The more a student's experiences are aligned with the benchmarks, the more engaged he or she is in the college experience. The benchmarks are Level of Academic Challenge, Active and Collaborative Learning, Student Interactions with Faculty Members, Enriching Educational Experiences, and Supportive Campus Environment.

The first benchmark, Level of Academic Challenge (LAC), includes things like preparation for class, using higher-order thinking skills, and having students work harder than they thought they could to meet the standards set by their professors (NSSE, 2001). The overriding characteristic of this benchmark is the expectation by faculty, staff, and administration that students will study hard, work hard, and excel. In addition, questions about the number of textbooks and length of papers required are included in this benchmark.

According to the second benchmark, Active and Collaborative Learning (ACL), students learn by actively engaging in their educational experience by asking questions, presenting information, discussing, tutoring, and working in groups (NSSE, 2001). All of these types of activities are helpful to students because they build self-confidence, which is needed in college life and life after graduation.

The third benchmark is Student Interactions with Faculty Members (SFI). The more interactions a college student has with her faculty members the better (NSSE, 2001). This can include meeting with faculty about grades or assignments, talking with them about future and/or career plans, serving on committees with them, or aiding a faculty member in a research project. These types of activities allow a student to see

first-hand how a faculty mentor works in his or her field and tackles issues on a daily basis.

The fourth benchmark is Enriching Educational Experiences (EEE). Colleges typically offer all kinds of opportunities for involvement outside the classroom. It is up to the student whether or not he or she wants to spend the time and energy to be involved. Some opportunities for involvement included in the NSSE are internships, community service, study abroad, and co-curricular activities. Students can also choose to step outside of their comfort zone and talk with their peers from different religious, political, ethnic, and socio-economic backgrounds – aspects that are also included in the EEE benchmark.

The final benchmark is Supportive Campus Environment (SCE). Students are most successful when they attend an institution that is caring and supportive of their needs (NSSE, 2001). Colleges and universities must have the types of services in place that encourage students to succeed academically and socially. They must promote supportive relationships between students, faculty members, and staff so that everyone feels good about the type of place they go to school and/or work.

All of the student-level benchmark scores, which are the results that researchers work with, are placed on a 100-point scale in order to analyze and compare data (NSSE, 2007). In an unrelated article by Bureau, Ryan, Ahren, Shoup and Torres (2011), I found their typical benchmark scores between 40 and 61. This was typical to the types of scores I got from running descriptive statistics on my benchmarks and the individual items later in this dissertation.

Student Engagement Research at Christian Colleges

A large body of literature exists on the general study of student engagement. Research indicates that certain student characteristics make a difference when it comes to student engagement. According to Hu and Kuh (2002), “certain student background characteristics (sex, race and ethnicity), level of parental education, and academic background of the student can influence student engagement in educationally purposeful activities” (p. 569). Additionally, some types of institutions are better at engaging students than others. According to Hu and Kuh, students who attended public and research institutions were less likely to be engaged in educationally purposeful activities than students who attended private and liberal arts colleges (2001; 2002).

In contrast, the literature on Christian institutions and student engagement, specifically using the NSSE, is not very large: only two special reports exist. In one report, researchers for the Teagle Foundation, which “provides leadership for liberal education... to ensure that today’s students have access to challenging, wide-ranging, and enriching college educations” (Teagle Foundation, 2010), looked at the relationship between student engagement in spirituality-enhancing activities during college and select student and institutional variables (Gonyea & Kuh, 2005). Spirituality-enhancing activities included worship activities, conversations with people from other religious, political, and personal values, and a deepened sense of spirituality. Student engagement and other desirable college outcomes (nine items referred to as deep learning) were the dependent variables.

Gonyea and Kuh (2005), for the Teagle Foundation, analyzed data from 150,000 first-year and senior students from over 450 colleges and universities. They found that

students at Christian institutions participated in more spiritual activities and gained more spiritually from their experiences than students who attended other institutions but that spiritually-enhancing activities had little to no effect on engagement and deep learning. Additionally, they found that the nature of the environment matters much more than institutional type for engaging in effective educational practices.

Another report for the Council of Independent Colleges, an association of more than 550 small and mid-sized private colleges and universities that promotes the unique educational experience available at teaching-oriented private institutions, (Council of Independent Colleges [CIC], 2010) used the same data set from Gonyea and Kuh (2005) and many of the same variables. However, the researchers in the CIC report looked more closely at the relationship between institutional-type characteristics and the dependent variables (Gonyea & Kuh, 2006).

Similar to the Teagle Foundation study, the CIC researchers found that students attending Christian institutions were more likely than others to engage in spiritually-enhancing activities, and students who attended Christian institutions self-reported the highest level of spirituality compared to students who attended other types of institutions (Gonyea & Kuh, 2006). Additionally, student engagement levels differed by the religious affiliation of the college or university. No significant differences in engagement were found between faith-based/fundamentalist and public institutions, but some of the other religiously-affiliated groupings did have significantly higher levels of student engagement than their public counterparts (Gonyea & Kuh).

The two studies above help to better understand student engagement at Christian institutions, but clearly more research is needed in this area in order to provide a more

complete picture. Perhaps the most important part of this section on student engagement is the inclusion of the five benchmarks and their individual descriptions. Since the five benchmarks act as the independent variables in the study, it is essential that an explanation, including its differences and their connection to student engagement theory, is discussed.

Christian Colleges and Universities

Over 900 religiously-affiliated degree-granting institutions of higher education exist in the United States (United States Department of Education, 2010). However, the CCCU has only 110 member institutions (Council of Christian Colleges and Universities, 2010).

Most research and literature in the field of Christian higher education does not differentiate between CCCU member institutions and the broader category of religiously-affiliated institutions of higher education. The following sections provide a general overview of the large body of literature on religious institutions – CCCU and non-CCCU members – in hopes of providing a framework for better understanding the proposed study and the unique type of higher education provided by Christian institutions. Unless specifically noted by the acronym CCCU, the research included in this section refers to the overall research on Christian colleges. Information regarding Catholic institutions has purposely been excluded from this study and literature review because of their own unique characteristics and the fact that they have their own extensive amount of research completely separate from the rest of the literature on Christian colleges.

History of Christian Higher Education

The first colleges in the United States were established as early as the 17th and 18th centuries by English settlers (Brubacher & Rudy, 1997; Lucas, 1994; Thelin, 2004). When colleges were first founded in the United States, they were charged with educating the young, white and privileged men for careers in church, law, or medicine. According to Ringenberg's (1984) historical account of Christian education, regardless of the student's academic interest, the colonial college's main purpose was to provide an educational environment that was distinctively Christian. This distinctively Christian educational environment is still what many Christian colleges are attempting to create today (Brann, 1999; Holmes, 1987; Walsh, 1992).

An example of a colonial college trying to integrate religion into its campus life is seen in Harvard's first student handbook, which stated that each student must "know God and Jesus Christ which is eternal life (John 17:3)" (Harvard handbook as cited in Ringenberg, 1984). In addition to the founding of Harvard within the Puritan/Congregationalist tradition in 1636, the colonial period was a time for the establishment of many other Christian colleges from various denominations including William and Mary in 1693 (Anglican), Yale in 1701 (Congregationalist), Princeton in 1746 (New Light Presbyterian), Columbia in 1754 (essentially Anglican), and many other now well-known colleges in the United States (Brubacher & Rudy, 1997; Lucas, 1994; Ringenberg, 1984; Thelin, 2004). The establishment of the above institutions was only the beginning of Christian higher education, which continued to expand throughout the next 200 years.

In 1800, the Second Great Awakening began, which triggered a significant increase in the number of students interested in Christian higher education (Ringenberg, 1984). According to Ringenberg, the college population from 1800-1860 grew four times as fast as the overall population. Three reasons for the great expansion in Christian higher education included the increased interest in religion, the increased interest in local communities wanting their own colleges, and the higher percentage of lower and middle-class citizens who wanted a college degree.

During the 1860s, many state governments created their own institutions of higher education. The majority of institutions created by state governments were considered public institutions with religious connections (Brubacher & Rudy, 1997; Lucas, 1994; Thelin, 2004). According to Ringenberg, the one main exception to the idea of a public institution with a religious connection was Thomas Jefferson who founded the University of Virginia in 1819. Jefferson intentionally avoided a religious connection because he felt it would interfere with the educational environment he hoped to create at the University. It is interesting that Thomas Jefferson's philosophy, which might have seemed peculiar for the time, is now the prevailing philosophy of public education in our society.

Throughout the late 1800s and the 1900s, Christian institutions continued to grow and be successful types of higher education options. In some cases, however, their academic reputations seemed to be faltering (Ringenberg, 1984). Ringenberg gives examples of some Christian institutions founded during the 1900s that were intellectually inferior and doomed for failure because they could not compete academically with their older Christian and public counterparts. He also discusses Christian colleges during this

time that tended to exert parental control over their students, which sometimes led to student unrest. The Christian colleges that did make it through this period of time were the institutions that disregarded some of their religious requirements, increased their academic offerings, hired more highly trained and respected faculty and opened their doors of admission to students of other faiths (Ringenberg, 1984).

In the last decade of the 20th century, Christian colleges attracted many students who were interested in avoiding the lifestyle found at secular institutions (Reisberg, 1999). In addition, there was an increase in attendance at Christian elementary and secondary schools, participation in home schooling, and youth ministries (Reisberg). This increase in Christian secondary education and activities has undoubtedly had an effect on the popularity of Christian higher education.

More recently Ream and Glanzer (2007) broached the concept of religion and scholarship in higher education by dedicating an ASHE Higher Education Report to the topic. Their work is a scholarly approach to the subject rather than a dedication to the more controversial stories that often make the news (Ream and Glazer). According to the authors, the biggest topics in Christian higher education right now include the history of secularization, the different types of seemingly similar religious colleges and universities, the ways that different scholars, networks, and institutions address their faith and scholarship, academic freedom and religious higher education, and well known scholars and their beliefs about the future of religious higher education.

Unique Campus Environment at Christian Institutions

Christian colleges and universities have always offered a unique social and educational experience, creating a campus environment that is different than what

students experience at most other schools (Birkholz, 1997; Brann, 1999; Good & Good, 1998; Holmes, 1987; Marsden, 1999; Oosterhuis, 2000; Ream & Glazer, 2007; Sloan, 1999; Riley, 2005; Schuman, 2010; Stellway, 1984; Walsh, 1992). There are exceptions, but most religious campuses don't have the alcohol, drugs, sexual activity, and violence so prevalent on secular campuses (Riley, 2005). In addition, students are more likely to run into large numbers of Christians, which allows them to feel comfortable discussing things from a Christian point of view (Brann, 1999). Other unique differences include their community, curriculum, and mission.

Thoennes (2001) interviewed 30 students at two different Christian institutions to determine whether they felt a sense of community or not. The results from the interviews were overwhelming. The majority of the students interviewed commented that their sense of community on campus was so close to ideal that they would not change one thing about it (Thoennes). However, there is one problem with Thoennes' research on community at Christian institutions: the majority of students who attend Christian institutions are homogeneous. Homogeneous groups of students can usually sustain a positive environment that is sometimes without conflict, which means that community is also probably easy to sustain (Holmes, 1975).

Until more recently, Christian institutions were sometimes seen as less than adequate because the curriculum relied heavily on biblical studies and not on general education (Ringenberg, 1984; Meilaender, 1999). This was primarily because they were known for preparing ministers and other church staff and they taught certain subjects based in faith rather than scientific evidence (Ringenberg; Schuman, 2010). Christian higher education has evolved, and now many institutions pride themselves on their goal

of educating students in the classics (Schuman). In addition, Christian institutions are known for their integration of faith and learning (Badley, 1999; Gaebelein, 1954; Holmes, 1975). The term “integration of faith and learning” was first coined by Gaebelein in his book *The Pattern of God’s Truth*, but it was Holmes (1975) who went so far as to say that it was “the reason for the existence of Christian colleges” (p. 6). According to Gaebelein, faith and learning is “the living union of subject matter, administration, and even of its personnel, with the eternal and infinite pattern of God’s truth. This...is the heart of integration...” (p. 9).

Mission statements exist for all Christian institutions and outline the reason for each school’s existence (Woodrow, 2006). According to Parkyn and Parkyn (1996), Christian colleges and universities exist to do more than just educate students academically and religiously. They provide a place where faculty encourage students’ academic pursuits and encourage students to view the world through Christian eyes (Meilaender, 1999). According to the literature, Christian institutions encourage religious pursuits on campus (which, in turn, encourages faith maturity) and have some kind of connection to their founding religion, which allows for a uniquely religious atmosphere (Astin, 1993; Benne, 2001; Holmes; 1987; Jeffers, 2002; Parkyn & Parkyn, 2006; Ringenber, 1984; Walsh, 1992). This is not to say that secular institutions do not provide their students with opportunities for fellowship and religion, but it is Christian institutions, according to researchers like Birkholz (1997), Oosterhuis (2000), and Wrobel and Stogner (1988), that are providing an environment that encourages students’ religious maturity and growth. This is beneficial to the institutions themselves because

research has shown that religious satisfaction and spiritual integration at Christian institutions means students are more likely to persist (Morris, Smith, & Cejda, 2003).

Coalition of Christian Colleges and Universities (CCCU)

According to Cross and Slater (2004) and Shaver (1984), there are two types of Christian colleges and universities. The first type is called the Bible (Shaver), or fundamentalist (Cross & Slater), university. These types of institutions teach literally and directly from the Bible and are considered conservative in their views (Shaver). In some cases, they do not allow their students to wear certain clothes, dance or date (Cross & Slater). In addition, they usually do not teach the theory of evolution because it conflicts with teachings from the Bible. One example of a fundamentalist institution is Liberty University. Located in Lynchburg, Virginia, Liberty was founded in 1971 by Jerry Falwell (Liberty University, 2010). The institution has a dress code, curfew, mandatory chapel, and a very strict policy against the teaching of evolution.

The other type of Christian college or university is similar to most non-religious colleges except for the emphasis on religion and character (Shaver, 1984). Shaver refers to these institutions as Christian liberal arts colleges, but more accurately Cross and Slater (2004) refer to them as the Coalition of Christian Colleges and Universities (CCCU). An example is Bethel University in Arden Hills, Minnesota. As opposed to the fundamentalist colleges, Bethel teaches evolution in its science curriculum, does not have mandatory chapel, and does not have a dress code (Bethel University, 2009).

Although Liberty University applied for membership into the CCCU and was not admitted (Patterson, 2001), members of the CCCU do come from both groups outlined above. However, most CCCU institutions are like the second group. In fact, according

to Hendrix (1992) and Patterson (2001), the founding fathers of the CCCU purposely distanced themselves from fundamentalism. See appendix A for a complete list of CCCU schools and the CCCU schools provided to Indiana University Center for Postsecondary Research.

Origin of the CCCU

In the late 1950s, Christian educators started exploring the idea of working together to protect their interests and to advance the cause of Christian higher education, but it was not until 11 Christian college presidents gathered in 1970-1971 that a plan to unify their efforts actually came to fruition (Berk, 1977; Hendrix, 1992; Longman, 2001; Patterson, 2001). The organization they created was called the Christian College Consortium (“the Consortium”), the first of many names on the road to becoming the Council of Christian Colleges and Universities. As the Christian College Consortium, the mission was:

To promote the purposes of evangelical Christian higher education in the church and in society through the promotion of cooperation among evangelical colleges, and, in that conviction, to encourage and support scholarly research among Christian scholars for the purpose of integrating faith and learning; to initiate programs to improve the quality of instructional programs and encourage innovation in member institutions; to conduct research into the effectiveness of the educational programs of the member colleges, with particular emphasis upon student development; to improve the management efficiency of the member institutions; to expand the human, financial and material resources available to the

member institutions; to explore the feasibility of a university system of Christian colleges; and, to do and perform all and everything which may be necessary and proper for the conduct of the activities of this organization in furtherance of the purposes heretofore expressed (Hendrix, 1992, p. 67).

In the summer of 1971, Edward Neteland became the first executive director of the Christian College Consortium, and in 1974, Gordon Werkema became the organization's third executive director and first full-time professional employee (Patterson, 2001). During these early years, Christian institutions not part of the original group pressed to gain membership. The founding presidents stayed true to their strict entrance requirements, which included not granting membership to colleges and universities who admitted non-Christian students (Patterson, 2001). This angered many outside Christian institutions that felt the Consortium was elitist. In response to this issue, a new parallel organization was formed in 1976 to include a wider audience of Christian institutions (Patterson). The new organization was called the Christian College Coalition (the "Coalition") and was under the same leadership as the Consortium. It consisted of 38 members, some of which were also part of the Christian College Consortium.

In 1977, Gordon Werkema resigned, and John Dellenback was appointed executive director (Patterson, 2001). Dellenback supervised both organizations for the next four years. This was a tumultuous time for both groups as they struggled with the division of their responsibilities. This, coupled with Dellenback's preference of working with the Coalition over the Consortium, led to the Coalition legally separating from the

Consortium in 1982 (Patterson, 2001). During his tenure, Dellenback was responsible for more than doubling the Coalition's membership. In addition, he and the Coalition developed membership criteria that made it clear who was eligible for membership. Specifically, "the organization looked for the following before granting membership: (1) accreditation as a four-year liberal arts college; (2) institutional commitment to Christ; (3) a policy of hiring well-qualified faculty and administrators who were committed Christians; (4) commitment to the integration of faith, learning, and living; and (5) commitment to excellence" (Patterson, p. 54).

The organization changed its name several more times over the years, finally settling on the Council of Christian Colleges and Universities (Patterson, 2001). It still has a mission to advance the cause of Christ-centered higher education and to help institutions transform student lives by faithfully relating scholarship and service to the Bible (Council for Christian Colleges and Universities, 2010). Paul Corts now leads the organization, which is located in Washington, D.C. and employs over 60 employees.

Purpose of CCCU

One of the CCCU's most important goals is to facilitate the moral and spiritual development of its students (Stokes & Regnerus, 2009). One could easily relate this to character. According to Holcomb (2004), "the core mission of CCCU schools is to develop the whole person, including not only the intellectual, physical, and social aspects of being human, but also the moral and spiritual dimensions as well" (p. 1). This assertion is reinforced by Woodrow (2006) who looked at mission statements for 105 Christian colleges and universities that were members of the CCCU. Whereas "character" was not specifically included in the mission statements he reviewed, he did refer to several

phrases that one could relate to character (i.e., learning, global, society, service, academic excellence, scholarship, spiritual, community, and leadership).

According to Maguire and Associates (2001), a market research firm that specializes in higher education, the public expects the CCCU to cultivate students' character. The CCCU hired Maguire and Associates in 2001 to help them better understand the Christian higher education market. According to Maguire and Associates, the organization and its members should be using four themes to promote their unique type of higher education. The four central themes are:

1. Academic Quality: A high-quality education in a secular world.
2. Christian-Centered Community: A close-knit, Christian community that emphasizes character and spiritual growth.
3. Future Orientation: Preparation for life as well as a living.
4. Financial Investment: The value proposition (p. 13).

The development of character is important to the CCCU. This is evident by: (1) the CCCU's attainment of a FIPSE (Fund for the Improvement of Postsecondary Education) grant between 1994 and 2001 that permitted it to learn more about value and character at CCCU schools; (2) the CCCU's own continued research using UCLA's CIRP survey and Student Satisfaction Inventory; and (3) the attainment of a grant from the Templeton Foundation that allowed the CCCU to research the faith and moral development of students attending CCCU schools (Bergen, Longman, & Schreiner, 2010; Fund for the Improvement of Post-Secondary Education Grant Report, 1994; Holcomb, 2004). According to Bergen, Longman, & Schreiner (2010), who provided an overview of the above research initiatives at the most recent CCCU International Forum in Atlanta,

GA, internal research by the CCCU indicates that not only is the development of faith and character important to the CCCU, but also that students do exhibit high levels of spiritual faith and character.

Other research shows conflicting evidence. As an example, in 2007 twenty-five CCCU institutions administered the National Survey of Student Engagement (NSSE) on their campuses with the addition of sixteen questions about faith and values (Schuman, 2010). In reality, most of the questions were about faith with only six questions referring specifically to student values. However, according to Schuman, who obtained their data, “four years of college neither dramatically strengthens nor significantly weakens” the religious faith and values of students that attend CCCU schools (p. 245).

Challenges Facing CCCU Institutions

Several challenges face members of the CCCU. The most obvious include enrollment, finances, and the persistence and graduation rates of their students. Enrollment at Coalition of Christian Colleges and Universities (CCCU) grew 70.6 % from 1990-2004, but more recent enrollment numbers indicate that total growth will not be as high over the next five to ten years (Green, 2005). These enrollment results and predictions mean difficulty for institutions which, according to Brewer, Gates, and Goldman (2005), usually generate the largest component of funds from tuition dollars.

The second closely related area of concern is finances (Morris, Smith, & Cejda, 2003) and the current economy (Hemingway, 2009). Many institutions are dealing with decreased revenues, rising costs, increased competition, and a constantly changing marketplace (Benne, 2001; Council for Christian Colleges and Universities/Maguire Associates: CCCU Forum 2001, Heminway). They also struggle with shrinking

endowments. According to Pope (2008), one-third of all Christian colleges have endowments of less than 50 million dollars, and some have no endowment or zero cash reserves. In recent years, members of the CCCU have reported hiring freezes, increases and decreases in tuition, and budget cuts as solutions to shrinking endowments and the current financial crisis (Hemingway, 2009)

The last challenge facing CCCU institutions has to do with persistence and graduation rates. Schreiner (2000) found that one in every four freshmen at a CCCU did not make it to his second year of college. Additionally, only 46.5 % of students who attended a CCCU institution graduated after five years. According to Burks and Barrett (2009), students who did make it to their second year in college at a Christian institution had developed close relationships with faculty and peers, were social, and achieved high grades. They were also likely male, attended religious services, attended class regularly, lived off campus, joined a fraternity or sorority, and had high levels of faculty interaction. This is different from other research on Christian colleges that says men and women persist at the same rate (Leppel, 2002) or that women persisted at a higher rate than men (Astin, Tsui, & Avalos, 1996). In addition, Burks and Barrett's (2009) findings are different from most research that on-campus living leads to persistence (Astin, 1978; Chickering, 1974; Gross, Hossler, & Ziskin, 2007; Schragger, 1986).

Information concerning Christian institutions and specifically the CCCU is not only interesting, but essential to understanding the unique position its schools and organization hold in the field of higher education. It is also essential to understanding this study since the sample will only include members of the CCCU. In addition, the results of this study will hopefully help CCCU member schools and the CCCU as an

organization by providing them with valuable information about the relationship between student engagement and character of their freshman and senior students.

Summary

The above review of the literature is extensive because it includes character and moral development, student engagement, and Christian colleges and universities. Most of the literature on moral development at the college level focuses on its predictors at all institutions not just Christian ones (Baxter & Magolda, 1992; Bebeau & Thoma, 2003; Finger, Borduin, & Baumstark, 1992; Lindsay et. al, 2007; Rest, 1979; Rest & Thoma, 1985; Rykiel, 1995; Whiteley & Associates, 1982; Whiteley, Bertin, & Berry, 1980; Wilson, Rest, Boldizar, & Deemer, 1992). However, there is a small body of literature concerning moral development at specifically Christian colleges and universities (Birkholz, 1997; Buier, Butman, Burwell, & Van Wicklin, 1989; Chen, 2005; Dirks, 1988; Hernandez, 2005; McNeel, 1991; Shaver, 1985; Stokes & Regnerus, 2009). This was obviously helpful to understanding the current state of the literature and relating that to my study. It also made me realize that there was a need for more research in this area.

The overall literature concerning Christian higher education ranges from challenges (Benne, 2001; Council for Christian Colleges and Universities/Maguire Associates: CCCU Forum 2001; Green, 2005; Pope, 2008; Ross, 2009; Schreiner, 2000) to their student's faith maturity on campus (Birkholz, 1997; Oosterhuis, 2000; Wrobel & Stogner, 1988). Most of the literature in Christian higher education exists on their unique environment (Birkholz, 1997; Buier, Butman, Burwell, & Van Wicklin, 1989; Holcomb, 2004; Holmes, 1975, 1978; Ma, 2003; Oosterhuis, 2000; Riley, 2005; Ringenberg, 1984; Stellway, 1984; Schuman, 2010; Wrobel & Stogner, 1988). This literature proved

extremely helpful for purposes of this study since it provided a framework for better understanding their campus community and the type of experience they provide their students.

As stated earlier, only two special reports exist on the topic of student engagement at Christian colleges and universities. This is obviously concerning. However, even more concerning is the lack of research on the relationship between student engagement and character at Christian institutions. As stated earlier, the only research connecting all three is the Kuh and Umbach (2004) study. The aforementioned research informs my study because it lays a foundation for understanding the internal workings of this study. In addition, the Kuh and Umbach study provides a definition for character and the dimensions of character that were slightly modified for this study.

Chapter 3: Study Design and Methodology

The research questions guiding this study include:

- 1) Are there differences in self-reported gains in character development for freshmen versus seniors?
- 2) What specific dimensions of character and benchmarks distinguish students who attend CCCU schools?
- 3) Are there significant differences in benchmarks or character for freshmen versus seniors?
- 4) What factors, with particular attention to the benchmark indicators, predict students' self-reported gains in character development at CCCU institutions?

The purpose of this chapter is to outline the study design and methodology used for this project. In order to organize the information and provide a framework to better understand the study, this chapter is divided into seven different categories: the survey instrument, sample and response rate, selection of samples, data preparation, validity and reliability of the variables, description of the statistical analysis and limitations of the study.

The Survey Instrument

Data were requested from the Indiana University Center for Postsecondary Research. More specifically, data came from the 2007 National Survey of Student Engagement (see appendix B) that measures student engagement by surveying students' responses to questions about their involvement in programs and activities that colleges and universities provide for their enrichment (NSSE, 2010). See appendix C for a copy

of the data sharing agreement between Indiana University and the University of Kansas. The items on the survey represent ‘good practices’ in education which means they are associated with desired outcomes of college (NSSE). The survey instrument does not assess student learning specifically, but its results do help colleges and universities learn what they are doing well and what they could improve on.

The survey consists of 28 questions, can be offered web-based or on paper, and includes questions about each student’s background and characteristics (NSSE, 2010). The specific question used for the dependent variable from the NSSE read: “To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?” (Kuh and Umbach, 2004, p. 41). Responses were scored on a four-point scale measuring the progress or gains for each student. The range was from “very little” to “very much.”

In addition to the above question, the survey includes other questions meant to measure student engagement and specifically the five benchmarks. As an example, the survey includes questions about the amount of time spent preparing for class and the number of and length of papers written, which was meant to measure Level of Academic Challenge. In addition, questions were asked about the amount of time spent discussing grades, assignments, and future career plans with faculty, which was meant to measure student-faculty interaction. Questions about working with other students on projects and outside of class (including tutoring) were part of Active and Collaborative Learning while questions about the campus environment and relationships were part of Supportive Campus Environment. Lastly, questions are included about talking with students different than themselves and participating in activities like internships and study abroad

experiences were part of Enriching Educational Experiences. Demographic information was also asked and included items like gender, year in school, Greek and athletic status, grades, living arrangements, and parent's educational level.

Sample and Response Rate

The NSSE survey has been administered on 1,452 college and university campuses since its inception in 2000, with a total of 2,321,085 participating students (NSSE, 2010). In 2007, which is the year used for this study, 587 colleges and universities participated which included nearly 300,000 students (NSSE, 2007). The average institutional response rate in 2007 was 36 percent (37 percent for the web and 33 percent for paper).

Selection of the Samples

The original data included freshmen and senior NSSE respondents who are full-time students. In addition, only full-time students who had not transferred were included in the sample. Both freshmen and seniors were included since the study is a comparative one. Institutions chosen for this study had enrollments under 1500 students and were four-year institutions part of the Council for Christian Colleges and Universities (CCCU). The maximum enrollment number of 1500 per school was chosen because I am specifically interested in looking at the relationship at smaller schools. Some CCCU schools are very large and some are very small. According to Birnbaum (1988), some differences exist between institutions because of the institutions' size. This is even the case amongst CCCU institutions. Data consists of CCCU institutions that participated in the NSSE survey in 2007 who met the size requirements.

In order to ensure that only CCCU institutions were part of the data set, I cross-referenced the CCCU's membership list with a list of all the colleges that participated in NSSE in 2007. I provided the list of the 33 institutions that are both (i) members of the CCCU, and (ii) participated in NSSE in 2007, to the research analyst at the Indiana University Center for Postsecondary Research (see the appendix A for a list of the 33 CCCU institutions). The Indiana University Center for Postsecondary Research only provided cases that were part of schools that had enrollments less than 1500.

Initial correspondence with my research analyst at Indiana University indicated that the sample would be at least 500 participants from thirty-three institutions and would cost the researcher approximately \$500.00. However, after running the data the sample consisted of 2,445 cases. The research analyst initially gave me 500 cases (a little more than 20 percent as that is the standard given out by the Indiana University Center for Postsecondary Research), but I requested more in hopes of getting more statistical power for my study. My research analyst and I finally settled on an even 2000 cases.

Data Preparation

After receiving the specific NSSE results for 2007, I ran an exploratory analysis to check the data slice. Inadvertently, the Indiana University Center for Postsecondary Research had included fifty-four sophomores, twelve juniors, and seven unclassified students in my sample when the sample was only supposed to include freshmen and seniors. These students were removed from the sample. After this modification, the sample for this study consisted of 1927 students. Freshmen consisted of 58% ($n=1117$) and seniors consisted of 42% ($n=810$).

In addition, descriptive statistics were run on demographics. NSSE has ten racial/ethnic options which consisted of: (coded 1=American Indian or other Native American, 2=Asian American or Pacific Islander, 3=Black or African American, 4=White (non-Hispanic), 5=Mexican or Mexican American, 6=Puerto Rican, 7=Other Hispanic or Latino, 8=Multiracial, 9=Other, 10=I prefer not to respond). In order to minimize the large number of groups and to have large enough group sizes, I decided to organize the group as follows when I ran demographics and for the first regression: 1=White (non-Hispanic), 2=Other (included American Indian or other Native American, Multiracial, other, and I prefer not to respond), 3=Hispanic (Mexican or Mexican American, Puerto Rican, and other Hispanic or Latino), 4=Black and 5=Asian American.

For the second (all freshmen) and third regressions (all seniors), I collapsed the minority groups into one group called non-white and left the white group as it was in order to get enough responders for each independent variable. According to Creswell (2002), you want to make sure your sample size is as large as possible so as to get more powerful statistics and make your results more generalizable.

In addition, in order to run regressions, I dummy coded the categorical variables (they included gender, ethnicity and class). The gender variables were dummy coded as follows: 0=Male (reference group) and 1=Female (focal group). The ethnicity variables were dummy coded as, White is the reference group. The class variables were dummy coded as follows: 0=Freshmen (reference group) and 1=Senior (originally 1=Freshmen, 4=Senior).

Additionally, in the second (all freshmen) and third regressions (all seniors), ethnicity was dummy coded as follows: White vs. All Other Groups: 0=White (reference group),

1=All Other Groups. Gender was the same as the first regression and class was not used in the model.

Validity and Reliability of the Variables

Since character was difficult to define and I was interested to see how well the dimensions of character hung together, I began my study by running an exploratory factor analysis for the dependent variable of character. I also ran a Cronbach's alpha reliability for character. Cronbach alpha ranges in value from zero to one with an ideal number higher than .7 (Creswell, 2002). The overall Cronbach's alpha for character was .869. Based on these findings, and others that will be detailed in the rest of this chapter, character will be one construct rather than the original eight recommended earlier in this study. A more detailed description of this process, the results, and my decision will occur later in this chapter.

Since student engagement has been scrutinized so voraciously, I ran an alpha reliability on the independent variable of student engagement to check its reliability. The overall Cronbach's alpha for student engagement was .76. I also ran a Cronbach's alpha for each individual student engagement benchmark and the freshmen and senior samples as separate entities. Overall, the Cronbach alphas were not as high as I would have liked. However, I decided to leave the benchmarks as they were and not alter them. A more detailed description of this process, the results, and my decision will occur later in this chapter.

Character

Character serves as the dependent variable in this study. Kuh and Umbach defined character as a set of behavioral patterns that represent what people believe and

what they do. They used descriptive statistics to create a profile of the dimensions of character. The question posed to each student was, “To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?”, which is question #11 on the NSSE survey (Kuh and Umbach, 2004, p. 41). Responses were scored on a four-point scale measuring the progress or gains for each student. The range was from “very little” to “very much.”

The dimensions of character used in this study were:

1. Knowledge of self:
 1. Understanding self (gnself)
 2. Understanding people of other racial and ethnic backgrounds (gndivers)
 3. Working effectively with others (gnothers)
2. Ethical development and problem solving:
 1. Developing a personal code of ethics (gnethics)
 2. Solving complex real-world problems (gnprobsv)
3. Civic responsibility:
 1. Contributing to the welfare of one’s community (gncommun)
4. Processing information:
 1. Learning effectively on one’s own (gningq)
 2. Thinking critically and analytically (gnanaly)

The research on character reinforces most of the items Kuh and Umbach (2004) chose to represent character. As stated earlier, the ones I felt did not belong were removed. According to Chen (2005), senior administrators at private faith based colleges use words like trustworthy, just, fair, civic-minded, committed, honesty, responsibility, caring, compassionate, and respectful when defining character. In addition, Kuh and Umbach (2004) found certain items were likely to contribute to character. According to Kuh and Umbach, they included “doing community service, or working on a project in the community that is related to a course, volunteerism, the frequency with which students are exposed to diversity in the classroom, talking with students from other races

and ethnicities, or having conversations with students who have different political and social views” (pg. 3). This obviously is something to note since not all students at Christian colleges and universities might have been exposed to diversity on a regular basis since they tend to be somewhat homogenous places.

In order to see how well my dimensions of character hung together, an exploratory factor analyses was run on the dependent variable. All the factor analyses used Maximum Likelihood as the Extraction Method and Oblimin with Kaiser Normalization as the Rotation Method. In the first factor analysis, the eight factors of character were not forced; instead one analysis was done to allow the variables of character to freely load. The result showed one factor and all the variables belonging to one dimension. Since there was only one factor the solution could not be rotated. The magnitude of the loadings was similar. The most significant loading was from ‘understanding yourself’ which was $\lambda=.747$. The smallest loading was ‘thinking critically’ which was $\lambda=.590$. In addition, Cronbach’s alpha reliability was run on the one factor. Results were .87. Exploratory factor analysis is presented in Table 1.

Table 1

Summary of Exploratory Factor Analysis Results for items used to measure Character.

Item	Factor Loading
Understanding Yourself	.75
Understanding People	.65
Working Effectively	.60
Personal Code of Ethics	.73
Solving Real-World Problems	.73
Contributing to your Community	.66
Learning Effectively on your Own	.68
Thinking Critically	.59

The same method was used again, but the variables were forced to load to four factors. In addition, it was rotated. Results on the structure matrix show that most of the items were substantial. Based on all these findings, it was decided that character should be one construct. Summary of factor analysis where items were forced to load is presented in Table 2.

Table 2

Summary of Factor Analysis where Items were Forced to Load.

Item	Factor Loadings			
	1	2	3	4
Understanding Yourself	.30	.26	.31	.64
Understanding People	.20	.19	.74	.25
Working Effectively	.19	.52	.21	.28
Personal Code of Ethics	.80	.24	.21	.29
Solving Real-World Problems	.31	.36	.49	.28
Contributing to your Community	.49	.35	.31	.16
Learning Effectively on your Own	.20	.35	.23	.58
Thinking Critically	.23	.59	.16	.22

Student Engagement Benchmarks

The five student engagement benchmarks serve as the independent variables in the study. As stated earlier, the five student engagement scales were created to measure student engagement (Kuh, 2001). They consist of:

- 1.Level of Academic Challenge
- 2.Active and Collaborative Learning
- 3.Student-Faculty Interaction
- 4.Enriching Educational Experiences
- 5.Supportive Campus Environment

Specific questions or items for each benchmark include (they are also listed in appendix D).

Level of Academic Challenge

1. Time spent preparing for class (studying, reading, writing, rehearsing, etc. related to academic program)
2. Working harder than you thought you could to meet an instructor's standards or expectations
3. Number of assigned textbooks, books, or book-length packs of course readings
4. Number of written papers or reports of 20 pages or more; number of written papers or reports of between 5 and 19 pages; and number of written papers or reports of fewer than 5 pages
5. Coursework emphasizing analysis of the basic elements of an idea, experience or theory
6. Coursework emphasizing synthesis and organizing of ideas, information, or experiences into new, more complex interpretations and relationships
7. Coursework emphasizing synthesis and organizing of ideas, information, or experiences into new, more complex interpretations and relationships
8. Coursework emphasizing the making of judgments about the value of information, arguments, or methods
9. Coursework emphasizing application of theories or concepts to practical problems or in new situations
10. Campus environment emphasizing time studying and on academic work

Student-Faculty Interaction

1. Discussed grades or assignments with an instructor
2. Talked about career plans with a faculty member or advisor
3. Discussed ideas from your readings or classes with faculty members outside of class
4. Worked with faculty members on activities other than coursework (committees, orientation, student-life activities, etc.)
5. Received prompt written or oral feedback from faculty on your academic performance.
6. Worked with a faculty member on a research project

Active and Collaborative Learning

1. Asked questions in class or contributed to class discussions
2. Made a class presentation
3. Worked with other students on projects during class
4. Worked with classmates outside of class to prepare class assignments
5. Tutored or taught other students

6. Participated in a community-based project as part of a regular course
7. Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)

Supportive Campus Environment

1. Campus environment provides the support you need to help you succeed academically
2. Campus environment helps you cope with your non-academic responsibilities (work, family, etc.)
3. Campus environment provides the support you need to thrive socially
4. Quality of relationships with other students
5. Quality of relationships with faculty members
6. Quality of relationships with administrative personnel and offices

Enriching Educational Experiences

1. Talking with students with different religious beliefs, political opinions, or values
2. Talking with students of a different race or ethnicity
3. An institutional climate that encourages contact among students from different economic, social and racial or ethnic backgrounds
4. Using electronic technology to discuss or complete an assignment
5. Participating in:
 - a. Internships or field experiences
 - b. Community service or volunteer work
 - c. Foreign language coursework
 - d. Study abroad
 - e. Independent study or self-assigned major
 - f. Culminating senior experience
 - g. Co-curricular activities
 - h. Learning communities

Even though NSSE is widely used, the reliability of the instrument has been scrutinized by Porter (2009; 2011) and Olivas (2011), as well as others in the Fall 2011 *Review of Higher Education*. They take issue with the content domain and ask why specific items are included in the survey, cite the vaguely worded questions and self-reporting method, and question the construct of the five benchmarks.

For this reason, alpha reliability was run on the five benchmarks as a whole, each individual student engagement benchmark for the combined group, and the freshmen and senior samples for each benchmark. The alpha reliability for all five benchmarks was .76. Alpha reliability of Level of Academic Challenge (LAC) for the combined group was .67 for eleven items; alpha reliability of Active and Collaborative Learning (ACL) for the combined group was .59 for seven items; alpha reliability of Student-Faculty Interaction(SFI) for the combined group was .739 for six items; alpha reliability for Enriching Educational Experiences (EEE) for the combined group was .60 for twelve items; and alpha reliability of Supportive Campus Environment (SCE) for the combined group was .77 for six items.

In order to check the alpha reliability for the freshman and senior samples for each benchmark, the sample was split. Freshmen consisted of 58% ($n=1117$) and seniors consisted of 42% ($n=810$). Alpha reliabilities for freshmen were LAC at .65, ACL at .58, SFI at .71, EEE at .54 and SCE at .72. Alpha reliabilities for seniors were LAC at .69, ACL at .54, SFI at .71, EEE at .51 and SCE at .69. Three of the benchmarks, for the overall and current sample, have consistently high reliabilities. Those benchmarks consist of Level of Academic Challenge, Student-Faculty Interaction, and Supportive Campus Environment. This does not mean that the other three benchmarks should not be used, but they should be used with caution (NSSE).

Overall the alpha reliabilities are low using my sample, but they are low using the national data as well (NSSE, 2011). This might be concerning if the national sample from the same year showed something different. Cronbach's alpha reliability for the entire 2007 sample and the sample used for this study are presented in Table 3 to show

how my sample is similar to the entire sample for that same year. The specific data for this study is no different than what occurred nationally in NSSE data that same year.

This was another reason the benchmarks were left as they were and not altered for this study.

Table 3

Summary of Cronbach's Alpha Reliability Indexes for NSSE 2007 Survey and Current Sample.

NSSE Benchmarks	2007 NSSE Survey Total	Current Sample
	Sample Cronbach's Alpha	Cronbach's Alpha
	Freshman/Senior	Freshman/Senior
Level of Academic Challenge	.73/.76	.65/.69
Active and Collaborative Learning	.66/.67	.58/.54
Student-Faculty Interaction	.71/.74	.71/.71
Enriching Educational Experiences	.58/.65	.54/.51
Supportive Campus Environment	.79/.80	.72/.69

As stated earlier, Cronbach alpha ranges in value from zero to one with an ideal number higher than .7 (Creswell, 2002). The overall alpha reliability for student engagement was .76 which is obviously above the .7 mark. When rounded to whole numbers, three of the five benchmarks are at the .7 mark. The breakdown by freshmen and seniors is similar to the overall sample with three of the five benchmarks at the .7 mark when they are rounded. Whereas this is not ideal, since not all five benchmarks are within acceptable levels, I, as the researcher, have chosen to use the student engagement benchmarks as they are (without altering them). This is obviously a limitation of the

study, but I believe altering the benchmarks would be a greater limitation since according to Kuh (2005) altering the benchmarks could alter the results of the study.

Statistical Analysis

Using SPSS software, data analysis was done as follows:

- 1) Descriptive statistics were computed for sample demographics (background characteristics), the independent variables and the dependent variable. In addition, descriptive statistics were run for each of the individual benchmark items and the individual character items. The descriptive statistics included frequencies, percentages, means and standard deviations.
- 2) Group comparisons for first year students and seniors were completed on all key independent variables and the dependent variable. This included a total of six t-tests (the total included one on the dependent variable of character and five on the independent variables or student engagement benchmarks).
- 3) A bivariate correlation was run to show the association between each of the five student engagement benchmarks and character. This was also done for freshmen and seniors separately.
- 4) Using multiple regressions, the student engagement benchmarks (independent variables) were regressed against character (dependent variable). Gender, ethnicity and grades were controlled for. Age was left out since it is too correlated with year in school.
- 5) Separate multiple regression analyses were run for freshmen and seniors just like above. The only difference was class was not included and race was converted into white and non-white instead of the original five ethnicities.

Limitations of the Study

One limitation of this study rests in its generalizability. A natural tendency is to take the findings of this study and use them across the board at all types of institutions. However, I, as the researcher, would urge the reader not to do this. The findings of this research are only to be used when discussing Christian and specifically CCCU institutions. All other generalizations should be avoided.

The CCCU institutions chosen for the sample were picked because they participated in the survey process. Since it does cost money for schools to give the survey to their students, not all CCCU institutions decide to participate. This could alter the sample of students given to the researcher by the Indiana University Center for Postsecondary Research. In addition, special consideration should be given to the fact that this is a self-reported study which can be a problem in some instances. Responders might not have enough experience with the school to answer well or they might intentionally answer the questions wrong when it comes to things like background and activities (NSSE, 2001, p. 5). A fair amount of research contends that self-reports are valid (Baird, 1976; Birdie, 1971; Pace, 1985; Pike, 1995). Kuh and Hu (2001) found they got reliable responses from self-reports if:

- 1) The information requested is known to the respondents;
- 2) The questions are phrased clearly and unambiguously;
- 3) The questions refer to recent activities;
- 4) The respondents think the questions merit a serious and thoughtful response;
- 5) Answering questions does not threaten, embarrass, or violate the privacy of the respondent or encourage the respondent to respond in socially desirable ways.

The study was completed using only data from the year 2007. This was mainly due to financial constraints. Obviously a longitudinal study would have been interesting. However, this was not an option. Lastly, the measure of character constructed from the NSSE survey most certainly does not meet every dimension of character. However, I believe it is probably one of the best ways to study character considering the access to multiple institutions and large sample size.

Another limitation is that one could argue that some of Kuh and Umbach's dimensions of character seem at odds with the types of colleges and universities that align themselves with the CCCU. One example is "developing a personal code of ethics." This dimension seems contrary to the fundamental existence of the CCCU because its colleges and universities tend to have their own code of ethics that students, faculty, and staff must adhere to. In fact, most prospective students and faculty/staff do not attend these types of institutions unless they have already bought into the established code. This could influence the results of this study.

Last, when reliability of the scales were run it was found that Kuh and Umbach's (2004) dimensions of character did not hang together the way I, as the researcher, had hoped. Some might argue that using character as one item rather than the original eight is not ideal. However, that was not possible and is another limitation of this study. Also, when reliabilities of the benchmarks were run it was found that the benchmarks did not have high reliability. Whereas the benchmarks will be used as they were originally intended this is another limitation in this study work mentioning.

Lastly, and probably most importantly, Porter (2009) has questioned the validity and reliability of the NSSE and all the research, including his own, that has been done

using the data. More specifically, he takes issue with the content domain and asks why specific items are included in the survey, cites the vaguely worded questions and self-reporting method, and questions the construct of the five benchmarks. More recently, the entire Fall 2011 *Review of Higher Education* was dedicated to student engagement and the problems some see with the survey instrument and its, in their opinion, unreliable results. Specifically, the chapters by Porter (2011) and Olivas (2011) cite their dissatisfaction with the design of the survey and offer very pointed recommendations for making it better. As the researcher, I do not think their opinions change the quality of this dissertation or my work, but their opinions are worth mentioning as another limitation of this study.

Conclusion

This chapter was a synopsis of the survey instrument, everything to do with the sample and data preparation, and finishes with next steps as this dissertation moves from providing background information to running data and getting results. It was also the beginning of understanding my data set better and running Cronbach's alpha for the student engagement benchmarks and character which helped me make decisions regarding how each of the variables should be used or maybe altered for this study. This was an especially important concept to get done before data were actually analyzed.

Chapter 4: Results

The purpose of this study is to examine the relationship between college student engagement and character among freshmen and seniors attending Christian colleges. Engagement (through the five benchmarks) serves as the key independent variables in this study. The dependent variable is character. Data were analyzed using SPSS software and the following was completed: descriptive statistics, t-tests, correlation tables, and three multiple regressions. Results of all the analysis are reported in this chapter.

The first section is an overview of the descriptive statistics for the population as well as the dependent and independent variables which allowed me to better understand my sample and its various components. The second section outlines the t-tests, which were run to see if there were any significant differences between the freshmen and senior groups. The third section outlines the correlations, which allowed me to see the relationship between character (dependent variable) and the five student engagement benchmarks (independent variables). This was both for the combined group and for freshmen and seniors separately. Finally, the last section is an overview of the three multiple regressions that were run to see if there was a difference in what predicts character for freshmen and seniors. The aforementioned statistics will allow me as the researcher to answer my research questions.

Descriptive Statistics

All the students in the sample were full-time and started their collegiate career at the school they currently attend. Almost 5% ($n=94$) were international students. Males

comprised 30.9% of the sample ($n=595$) and females comprised 69.1% of the sample ($n=1331$). One student's gender was not reported. Racial and ethnic breakdown consisted of White (non-Hispanic), 84.3%, Other, 7.8%, Hispanic, 3%, Black, 2.6% and Asian American, 2.3%. Descriptive statistics for gender and ethnicity for freshmen and seniors combined are outlined in table 4.

Table 4

Summary of Frequencies and Percentages for Gender and Ethnicity/Race for both Freshmen and Seniors Combined.

Gender	Frequency	Percentage %
Male	595	30.9%
Female	1331	69.1%
Missing	1	.1%
Ethnicity/Race	Frequency	Percentage %
White (non-Hispanic)	1625	84.3%
Other	150	7.8%
Hispanic	58	3%
Black	50	2.6%
Asian American	44	2.3%

The above sample was split and frequencies and percentages for gender and ethnicity/race were performed for freshmen and seniors separately. Results were somewhat comparable to the overall group, but it seems there was a little more diversity in the freshman class than the senior class. As an example, 82.5% of freshmen classified themselves as White (non-Hispanic) while 86.8% of seniors classified themselves that way. This difference is obviously not significant, but it is noteworthy since it means that the freshman group has more Hispanic, Black, and Asian American students than the

senior group. Descriptive statistics for gender and ethnicity for both freshmen and seniors separately are outlined in table 5.

Table 5

Summary of Frequencies and Percentages for Gender and Ethnicity/Race for Freshmen and Seniors Separated.

Gender	Frequency		Percentage %	
	Fresh.	Seniors	Fresh.	Seniors
Male	334	261	29.9%	32.2%
Female	782	549	70.1%	67.8%
Missing	1		.1%	
Ethnicity/Race	Frequency		Percentage %	
	Fresh.	Seniors	Fresh.	Seniors
White (non-Hispanic)	922	704	82.5%	86.8%
Other	81	64	7.3%	7.9%
Hispanic	43	15	3.8%	1.9%
Black	39	11	3.5%	1.4%
Asian American	27	17	2.4%	2.1%

In many ways the sample for this study is not representative of college campuses nationally, but it is representative of the student population that attends schools affiliated with the Coalition of Christian Colleges and Universities (CCCU). This is especially important to emphasize because it highlights the difference between the two groups. As an example, the breakdown of male versus female students is not representative of the general student population, but it is close to the breakdown at Houston Baptist University where sixty-five percent of the student population is female (Houston Baptist University

Catalog, 2010). Houston Baptist University's ethnic breakdown does not match this study since it is located in Texas and has a very large Hispanic population, but it is representative at other CCCU schools where the ethnic breakdown, specifically African American students, is less than the national average (Cross and Slater, 2004). However, Cross and Slater do state that African American enrollments are on the rise at Christian institutions.

Further descriptive statistics run on the population include average SAT and ACT. This was first done for the combined group (both freshmen and seniors). Quite a few zero scores were included in the sample so those were removed before the descriptive statistics were run. After the zero scores were removed, the SAT minimum was 660 and the maximum was 1530. The ACT minimum was 12 and the maximum was 35. The mean (M) for the SAT was 1130.73 and the standard deviation (SD) was 195.565. The mean for the ACT was 24.82 and the standard deviation was 5.057. A summary of the SAT and ACT breakdown for freshmen and seniors combined is located in table 6.

Table 6

Summary of the Means and Standard Deviations for both SAT and ACT Tests for both Freshmen and Seniors Combined.

Test	Mean	Standard Deviation
SAT	1130.73	195.565
ACT	24.82	5.057

The combined group was split into freshmen and seniors. Results were similar to the above combined group. A summary of the SAT and ACT breakdown for freshmen and seniors separate is located in table 7.

Table 7

Summary of the Means and Standard Deviations for both SAT and ACT Tests for Freshmen and Seniors Separate.

Test	Mean		Standard Deviation	
	Fresh.	Seniors	Fresh.	Seniors
SAT	1072.1	1183.42	184.66	191.09
ACT	23.27	26.22	4.92	4.79

The national average of all test takers in 2007 was 1021 on the SAT (SAT, 2007) and 21.2 on the ACT (ACT, 2007). The average SAT of my overall sample was 1130.73 and the average ACT was 24.82. Whereas my sample is a little higher, the averages are close, which means my sample is somewhat comparable to the other high school students taking the ACT and SAT in 2007.

To better understand the sample, descriptive statistics were also run for the dependent variable of character as a whole (freshmen and seniors combined) and for freshmen and seniors separately. In addition, I ran the individual items of character for freshmen, seniors, and freshmen and seniors combined. This included both the means (*M*) and standard deviations (*SD*). In order to run descriptive statistics for character as a whole I had to first get the mean for the original variables which included understanding self, understanding people of other racial and ethnic backgrounds, working effectively with others, developing a personal code of ethics, solving complex real-world problems, contributing to the welfare of one's community, learning effectively on one's own and thinking critically and analytically. Character, as a composite item, had a mean of 2.99

and a standard deviation of .60. This was on a scale from 1 to 4 (coded 1=very little, 2=some, 3=quite a bit, 4=very much).

This means that the overall population reported and agreed “quite a bit” with the questions that measured character and their own level of character development. More specifically, this means both freshmen and seniors as a combined group had good levels of character. Later in this dissertation and in my statistical analysis, a t-test was run on character where the group was split into freshmen and seniors and means were compared. Results of that t-test will be reported later. Descriptive statistics for character are located in table 8.

Table 8

Summary of the Mean and Standard Deviation of Character (as one item). On a scale of 1 to 4.

	Mean	Standard Deviation
Character (as one item)	2.99	.60

As stated earlier, I also ran descriptive statistics for the individual character items. This was for freshmen, seniors, and the combined group of freshmen and seniors. Thinking critically and analytically and developing a personal code of ethics were the items with the highest means for all three groups. Understanding people of other racial and ethnic backgrounds and solving complex real-world problems were the items with the lowest means for all three groups. In addition, means were higher for the senior and combined groups than they were for the freshmen group. Results of the descriptive statistics for the individual items are reported in table 9.

Table 9

Summary of the Mean and Standard Deviation of the individual Character items. On a scale of 1 to 4.

	Mean			Standard Deviation		
	Fresh.	Seniors	Combined	Fresh.	Seniors	Combined
gnanaly	3.29	3.49	3.38	.721	.668	.706
gnothers	3.04	3.19	3.10	.800	.754	.784
gninq	2.86	3.02	2.93	.784	.824	.805
gnself	2.98	3.16	3.06	.865	.818	.850
gndivers	2.66	2.68	2.67	.929	.897	.915
gnprobsv	2.67	2.75	2.71	.869	.855	.864
gnethics	3.15	3.25	3.19	.865	.827	.850
gncommum	2.88	2.98	2.92	.914	.885	.904

Before running descriptive statistics on the student engagement benchmarks, a better understanding of the benchmarks and the idea of the 100-point scale is important to understanding the data being run. In order to do this, I found institutional benchmark scores for several institutions. None of the colleges are affiliated with the CCCU, but they are small and many have religious ties. Unfortunately, none of the data available on the NSSE website was for schools that were part of the CCCU. The colleges used for the below table are Hendrix in Conway, AR and Wheaton in Norton, MA. A summary of these colleges and my sample are located in table 10.

Table 10

Summary of Institutional Benchmarks from Hendrix, Wheaton, and my Sample. On a scale of 1 to 100.

	Hendrix Mean		Wheaton Mean		My Sample Mean	
	Fresh.	Seniors	Fresh.	Seniors	Fresh.	Seniors
Level of Academic Challenge	55.6	62.9	60	63	54.8	59
Active and Collaborative Learning	43.6	49.0	63	62	43.9	52.3
Student Faculty Interaction	37.4	56.4	40	49	33.3	46
Enriching Educational Experiences	34.1	52.5	63	62	28.5	50.4
Supportive Campus Environment	68.1	62.9	63	62	67.7	66

In addition, descriptive statistics were run on the independent variables (student engagement benchmarks). It was found that Level of Academic Challenge ($M=56.59$, $SD=12.33$) and Supportive Campus Environment ($M=67.00$, $SD=16.67$) had higher means while student faculty interaction ($M=38.72$, $SD=18.63$) and Enriching Educational Experiences ($M=37.69$, $SD=17.41$) had lower means. This is on a scale from 1 to 100. According to the 2007 NSSE codebook, student-level benchmark scores are each student's average responses after all the items have been placed on a 100-point scale (NSSE, 2011). Descriptive statistics for the engagement benchmarks are located in table 11.

Table 11

Summary of Means and Standard Deviations for Engagement Benchmarks. On a scale of 1 to 100.

	Mean	Standard Deviation
Level of Academic Challenge	56.59	12.33
Active and Collaborative Learning	47.47	14.64
Student Faculty Interaction	38.72	18.63
Enriching Educational Experiences	37.69	17.41
Supportive Campus Environment	67.00	16.67

I also ran descriptive statistics for the individual benchmark items for freshmen, seniors and the combined group. Most of the items were on a scale of 1 to 4. However, some items were on a scale of 1 to 5, 1 to 7, and 1 to 8. I removed those items from my table as it was impossible to get a valid comparison. The tables are separated by benchmark and presented in tables 12 thru 17.

The individual benchmark items for Level of Academic Challenge (LAC) that were on a scale of 1-4 included analyzing the basic elements of an idea, experience or theory, such as examining a particular case or situation in depth and considering its components, synthesizing and organizing ideas, information, or experiences into new, more complex interpretations and relationships, making judgments and the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions, applying theories or concepts to practical problems or in new situations, worked harder than you thought to meet an instructor's standards or expectations, and spending significant amounts of time studying and on academic work. For the combined group, analyzing the basic elements

of an idea, experience or theory, such as examining a particular case or situation in depth and considering its components ($M=3.16$, $SD=.732$) and spending significant amounts of time studying and on academic work ($M=3.26$, $SD=.698$) were the two items with the highest means. In addition, the means for seniors were higher than for the juniors on every item even though their means were somewhat comparable.

Table 12

Summary of Means and Standard Deviations for Level of Academic Challenge (LAC). On a scale 1 to 4.

	Mean			Standard Deviation		
	Fresh.	Seniors	Combined	Fresh.	Seniors	Combined
analyze	3.10	3.24	3.16	.750	.700	.732
synthesz	2.85	3.13	2.97	.815	.791	.817
evaluate	2.83	2.97	2.89	.818	.843	.831
applying	2.95	3.16	3.04	.794	.778	.794
workhard	2.56	2.61	2.58	.802	.823	.811
envschol	3.25	3.26	3.26	.691	.708	.698

The individual benchmark items for Active and Collaborative Learning (ACL) consist of asked questions in class or contributed to class discussions, made a class presentation, worked with other students on projects during class, worked with classmates outside of class to prepare class assignments, tutored or taught other students, participated in a community-based project as part of a regular course, and discussed ideas from your readings or classes with others outside of class. For the first benchmark the means were somewhat comparable for freshmen and seniors. For this benchmark none of the means are considerably high except for asked questions in class or contributed to class discussions ($M=3.16$, $SD=.817$) and discussed ideas from your readings or classes with others outside of class ($M=3.00$, $SD=.821$) for the senior group. There is also a

pretty wide difference between some of the items for the freshmen and senior groups. As an example, asked questions in class or contributed to class discussions, made a class presentation, and tutored or taught other students had much higher means for the senior group than they did for the freshmen group. On the contrary, participated in a community-based project as part of a regular course had a higher mean for the freshmen ($M=2.00$, $SD=.852$) than it did for the seniors ($M=1.99$, $SD=.847$).

Table 13

Summary of Means and Standard Deviations for Active and Collaborative Learning (ACL). On a scale 1 to 4.

	Mean			Standard Deviation		
	Fresh.	Seniors	Combined	Fresh.	Seniors	Combined
clquest	2.76	3.16	2.93	.810	.817	.836
clpresen	2.16	2.77	2.42	.700	.736	.777
classgrp	2.15	2.19	2.16	.751	.766	.757
occgrp	2.60	2.73	2.65	.763	.777	.771
tutor	1.72	2.16	1.91	.813	1.00	.923
commproj	2.00	1.99	1.99	.852	.847	.850
oocideas	2.84	3.00	2.91	.809	.821	.818

The individual benchmark items for Student-Faculty Interaction (SFI) are discussed grades or assignments with an instructor, discussed ideas from your readings or classes with faculty members outside of class, talked about career plans with a faculty member or advisor, received prompt written or oral feedback from faculty on your academic performance, worked with faculty members on activities other than coursework, and worked with a faculty member on a research project. Once again all the items for seniors had means higher than for the freshmen. This was also the benchmark that had the lowest benchmark item scores with none of the means for any of the groups being higher than a 2.80. The lowest item scores came from worked with faculty

members on activities other than coursework ($M=1.70$, $SD=.781$) and worked with a faculty member on a research project ($M=1.77$, $SD=.888$) for the freshmen group. The senior group and combined group for each of those items were also low, but the freshmen was by far the lowest.

Table 14

Summary of Means and Standard Deviations for Student-Faculty Interaction (SFI). On a scale 1 to 4.

	Mean			Standard Deviation		
	Fresh.	Seniors	Combined	Fresh.	Seniors	Combined
facgrade	2.48	2.74	2.59	.803	.828	.824
facideas	1.88	2.27	2.04	.827	.870	.867
facplans	2.26	2.68	2.44	.812	.872	.862
facfeed	2.59	2.80	2.68	.765	.720	.753
facother	1.70	2.20	1.91	.781	.986	.906
resrch04	1.77	2.39	2.03	.888	.895	.943

Individual items for Enriching Educational Experiences (EEE) include had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values, had serious conversations with students of a different race or ethnicity than your own, encouraging contact among students from different economic, social, and racial or ethnic backgrounds used an electronic medium to discuss or complete an assignment, practicum, internship, field experience, co-op experience, or clinical assignment, community service or volunteer work. In addition, the rest of the items include participate in a learning community or some other formal program where groups of students take two or more classes together, foreign language coursework, study abroad, independent study or self-designed major, and culminating senior experience. The individual items for EEE have several items where the freshmen group had a higher mean than the senior group. This is the case for

had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values, had serious conversations with students of a different race or ethnicity than your own, and encouraging contact among students from different economic, social, and racial or ethnic backgrounds. However, the rest of the eight items all have mean scores that are higher for seniors than freshmen.

Community service or volunteer work had the highest mean for the freshmen, seniors and the combined group.

Table 15

Summary of Means and Standard Deviations for Enriching Educational Experiences (EEE). On a scale 1 to 4.

	Mean			Standard Deviation		
	Fresh.	Seniors	Combined	Fresh.	Seniors	Combined
diffstud2	2.59	2.53	2.56	.938	.886	.917
divrstud	2.50	2.46	2.48	.991	.950	.974
envdivrs	2.81	2.65	2.74	.896	.950	.922
itacadem	2.48	2.58	2.52	1.025	1.027	1.027
intern04	2.74	3.49	3.05	.843	.862	.928
volIntr04	3.39	3.68	3.51	.899	.778	.862
lrncom04	1.93	2.61	2.21	1.048	1.049	1.099
forlng04	2.77	3.23	2.96	.982	.995	1.013
stdabr04	2.32	2.77	2.51	.902	1.028	.982
indstd04	1.77	2.59	2.12	.729	.962	.927
snrx04	2.17	3.30	2.64	.958	.872	1.080

The three items for Supportive Campus Environment (SCE) are providing the support you need to thrive socially, providing the support you need to help you succeed academically, and helping you cope with your non-academic responsibilities.

Interestingly enough, all three items have higher mean scores for the freshmen and combined group. The senior group had the lowest means. Providing the support you

need to help you succeed academically ($M=3.21$, $SD=.702$) had the highest means for all three groups, but the freshmen group was the highest out of all three.

Table 16

Summary of Means and Standard Deviations for Supportive Campus Environment (SCE). On a scale 1 to 4.

	Mean			Standard Deviation		
	Fresh.	Seniors	Combined	Fresh.	Seniors	Combined
envsocial	2.65	2.51	2.59	.876	.865	.873
envsuprt	3.21	3.15	3.18	.702	.743	.720
envnacad	2.46	2.23	2.36	.871	.854	.871

The NSSE Institute has several colleges and universities on their website that have published their institutional data. Unfortunately, none of the schools are part of the CCCU. However, Hendrix College in Conway, Arkansas is included and it is considered a small liberal arts college, with an enrollment under 1500, and it is also distinctively Christian (Hendrix University, 2012). According to its website, Hendrix had higher benchmark scores than the other two categories of institutions (which included other liberal arts colleges and the entire sample) in every benchmark except ‘Active and Collaborative Learning’ where the three groups were pretty comparable. When compared to my sample from that same year, it seems that my group (of CCCU schools) had benchmark scores comparable to Hendrix and other liberal arts colleges’ benchmark scores but those scores were definitely higher than the overall population for that same year. This means that my group of CCCU schools had good levels of engagement compared to other institutions from that same year.

Comparison of Means by Freshmen and Senior Students

In order to find out if there are any significant differences between the freshmen and senior groups, several independent–samples t-test were computed. A total of six t-tests were run on the sample. The total included one on the dependent variable of character and five on the independent variables or student engagement benchmarks.

Results from the t-test on character reveal that the differences between freshmen and seniors' character is significant at alpha level .01. This means that there are statistically significant differences in means for freshmen ($M=2.94$, $SD=.67$) and seniors ($M=3.07$, $SD=.58$) on self-reported character. More specifically, seniors have higher self-reported gains in character development than freshmen. Table 17 presents the means and standard deviations for freshmen and senior students when it comes to their character.

Table 17

Summary of Means and Standard Deviations for Character.

Character	Means and Standard Deviations		T-test value $t(1923)=$	Significance Level (p)
	Fresh.	Seniors		
	M=2.94 SD=.67	M=3.07 SD=.58	-4.47	$p<.01^*$

**The mean difference is significant at the .01 level.*

Results from the t-tests on the student engagement benchmarks reveal that Level of Academic Challenge, Active and Collaborative Learning, Student-Faculty Interaction

and Enriching Educational Experiences are all significant at alpha level .001 when comparing freshmen and seniors. This means that there are statistically significant differences in means for freshmen and seniors when it comes to the aforementioned benchmarks. More specifically, the seniors rated their institutions higher than the freshmen on four of the five benchmarks. In addition, Supportive Campus Environment is significant at alpha level .05. In this case freshmen ($M=67.72$, $SD=16.76$) rated their schools as higher in Supportive Campus Environment than did the seniors ($M=66.01$, $SD=16.49$) in the sample. Results of the engagement benchmarks are shown in table 18.

Table 18
Summary of Means and Standard Deviations for each of the Student Engagement Benchmarks.

Engagement Benchmarks	Means and Standard Deviations		T-test value $t(1922)=$	Significance Level (p)
	Fresh.	Seniors		
Level of Academic Challenge	M=54.81 SD=11.91	M=59.04 SD=12.49	-7.53	$p<.001^{***}$
Active and Collaborative Learning	M=43.93 SD=13.95	M=52.34 SD=14.17	-12.98	$p<.001^{***}$
Student-Faculty Interaction	M=33.39 SD=16.16	M=46.08 SD=19.31	-15.65	$p<.001^{***}$
Enriching Educational Experiences	M=28.52 SD=11.43	M=50.35 SD=16.28	-34.558	$p<.001^{***}$
Supportive Campus Environment	M=67.72 SD=16.76	M=66.01 SD=16.49	2.23	.026*

*The mean difference is significant at the .05 level.

***The mean difference is significant at the .001 level.

Relationship between Student Engagement Benchmarks and Character

A bivariate correlation was run to show the association between character (dependent variable) and the five student engagement benchmarks (independent variables). This was done for the sample as a whole (both freshmen and seniors combined) and the freshmen and senior samples separately. According to Creswell (2002), the relationship between the two variables is noted by the correlation coefficient (r). The correlation coefficient ranges from -1 to +1 and indicates the strength of the relationship between the two variables.

Overall results show that all the relationships between the independent variables and the dependent variable were significant and positive for the freshmen, seniors, and the combined group. Independent variables included: Level of Academic Challenge, Active and Collaborative Learning, Student-Faculty Interaction, Enriching Educational Experiences, and Supportive Campus Environment. The dependent variable was character.

For the combined group Supportive Campus Environment was the most strongly correlated with the dependent variable of character ($r = .586, p < .01$). Closely behind was Level of Academic Challenge ($r = .469, p < .01$), Student-Faculty Interaction ($r = .416, p < .01$) and Active and Collaborative Learning ($r = .381, p < .381$). In contrast, Enriching Educational Experiences had the weakest relationship ($r = .330, p < .01$) even though it too was significant and positive. This means that each of the five benchmarks, in their own way, was positively correlated with character.

For the freshmen and senior groups the results were similar. All the relationships were significant and positive for both the freshmen and senior groups. Supportive

Campus Environment once again had the strongest relationship for both freshmen ($r = .595, p < .01$) and seniors ($r = .595, p < .01$). Enriching Educational Experiences had the weakest relationship for both freshmen ($r = .344, p < .01$) and seniors ($r = .355, p < .01$). The only difference was in the strength of the relationships. As an example, seniors did not have as strong a relationship between Student-Faculty Interaction and character as the freshmen or combined group did. Results of the correlation between the student engagement benchmarks and character are found in Table 19.

Table 19

Summary of Correlation between Student Engagement Benchmarks and Character for Freshmen, Seniors, and the Sample as a Whole (Combined).

Engagement Benchmarks	Character		
	Fresh.	Seniors	Combined
Level of Academic Challenge	.485**	.429**	.469**
Active and Collaborative Learning	.371**	.369**	.381**
Student-Faculty Interaction	.435**	.381**	.416**
Enriching Educational Experiences	.344**	.355**	.330**
Supportive Campus Environment	.595**	.595**	.586**

***The mean difference is significant at the .01 level.*

Regression Analyses

A regression analyses helps us understand how the typical value of the dependent variable of character changes when any one of the independent variables is varied while the other independent variables are held constant (Creswell, 2002). Using multiple regressions, the student engagement benchmarks (independent variables) were regressed against character (dependent variable) controlling for gender, ethnicity, grades and age. This means each model had nine variables which included gender, ethnicity, grades, age, Level of Academic Challenge (AC), Active and Collaborative Learning (ACL), Student-

Faculty Interaction (SFI), Enriching Educational Experiences (EEE) and Supportive Campus Environment (SCE). Past research has indicated that the control variables have influenced the five student engagement benchmarks in past research and were therefore included (Hu and Kuh, 2002). Lastly, separate regression analyses were run for freshmen and seniors. The purpose was to see if there was a difference in what predicts character for the two groups.

Specific details, including R^2 values, beta weight (B), and levels of significance are included. The R^2 is the amount of variance explained in the dependent variable by the independent variables (Creswell, 2002). The beta weight (B) and level of significance (p) allows one to compare strengths of each of the independent variables and allows me, as the researcher, to conclude whether or not the results are significant or could be attributed to something other than chance (Creswell).

For the first regression both freshmen and seniors were used, so 'class' was included in the model as an independent variable. 'Age' was not included because age is too highly correlated with year in school. Results of the regression indicate that $R^2=.462$ which means about 46 percent of the variance in character is explained or counted for by the independent variables after controlling for gender, ethnicity and grades.

Additionally, when using both freshmen and seniors in the sample it was found that Academic Challenge (Beta=.226, $p=.000$) and Supportive Campus Environment (Beta=.448, $p=.000$) were statistically significant and the best predictors of character. More specifically, Supportive Campus Environment had the highest Beta which means it is the best predictor of character. Active and Collaborative Learning (Beta=.066, $p=.004$), Student-Faculty Interaction (Beta=.063, $p=.009$) and Enriching Educational

Experiences (Beta=.129, $p=.000$) were not as good of predictors of character, but they too were significant. In addition, ethnicity, gender, grades and year in school were not significant predictors of character. Results of the regression for freshmen and seniors combined are located in Table 20.

Table 20

Summary of Regression for both Freshmen and Seniors Combined.

Independent Variables	b	Beta	Significance Level
(Constant)	.927		.000
Other Race	.015	.006	.711
Hispanic	.072	.020	.239
Black	-.055	-.015	.398
Asian	-.002	.000	.980
Gender	.020	.015	.378
Grades	-.004	-.010	.583
Class	-.039	-.032	.152
Level of Academic Challenge	.011	.226	.000**
Active and Collaborative Learning	.003	.066	.004**
Student-Faculty Interaction	.002	.063	.009**
Enriching Educational Experiences	.004	.129	.000**
Supportive Campus Environment	.016	.448	.000**

***Significant at the .01 level.*

For the second regression only freshmen were included. Results of the second regression with only freshmen indicate $R^2=.467$ which means that almost 47 percent of the variance in character is explained or counted for by the independent variables after controlling for gender, ethnicity, grades and age. Supportive Campus Environment

(Beta=.430, $p=.000$) was statistically significant and the best predictor of character. In addition, Academic Challenge (Beta=.238, $p=.000$), Student-Faculty Interaction (Beta=.106, $p=.000$) and Enriching Educational Experiences (Beta=.102, $p=.000$) were significant. However, Active and Collaborative Learning (Beta=.021, $p=.469$) was not significant and therefore not a good predictor of character. In addition, ethnicity, gender, grades, and age were not significant predictors of character. The summary of the freshmen regression is outlined in table 21.

Table 21

Summary of Regression Predicting Character for Freshmen.

Independent Variables	b	Beta	Significance Level
(Constant)	.674		.000
Age	.109	.032	.148
Gender	.054	.040	.075
Other Race	.009	.005	.814
Grades	.006	.017	.456
Level of Academic Challenge	.012	.238	.000**
Active and Collaborative Learning	.001	.021	.469
Student-Faculty Interaction	.004	.106	.000**
Enriching Educational Experiences	.005	.102	.000**
Supportive Campus Environment	.016	.430	.000**

**Significant at the .05 level.*

***Significant at the .01 level.*

For the third regression only seniors were included. Results of the regression predicting character for seniors indicate $R^2=.452$ which means that 45 percent of the variance in character is explained or counted for by the independent variables after controlling for all of the independent variables including NSSE benchmarks, gender,

ethnicity, grades and age. This time Supportive Campus Environment (Beta=.464, $p=.000$) was the best predictor of character. Academic Challenge (Beta=.188, $p=.000$), Active and Collaborative Learning (Beta=.096, $p=.004$) and Enriching Educational Experiences (Beta=.140, $p=.000$) were also significant. Student-Faculty Interaction (Beta=.028, $p=.433$) was not significant and therefore not a good predictor of character. Again, ethnicity, gender, grades, and age were not significant predictors of character. The summary of the regression for seniors is outlined in table 22.

Table 22

Summary of Regression for Seniors Predicting Character.

Independent Variables	b	Beta	Significance Level
(Constant)	.903		.000
Age	.110	.054	.044
Gender	-.006	-.004	.869
Other Race	-.004	-.002	.930
Grades	-.022	-.054	.049
Level of Academic Challenge	.009	.188	.000**
Active and Collaborative Learning	.004	.096	.004*
Student-Faculty Interaction	.001	.028	.433
Enriching Educational Experiences	.005	.140	.000**
Supportive Campus Environment	.016	.464	.000**

**Significant at the .05 level.*

***Significant at the .01 level.*

There were noticeable differences between the second regression that only included freshmen and the third regression that only included seniors. As an example, even though Supportive Campus Environment was a significant predictor of character for both groups, it was more predictive for the senior group. In addition, seniors had higher

benchmark scores for Active and Collaborative Learning and Enriching Educational Experiences while freshmen had higher benchmark scores for Academic Challenge and student-faculty interaction. Also interesting was the fact that Student-Faculty Interaction was not significant, and therefore not a predictor of character for seniors, but it was significant and a predictor of character for freshmen. In addition, Active and Collaborative Learning was significant for seniors, but not for freshmen.

Summary

The results of the t-test on character indicate that seniors have higher self-reported gains in character development than freshmen students. Additionally, results from the t-tests on the student engagement benchmarks reveal that Level of Academic Challenge, Active and Collaborative Learning, Student-Faculty Interaction and Enriching Educational Experiences are all significant at alpha level .001 and Supportive Campus Environment is significant at alpha level .05. This means that there are statistically significant differences in means for freshmen and seniors when it comes to the aforementioned benchmarks. More specifically, when means were examined for seniors, Level of Academic Challenge, Active and Collaborative Learning, Student-Faculty Interaction and Enriching Educational Experiences were higher. When means were examined for freshmen, it was found that Supportive Campus Environment was higher.

After completing a bivariate correlation to look at the relationship between the student engagement benchmarks and character, it was found that the all the relationships between the independent variables (benchmarks) and the dependent variable (character) were significant and positive. This means that each of the five benchmarks, in their own way, was positively correlated with character.

Lastly, for the three regressions, it was found that Supportive Campus Environment was the best predictor of character for all three groups (freshmen and seniors combined, freshmen, and seniors). Seniors had higher benchmark scores for three of the five benchmarks (Supportive Campus Environment, Active and Collaborative Learning and Enriching Educational Experiences) while freshmen had higher benchmark scores for two of the benchmarks (Academic Challenge and Student-Faculty Interaction). In addition, the same variables were not predictive for both groups. Student-Faculty Interaction was not predictive for seniors, but it was predictive for freshmen while Active and Collaborative Learning was not predictive for freshmen, but it was predictive for seniors.

Chapter 5: Discussion

The purpose of this study was to examine the relationship between character and college student engagement among freshmen and seniors attending schools that are part of the Council for Christian Colleges and Universities (CCCU). This was done by using the National Survey of Student Engagement (NSSE). The NSSE is secular in nature which might not seem ideal in a study on Christian colleges, but it is by far the best measure of character found for my study.

For purposes of this study, the character items were:

1. Knowledge of self:
 1. Understanding self
 2. Understanding people of other racial and ethnic backgrounds
 3. Working effectively with others
2. Ethical development and problem solving:
 1. Developing a personal code of ethics
 2. Solving complex real-world problems
3. Civic responsibility:
 1. Contributing to the welfare of one's community
4. Processing information:
 1. Learning effectively on one's own
 2. Thinking critically and analytically

According to applicable literature (Astin, 1993; Kuh, 2001; Kuh, 2003; Kuh et al., 2005; Pace, 1984; Pascarella & Terenzini, 1991, 2005), student engagement is the amount of energy and time students put toward their educational and extracurricular activities in college. The five student engagement scales were created to measure student engagement (Kuh, 2001). As stated earlier, all the benchmarks were included because they could all potentially impact character. As an example, Level of Academic Challenge was included because according to Kuh those general education skills are required to lead a reflective and civic-minded life. Active and Collaborative Learning

was included because it includes participation in community-based projects and Student-Faculty Interaction was included because it involves working well with others. Enriching Educational Experiences was included because it involves learning about and accepting differences in people, and Supportive Campus Environment was included because it includes support from faculty, but also support from one's peers.

The student engagement benchmarks are:

1. Level of Academic Challenge
2. Active and Collaborative Learning
3. Student-Faculty Interaction
4. Enriching Educational Experiences
5. Supportive Campus Environment

This chapter provides a summary of my findings and a broader discussion of the results and how they fit with this dissertation and the broader study of character, student engagement and Christian colleges and universities. It is divided into six sections. The first section highlights my major research findings, the next four sections (divided by research questions) are a more elaborate review of those findings along with a discussion of their importance and how they fit into the broader study of this topic and the field of higher education. The fifth section highlights implications for practice and implications for future research. The six, and final section, includes my concluding remarks.

Summary of Findings

The most interesting and intriguing results of this dissertation were that seniors have higher self-reported gains in character development than freshmen and seniors rated their institutions higher than freshmen on all the benchmarks except Supportive Campus

Environment. In addition, results show that all the relationships between the student engagement benchmarks and character were significant and positive. More specifically, Supportive Campus Environment was the most strongly correlated with the dependent variable of character.

Supportive Campus Environment was also the best predictor of character for freshmen and seniors combined, freshmen, and seniors. Supportive Campus Environment, Active and Collaborative Learning and Enriching Educational Experiences were the best predictors for seniors while Academic Challenge and Student-Faculty Interaction were the best predictors for freshmen. In addition, the same variables were not predictive for both groups. Student-Faculty Interaction was not predictive for seniors, but it was predictive for freshmen while Active and Collaborative Learning was not predictive for freshmen, but it was predictive for seniors.

Summary of Findings and Discussion for Research Question 1

Are there differences in self-reported gains in character development for freshman versus senior students?

As stated earlier, results of this study indicated that seniors have higher self-reported gains in character development than freshmen. This finding is important because it might indicate that the CCCU and its members are positively impacting the character development of their students (over a four year experience). It is impossible to speculate whether or not the CCCU is completely responsible for this phenomenon, but nonetheless this finding is important. It is especially interesting when it is coupled with Kuh and Umbach (2004) findings that were highlighted earlier in this dissertation. In their research, they reported greater gains in character development at private institutions

compared to public institutions and more specifically greater gains for religiously affiliated institutions compared to unaffiliated institutions. My findings, along with their findings, make it seem like some colleges and universities are doing something good when it comes to character development of their students.

Besides Kuh and Umbach (2004), there is no other research that uses the dimensions of character outlined in this study. However, some research does exist on self-reported gains in moral development which I have argued earlier in this dissertation is the same as character. As an example, McNeel (1994) found that freshmen at a liberal arts college started with the highest scores compared to other schools in moral development but more importantly for this study found gains in moral development from the freshman to senior year. Additionally, some research has reported year in college as the strongest predictor of moral development (Bebeau & Thoma, 2003; Finger, Borduin, & Baumstark, 1992; Lindsay et. al, 2007; Wilson, Rest, Boldizar, & Deemer, 1992). More specifically, persisting to higher levels of post-secondary education has a positive impact on moral development (Finger, Borduin, & Baumstark, 1992; Rest, 1979; Rest & Thoma, 1985; Rykiel, 1995; Whiteley & Associates, 1982; Whiteley, Bertin, & Berry, 1980; Wilson, Rest, Boldizar, & Deemer, 1992).

Both Kohlberg's (1958) theory of moral development and Chickering and Reisser's (1993) theory of Identity Development acknowledge that concepts can develop on a continuum or series of stages over time just like I found with character. According to Colby, Kohlberg, Gibbs, and Lieberman (1983), even if moral development does not correspond to age, it will still progress in a predictable pattern where people start by making moral decisions in hopes of avoiding punishment or seeking rewards (pre-

conventional stages) all the way to making moral decisions guided by universal ethical principles (conventional and post-conventional stages). According to Chickering and Reisser's (1993) theory of Identity Development, the seven vectors of developing competence, managing emotions, moving through autonomy toward interdependence, developing mature interpersonal relationships, establishing identity, developing purpose, and developing integrity also move along a continuum.

There are potentially many explanations for why seniors report higher gains in character development than freshmen, but in this situation, the data suggest that attending a school affiliated with the CCCU is improving the character of their students. This is important in a society where college graduates with high character are more likely to “work toward the public good, with integrity and personal responsibility that reflect their examined understanding of their ethical responsibility to self and the larger community” (Kuh and Umbach, 2004, p. 37).

Summary of Findings and Discussion for Research Question 2

What specific dimensions of character and benchmarks distinguish students who attend CCCU schools?

To better understand this study, and the individual items associated with the dependent and independent variables, I ran descriptive statistics for each item of character and each item under the student engagement benchmarks. This allowed me to see which items had higher means and consequently which items were more notable.

For character the items with the highest means were thinking critically and analytically and developing a personal code of ethics. This means that the overall sample self-reported that thinking critically and analytically and developing a personal code of

ethics led to higher self-reported gains in character. In addition, all the means were higher for the senior population than they were for the freshmen population which means that the students reported greater gains in character after being on campus for several years.

When it came to examining the individual benchmark items, I found several items with considerable means. They include examining a particular case or situation in depth and considering its components and spending significant amounts of time studying and on academic work for Level of Academic Challenge.

Asked questions in class or contributed to class discussions and discussed ideas from your readings or classes with others outside of class for Active and Collaborative Learning. In addition, for this benchmark, asked questions in class or contributed to class discussions, made a class presentation, and tutored or taught other students had much higher means for the senior group than they do for the freshmen group. On the contrary, participating in a community-based project as part of a regular course had a higher mean for the freshmen than it did for the senior sample.

Student-Faculty Interaction had the lowest item scores of all the benchmarks (all the items were low, but the freshmen group was especially low). The lowest item scores come from worked with faculty members on activities other than coursework and worked with a faculty member on a research project.

The individual items for EEE have several items where the freshmen group has a higher mean than the senior group. This was the case for had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values, had serious conversations with students of a different race

or ethnicity than your own, and encouraging contact among students from different economic, social, and racial or ethnic backgrounds. Community service or volunteer work had the highest mean for the freshmen, seniors and the combined group.

Interestingly enough, all three items have higher mean scores for the freshmen and combined group for the benchmark of Supportive Campus Environment. Providing the support you need to help you succeed academically had the highest means for all three groups, but the freshmen group was the highest of all three.

Overall the items that had higher means under the Student Engagement Benchmarks are what you would expect them to be. Without listing every item again, I think the majority of the items with higher means are characteristics and qualities of hard-working, dedicated, and socially aware students. I did find it interesting that Student-Faculty Interaction had the lowest item scores of all the benchmarks and that specifically working with faculty members on activities other than coursework and working with a faculty member on a research project were so unimportant.

Summary of Findings and Discussion for Research Question 3

Are there significant differences in benchmarks or character for freshmen versus seniors?

Results of the t-tests indicated that seniors reported four of the five benchmarks higher than freshmen. Specifically, the benchmarks were Level of Academic Challenge, Active and Collaborative Learning, Student-Faculty Interaction and Enriching Educational Experiences. On the contrary, freshmen reported Supportive Campus Environment higher than seniors which is perplexing and will be explored in detail later in this chapter. In addition, results of the multiple regressions indicate that seniors had

higher benchmark scores for three of the five benchmarks (Supportive Campus Environment, Active and Collaborative Learning and Enriching Educational Experiences) while freshmen had higher benchmark scores for two of the benchmarks (Academic Challenge and Student-Faculty Interaction). This means that Supportive Campus Environment, Active and Collaborative Learning and Enriching Educational Experiences all predicted character better for seniors than freshmen. It also means that Academic Challenge and Student-Faculty Interaction are less useful for seniors.

Results of the freshmen regression indicated that Supportive Campus Environment, Academic Challenge, Student-Faculty Interaction and Enriching Educational Experiences were significant and predictors of character. Active and Collaborative Learning was not significant and therefore not a good predictor of character. Results of the senior regression indicated that Supportive Campus Environment, Academic Challenge, Active and Collaborative Learning and Enriching Educational Experiences were also significant and predictors of character. Student-Faculty Interaction was not significant for seniors and therefore not a predictor of character.

The fact that the same variables were not predictive for both the freshmen and senior groups is noteworthy (especially since all five of the benchmarks were significant in the freshmen and senior combined regression). As the researcher, I can only speculate as to why Active and Collaborative Learning was not significant for freshmen (but was significant for seniors). It might have had to do with the sample size. Or, it could be that Active and Collaborative Learning does not occur much during the freshman year when students are taking general education courses. In addition, I can only speculate why

Student-Faculty Interaction was not significant for seniors (but was significant for freshmen). I would assume that it has to do with the fact that Student-Faculty Interaction is so crucial earlier in a college career. As students get older, as in senior year, they have learned better how to navigate their college environment and are not so dependent on just faculty relationships. They have met students and staff along the way and are equally, if not more helpful, in helping them navigate their college environment.

All of these findings can be related back to student engagement theory.

According to Kuh (2003; 2009), the more students study, the more they know about the subject they are studying. The more students get feedback from faculty and staff members, the more they understand what they are learning. It would make sense then, that students, specifically seniors, who are exposed to the aforementioned items over a longer period of time, would report higher levels than students, specifically freshmen, who have not been exposed to them as long.

Summary of Findings and Discussion for Research Question 4

What factors, with particular attention to the benchmark indicators, predict students' self-reported gains in character development at CCCU institutions?

Results of this study indicated that Supportive Campus Environment was the best predictor of character at CCCU schools for all three groups (freshmen and seniors combined, freshmen and seniors). Knowing that a Supportive Campus Environment is the benchmark that most predicts character at CCCU schools is important because it can also be directly related back to Chickering and Reisser's (1993) theory of Identity Development. According to Chickering and Reisser, all students move through the vectors at different rates. However, their theory does acknowledge the institution's challenge and support and how environment can both positively and negatively impact a

student's progression. According to Chickering and Reisser (1993), educational environments have a lot of influence when it comes to students. Some examples include institutional objectives and size, interaction of faculty and students, curriculum, and support from student affairs programs and services (Chickering and Reisser).

Additionally, results of the combined regression (both freshmen and seniors) resulted in Academic Challenge, Supportive Campus Environment, Active and Collaborative Learning, Student-Faculty Interaction and Enriching Educational Experiences being statistically significant and predictors of character. Supportive Campus Environment had the highest beta with Academic Challenge second, Enriching Educational Experiences third, Active and Collaborative Learning fourth, and Student-Faculty Interaction fifth (even though it too was significant).

These findings are interesting because they reinforce the type of educational experience being offered at the CCCU schools in this sample. If all five benchmarks predict character for the freshmen and senior combined group, the institutions are obviously providing high quality activities that the survey responders felt contributed to their character. What is not known is what gains in character would occur without college, and in this case, without attending a CCCU institution. However, this is beyond the scope of this study.

Implications for Practice and Implications for Future Research

This study and my findings are important to members of the CCCU because a positive relationship between student engagement and character means that the more engaged their students are the higher the level of character they will have. In fact, this is important to members of the CCCU, but an argument could be made that it is important

to the future of all college graduates. If students are more engaged, and have higher levels of character, they are likely to “work toward the public good, with integrity and personal responsibility that reflect their examined understanding of their ethical responsibility to self and the larger community” (Kuh and Umbach, 2004, p. 37). This type of college output benefits everyone.

This study is also helpful to Christian institutions, faculty and staff working at Christian institutions, and the CCCU because it gives them specific areas they can work towards to increase the value and type of experience they provide in higher education. Specifically, members of the CCCU can begin by looking at each of the benchmarks that did not predict character and make a plan to implement new programs and policies that can impact the student engagement and character development of their students. In addition, this study will add to the broader research on Christian institutions and on character in college students and will yield recommendations to CCCU institutions on how, through student engagement, to develop the character of their students. Specific recommendations will be presented later in this chapter. It also validates all the hard work that members of the CCCU do in order to get and keep their students engaged in the collegiate process. After this type of study they know their efforts are not futile because concepts like a Supportive Campus Environment do make a difference.

In addition, many of concepts and programs they implement on their college campus could be seen as providing a Supportive Campus Environment and potentially increasing student engagement and consequently character of their students. More specifically, Supportive Campus Environment, Academic Challenge, Student-Faculty Interaction and Enriching Educational Experiences were significant and predicted

character for freshmen students. Conversely, Active and Collaborative Learning was not significant and therefore not a good predictor of character. Based on these findings I would recommend that members of the CCCU continue activities that reinforce the aforementioned significant benchmarks. As an example, activities like quality of relationships with faculty and staff for Supportive Campus Environment, emphasizing time studying and on academic work for Academic Challenge, discussing grades and assignments with an instructor for Student-Faculty Interaction and talking with students with different religious beliefs, political opinions, or values than your own for Enriching Educational Experiences.

In addition, I think that CCCU member schools should look at activities that lead to Active and Collaborative Learning and see if they can create an environment where the activities are easier for freshmen to experience. Some of the activities include things like making a class presentation, working with other students on projects during class, tutoring or teaching other students, and participating in a community-based project as part of a course. Some of the activities mentioned seem to be things that might not be readily available to first year students. As an example, freshmen might not be working with other students on projects because they are potentially taking general education requirements where the class size is a little bigger and maybe not conducive to this type of activity. In addition, they might be activities like tutoring that are reserved for seniors because they require more experience and responsibility. Since Active and Collaborative Learning was predictive of character for seniors, I would think that with a little more intention, it is possible that the freshmen cohort could also benefit from the activities associated with this benchmark.

Results of the senior regression indicated that Supportive Campus Environment, Academic Challenge, Active and Collaborative Learning and Enriching Educational Experiences were also significant and predictors of character. Student-Faculty Interaction was not significant for seniors and therefore not a predictor of character. Based on these findings I would recommend that members of the CCCU continue activities that are associated with Supportive Campus Environment, Academic Challenge, Active and Collaborative Learning and Enriching Educational Experiences. I think an ideal environment has lots of Student-Faculty Interaction so it worries me a bit it was not predictive for seniors, but as long as seniors are getting the type of daily interactions they need to be successful, I would not say CCCU member schools should worry. However, I think creating opportunities for student and faculty interactions for all levels of students is a very beneficial idea.

Implications of running the individual items for both character and the student engagement benchmarks is that I now have specific items to point to that distinguish students who attend CCCU schools. As an example, for character the items with the highest means were thinking critically and analytically and developing a personal code of ethics. The benchmark items with the highest combined means were examining a particular case or situation in depth and considering its components, applying theories or concepts to practical problems or in new situations, practicum, internship, field experience, co-op experience, or clinical assignment, community service or volunteer work, and providing the support you need to help you succeed academically. This is helpful to members of the CCCU because they know what is already working well on

their college campuses. They can also look at the individual items that did not perform as well and know that those are things they need to work on.

There are some questions that are still unanswered mainly because they were beyond the scope of this study. As an example, I would be interested to see if I would have received similar results if I would have only looked at Catholic institutions since they too take character development and morals seriously. I am also interested to know whether or not different populations (like Greek students, athletes, or internationals) would have had the same benchmarks or different ones be predictive for the overall population or the freshmen or senior groups. I would also like to see more studies with Kuh and Umbach's (2004) dimensions of character. As stated throughout this dissertation, there are few measurements of character and definitely not one measurement that is used universally. As a researcher that used Kuh and Umbach's dimensions, and felt they measured character well, I would like to see the dimensions used and consequently validated in some other research.

After doing this research, I feel like there are a lot more research opportunities available on character and the CCCU. Not enough has been done on either subject. Part of this is because the CCCU only consists of 110 institutions. In addition, they are a non-profit that has many goals, none of which are to make themselves better understood or more well known. As an organization, it seems they are content working with their current constituents and programs. As the researcher in this study, I would recommend that the CCCU spend more time and resources on research that will undoubtedly reinforce their unique type of educational environment and the positive type of educational experience they provide.

Concluding Remarks

The purpose of this study was to examine the relationship between character and college student engagement among freshman and seniors attending Christian colleges. I feel the results of this study were positive and I was successful in finding results that validate the unique type of experience at CCCU schools. I think this was important because although these schools are viable options for many prospective students, they are seen as subpar by some people. In my opinion, colleges and universities like members of the CCCU who can maintain and cultivate character in our society, are going to become increasingly useful and important to future generations of students.

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Appendix A

List of all 110 CCCU Institutions. Those with an asterisk are part of the 33 institutions that participated in the 2007 NSSE.

*Abilene Christian University	Abilene, TX	http://www.acu.edu
Anderson University	Anderson, IN	http://www.anderson.edu
Asbury University	Wilmore, KY	http://www.asbury.edu
Azusa Pacific University	Azusa, CA	http://www.apu.edu
Belhaven University	Jackson, MS	http://www.belhaven.edu
Bethel College--IN	Mishawaka, IN	http://www.bethelcollege.edu
*Bethel University	Saint Paul, MN	http://www.bethel.edu
Biola University	La Mirada, CA	http://www.biola.edu
Bluefield College	Bluefield, VA	http://www.bluefield.edu
Bluffton University	Bluffton, OH	http://www.bluffton.edu
Bryan College	Dayton, TN	http://www.bryan.edu
*California Baptist University	Riverside, CA	http://www.calbaptist.edu
Calvin College	Grand Rapids, MI	http://www.calvin.edu
*Campbellsville University	Campbellsville, KY	http://www.campbellsville.edu
Carson-Newman College	Jefferson City, TN	http://www.cn.edu
Cedarville University	Cedarville, OH	http://www.cedarville.edu
*College of the Ozarks	Point Lookout, MO	http://www.CofO.edu
Colorado Christian University	Lakewood, CO	http://www.ccu.edu
Corban University	Salem, OR	http://www.corban.edu
Cornerstone University	Grand Rapids, MI	http://www.cornerstone.edu
*Covenant College	Lookout Mountain, GA	http://www.covenant.edu
Crown College	Saint Bonifacius, MN	http://www.crown.edu
Dallas Baptist University	Dallas, TX	http://www.dbu.edu
*Dordt College	Sioux Center, IA	http://www.dordt.edu
East Texas Baptist University	Marshall, TX	http://www.etbu.edu
*Eastern Mennonite University	Harrisonburg, VA	http://www.emu.edu
Eastern Nazarene College	Quincy, MA	http://www.enc.edu
Eastern University	St Davids, PA	http://www.eastern.edu
Erskine College	Due West, SC	http://www.erskine.edu
Evangel University	Springfield, MO	http://www.evangel.edu
*Fresno Pacific University	Fresno, CA	http://www.fresno.edu
Geneva College	Beaver Falls, PA	http://www.geneva.edu
George Fox University	Newberg, OR	http://www.georgefox.edu
*Gordon College	Wenham, MA	http://www.gordon.edu
Goshen College	Goshen, IN	http://www.goshen.edu
*Grace College & Seminary	Winona Lake, IN	http://www.grace.edu
Greenville College	Greenville, IL	http://www.greenville.edu
Hannibal-LaGrange College	Hannibal, MO	www.hlg.edu
Hardin-Simmons University	Abilene, TX	http://www.hsutx.edu

*Hope International University	Fullerton, CA	http://www.hiu.edu
*Houghton College	Houghton, NY	http://www.houghton.edu
Houston Baptist University	Houston, TX	http://www.hbu.edu
Howard Payne University	Brownwood, TX	http://www.hputx.edu
Huntington University	Huntington, IN	http://www.huntington.edu
Indiana Wesleyan University	Marion, IN	http://www.indwes.edu
*John Brown University	Siloam Springs, AR	http://www.jbu.edu
*Judson College--AL	Marion, AL	http://www.judson.edu
Judson University	Elgin, IL	http://www.judsonu.edu
Kentucky Christian University	Grayson, KY	http://www.kcu.edu
King College	Bristol, TN	http://www.king.edu
King's University College, The	Edmonton, AB	http://www.kingsu.ab.ca
Lee University	Cleveland, TN	http://www.leeuniversity.edu
*LeTourneau University	Longview, TX	http://www.letu.edu
*Lipscomb University	Nashville, TN	http://www.lipscomb.edu
Louisiana College	Pineville, LA	http://www.lacollege.edu
*Malone University	Canton, OH	http://www.malone.edu
Master's College & Seminary, The	Santa Clarita, CA	http://www.masters.edu
*Messiah College	Grantham, PA	http://www.messiah.edu
MidAmerica Nazarene University	Olathe, KS	http://www.mnu.edu
*Milligan College	Johnson City, TN	http://www.milligan.edu
Mississippi College	Clinton, MS	http://www.mc.edu
Missouri Baptist University	Saint Louis, MO	http://www.mobap.edu
Montreat College	Montreat, NC	http://www.montreat.edu
Mount Vernon Nazarene University	Mount Vernon, OH	http://www.mvnu.edu
North Central University	Minneapolis, MN	http://www.northcentral.edu
North Greenville University	Tigerville, SC	http://www.ngu.edu
North Park University	Chicago, IL	http://www.northpark.edu
Northwest Christian University	Eugene, OR	http://www.northwestchristian.edu
Northwest Nazarene University	Nampa, ID	http://www.nnu.edu
Northwest University	Kirkland, WA	http://www.northwestu.edu
Northwestern College--IA	Orange City, IA	http://www.nwciowa.edu
*Northwestern College--MN	Saint Paul, MN	http://www.nwc.edu
Nyack College	Nyack, NY	http://www.nyack.edu
Oklahoma Baptist University	Shawnee, OK	http://www.okbu.edu
Oklahoma Christian University	Edmond, OK	http://www.oc.edu
Oklahoma Wesleyan University	Bartlesville, OK	http://www.okwu.edu
Olivet Nazarene University	Bourbonnais, IL	http://www.olivet.edu
Oral Roberts University	Tulsa, OK	http://www.oru.edu
Palm Beach Atlantic University	West Palm Beach, FL	http://www.pba.edu
Point Loma Nazarene University	San Diego, CA	http://www.pointloma.edu
Redeemer University College	Ancaster, ON	http://www.redeemer.ca
Roberts Wesleyan College	Rochester, NY	http://www.roberts.edu

San Diego Christian College	El Cajon, CA	http://www.sdcc.edu
*Seattle Pacific University	Seattle, WA	http://www.spu.edu
Shorter University	Rome, GA	http://www.shorter.edu
*Simpson University	Redding, CA	http://www.simpsonu.edu/
Southeastern University	Lakeland, FL	http://www.seuniversity.edu
*Southern Nazarene University	Bethany, OK	http://www.snu.edu
*Southern Wesleyan University	Central, SC	http://www.swu.edu
Southwest Baptist University	Bolivar, MO	http://www.sbuniv.edu
Spring Arbor University	Spring Arbor, MI	http://www.arbor.edu
*Sterling College	Sterling, KS	http://www.sterling.edu
Tabor College	Hillsboro, KS	http://www.tabor.edu
Taylor University	Upland, IN	http://www.taylor.edu
Toccoa Falls College	Toccoa Falls, GA	http://www.tfc.edu
*Trevecca Nazarene University	Nashville, TN	http://www.trevecca.edu
*Trinity Christian College	Palos Heights, IL	http://www.trnty.edu
Trinity International University	Deerfield, IL	http://www.tiu.edu
Trinity Western University	Langley, BC	http://www.twu.ca
*Union University	Jackson, TN	http://www.uu.edu
University Of Mary Hardin-Baylor	Belton, TX	http://www.umhb.edu
University of Sioux Falls	Sioux Falls, SD	http://www.usiouxfalls.edu
University Of The Southwest	Hobbs, NM	http://www.usw.edu
Vanguard University of Southern California	Costa Mesa, CA	http://www.vanguard.edu
Warner Pacific College	Portland, OR	http://www.warnerpacific.edu
Warner University	Lake Wales, FL	http://www.warner.edu
*Waynesburg University	Waynesburg, PA	http://www.waynesburg.edu
Westmont College	Santa Barbara, CA	http://www.westmont.edu
*Wheaton College	Wheaton, IL	http://www.wheaton.edu
*Whitworth University	Spokane, WA	http://www.whitworth.edu
Williams Baptist College	Walnut Ridge, AR	http://www.wbcoll.edu

Appendix B



National Survey of Student Engagement 2007

The College Student Report

1 In your experience at your institution during the current school year, about how often have you done each of the following? Mark your answers in the boxes. Examples: or

	Very often	Often	Some-times	Never					
	▼	▼	▼	▼					
a. Asked questions in class or contributed to class discussions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	r. Worked harder than you thought you could to meet an instructor's standards or expectations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Made a class presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	s. Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Prepared two or more drafts of a paper or assignment before turning it in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	t. Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Worked on a paper or project that required integrating ideas or information from various sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	u. Had serious conversations with students of a different race or ethnicity than your own	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	v. Had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Come to class without completing readings or assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
g. Worked with other students on projects during class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
h. Worked with classmates outside of class to prepare class assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
i. Put together ideas or concepts from different courses when completing assignments or during class discussions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 During the current school year, how much has your coursework emphasized the following mental activities?				
j. Tutored or taught other students (paid or voluntary)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Very much	Quite a bit	Some	Very little
k. Participated in a community-based project (e.g., service learning) as part of a regular course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	a. Memorizing facts, ideas, or methods from your courses and readings so you can repeat them in pretty much the same form	▼	▼	▼	▼
l. Used an electronic medium (listserv, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	b. Analyzing the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Used e-mail to communicate with an instructor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	c. Synthesizing and organizing ideas, information, or experiences into new, more complex interpretations and relationships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Discussed grades or assignments with an instructor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	d. Making judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Talked about career plans with a faculty member or advisor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e. Applying theories or concepts to practical problems or in new situations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Discussed ideas from your readings or classes with faculty members outside of class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
q. Received prompt written or oral feedback from faculty on your academic performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

9 About how many hours do you spend in a typical 7-day week doing each of the following?

a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	<input type="checkbox"/>							
Hours per week	0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30
b. Working for pay on campus	<input type="checkbox"/>							
Hours per week	0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30
c. Working for pay off campus	<input type="checkbox"/>							
Hours per week	0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30
d. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)	<input type="checkbox"/>							
Hours per week	0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30
e. Relaxing and socializing (watching TV, partying, etc.)	<input type="checkbox"/>							
Hours per week	0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30
f. Providing care for dependents living with you (parents, children, spouse, etc.)	<input type="checkbox"/>							
Hours per week	0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30
g. Commuting to class (driving, walking, etc.)	<input type="checkbox"/>							
Hours per week	0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30

10 To what extent does your institution emphasize each of the following?

		Very much	Quite a bit	Some	Very little
a. Spending significant amounts of time studying and on academic work	<input type="checkbox"/>				
b. Providing the support you need to help you succeed academically	<input type="checkbox"/>				
c. Encouraging contact among students from different economic, social, and racial or ethnic backgrounds	<input type="checkbox"/>				
d. Helping you cope with your non-academic responsibilities (work, family, etc.)	<input type="checkbox"/>				
e. Providing the support you need to thrive socially	<input type="checkbox"/>				
f. Attending campus events and activities (special speakers, cultural performances, athletic events, etc.)	<input type="checkbox"/>				
g. Using computers in academic work	<input type="checkbox"/>				

11 To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

	Very much	Quite a bit	Some	Very little
a. Acquiring a broad general education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Acquiring job or work-related knowledge and skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Writing clearly and effectively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Speaking clearly and effectively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Thinking critically and analytically	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Analyzing quantitative problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Using computing and information technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Working effectively with others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Voting in local, state, or national elections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Learning effectively on your own	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Understanding yourself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Understanding people of other racial and ethnic backgrounds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Solving complex real-world problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Developing a personal code of values and ethics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Contributing to the welfare of your community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Developing a deepened sense of spirituality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12 Overall, how would you evaluate the quality of academic advising you have received at your institution?

Excellent
 Good
 Fair
 Poor

13 How would you evaluate your entire educational experience at this institution?

Excellent
 Good
 Fair
 Poor

14 If you could start over again, would you go to the same institution you are now attending?

Definitely yes
 Probably yes
 Probably no
 Definitely no

15 Write in your year of birth:

16 Your sex:
 Male Female

17 Are you an international student or foreign national?
 Yes No

18 What is your racial or ethnic identification? (Mark only one.)
 American Indian or other Native American
 Asian, Asian American, or Pacific Islander
 Black or African American
 White (non-Hispanic)
 Mexican or Mexican American
 Puerto Rican
 Other Hispanic or Latino
 Multiracial
 Other
 I prefer not to respond

19 What is your current classification in college?
 Freshman/first-year Senior
 Sophomore Unclassified
 Junior

20 Did you begin college at your current institution or elsewhere?
 Started here Started elsewhere

21 Since graduating from high school, which of the following types of schools have you attended other than the one you are attending now? (Mark all that apply.)
 Vocational or technical school
 Community or junior college
 4-year college other than this one
 None
 Other

22 Thinking about this current academic term, how would you characterize your enrollment?
 Full-time Less than full-time

23 Are you a member of a social fraternity or sorority?
 Yes No

24 Are you a student-athlete on a team sponsored by your institution's athletics department?
 Yes No (Go to question 25.)

On what team(s) are you an athlete (e.g., football, swimming)? Please answer below:

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

26 Which of the following best describes where you are living now while attending college?
 Dormitory or other campus housing (not fraternity/sorority house)
 Residence (house, apartment, etc.) within walking distance of the institution
 Residence (house, apartment, etc.) within driving distance of the institution
 Fraternity or sorority house

27 What is the highest level of education that your parent(s) completed? (Mark one box per column.)

Father	Mother	
<input type="checkbox"/>	<input type="checkbox"/>	Did not finish high school
<input type="checkbox"/>	<input type="checkbox"/>	Graduated from high school
<input type="checkbox"/>	<input type="checkbox"/>	Attended college but did not complete degree
<input type="checkbox"/>	<input type="checkbox"/>	Completed an associate's degree (A.A., A.S., etc.)
<input type="checkbox"/>	<input type="checkbox"/>	Completed a bachelor's degree (B.A., B.S., etc.)
<input type="checkbox"/>	<input type="checkbox"/>	Completed a master's degree (M.A., M.S., etc.)
<input type="checkbox"/>	<input type="checkbox"/>	Completed a doctoral degree (Ph.D., J.D., M.D., etc.)

28 Please print your major(s) or your expected major(s).

a. Primary major (Print only one.):

b. If applicable, second major (not minor, concentration, etc.):

THANKS FOR SHARING YOUR VIEWS!

After completing the survey, please put it in the enclosed postage-paid envelope and deposit it in any U.S. Postal Service mailbox. Questions or comments? Contact the National Survey of Student Engagement, Indiana University, 1900 East Tenth Street, Eigenmann Hall Suite 419, Bloomington IN 47406-7512 or nsse@indiana.edu or www.nsse.iub.edu. Copyright © 2006 Indiana University.

Appendix C



Indiana University Center for Postsecondary Research Data Sharing Agreement

This Indiana University Center for Postsecondary Research Data Sharing Agreement ("Agreement") defines the parameters for data sharing from the National Survey of Student Engagement ("NSSE") between the Research Institution and its Authorized Researchers named below and the Trustees of Indiana University on behalf of the Indiana University Center for Postsecondary Research ("IUCPR"). The terms below are intended to reflect and comply with the existing agreements between NSSE and the institutions that participate in the survey program. Under these participation agreements, NSSE may:

" . make data, in which individual institutions or students cannot be identified, available to researchers interested in studying the undergraduate experience . NSSE results specific to each institution and identified as such will not be made public except by mutual agreement between NSSE and the institution "

RESEARCHERS

The following researchers ("Authorized Researchers") of The University of Kansas ("Research Institution") may make use of NSSE data pursuant to the terms of this Agreement:

Kelly Miller	The University of Kansas
Lisa Wolf-Wendel	The University of Kansas

DATA DESCRIPTION

Under this Agreement, IUCPR will provide the researchers a data file delimited in the following ways ("NSSE Data File"):

- Data Source: NSSE 2007
- Variables: All survey items. All student and institution identifying information will be removed.
- Cases: A 20% random sample of all non-transfer, full-time first-year and senior students who attend an institution that is part of the Council for Christian Colleges and Universities (CCCU) and whose enrollment is fewer than 1,500 students.



Claims Act (K.S.A. 75-6101 et seq) may be processed according to the Act. Research Institution further agrees that the Trustees of Indiana University, their officers, employees, and agents, shall not be liable for the damages resulting from injuries or damages sustained by any person or persons or property resulting from the negligent performance or omission by the Research Institution.

9. FEES

In exchange for access to and use of the NSSE Data File, Kelly Miller agrees to pay Indiana University the sum of \$500, by check upon execution of this Agreement;

SIGNATURES

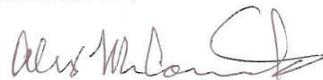
The undersigned hereby consent to the terms of this Agreement and confirm that they have all necessary authority to enter into this Agreement.

For The Trustees of Indiana University:



Marcia Landen
Director, Grant Services
Office of the VP for Research Administration
Indiana University

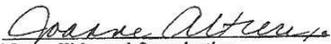
7-21-11
Date



Alexander C. McCormick
Director,
National Survey of Student Engagement

7/14/2011
Date

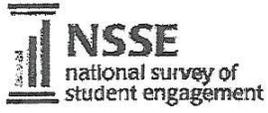
For the Research Institution:



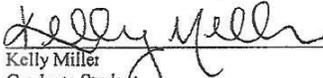
Name, Title, and Organization
Authorized Institutional Official of Research Institution

7/8/11
Date

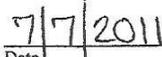
Joanne Altieri, Director
Research Administration



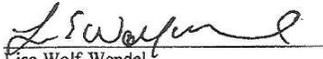
Acknowledgment of Authorized Researchers:



Kelly Miller
Graduate Student
The University of Kansas



Date



Lisa Wolf-Wendel
Faculty Advisor
The University of Kansas



Date

Appendix D



Benchmarks of Effective Educational Practice

The benchmarks are based on 42 key questions from the NSSE survey that capture many vital aspects of the student experience. These student behaviors and institutional features are some of the more powerful contributors to learning and personal development.

LAC

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.

Activities and conditions:

- Time spent preparing for class (studying, reading, writing, rehearsing, and other activities related to your academic program)
- Worked harder than you thought you could to meet an instructor's standards or expectations
- Number of assigned textbooks, books, or book-length packs of course readings
- Number of written papers or reports of 20 pages or more
- Number of written papers or reports between 5 and 19 pages
- 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
- Coursework emphasizes: Applying theories or concepts to practical problems or in new situations
- Campus environment emphasizes spending significant amounts of time studying and on academic work

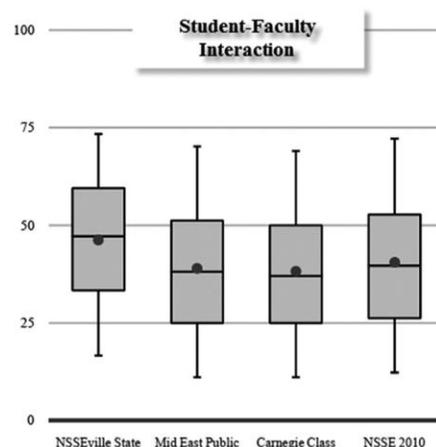
ACL

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.

Activities:

- Asked questions in class or contributed to class discussions
- Made a class presentation
- Worked with other students on projects during class
- Worked with classmates outside of class to prepare class assignments
- Tutored or taught other students
- Participated in a community-based project as part of a regular course
- Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)



SFI**Student-Faculty Interaction**

Students see first-hand how experts think about and solve practical problems by interacting with faculty members inside and outside the classroom. As a result, their teachers become role models, mentors, and guides for continuous, life-long learning.

Activities:

- Discussed grades or assignments with an instructor
- Talked about career plans with a faculty member or advisor
- Discussed ideas from your readings or classes with faculty members outside of class
- Worked with faculty members on activities other than coursework (committees, orientation, student-life activities, etc.)
- Received prompt written or oral feedback from faculty on your academic performance
- Worked with a faculty member on a research project

SCE**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.

Conditions:

- Campus environment provides support you need to help you succeed academically
- Campus environment helps you cope with your non-academic responsibilities (work, family, etc.)
- Campus environment provides the support you need to thrive socially
- Quality of relationships with other students
- Quality of relationships with faculty members
- Quality of relationships with administrative personnel and offices

EEE**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.

Activities and conditions:

- 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
- Participating in:
 - Internships or field experiences
 - Community service or volunteer work
 - Foreign language coursework
 - Study abroad
 - Independent study or self-assigned major
 - Culminating senior experience
 - Co-curricular activities
 - Learning communities



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