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A Study of the Influence of Public and Private Christian High School Education on Academic Achievement and Spiritual Formation of College Students

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A Study of the Influence of Public and Private Christian High School

Education on Academic Achievement and Spiritual Formation of College

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Abstract

This investigation compared the influence of public and Christian high schools on the spiritual formation and academic achievement of college students. Recent high school graduates who attend a private, liberal arts university in the southeastern United States responded to an online survey and interview questions related to the influence of one's high school experience on spiritual formation and academic achievement. Significant differences were found between high school type and the type of problems faced by students and teachers, students' ability to intelligently defend their faith, and students' perceived ability to function in a diverse world. Significant differences favoring Christian school graduates were also found related to high school's influence on taking college classes seriously, helping others, defending beliefs, sharing their faith, appreciation for other cultures, taking responsibility for actions, ability to receive constructive feedback, and being honest with oneself. Suggestions for educational improvement from both public and private high school graduates include: the need for hiring and retaining inspiring teachers who model moral behavior daily; the need for school personnel to listen to students and involve them in decision making; better problem-solving skills by school administrators; less favoritism shown to certain students by teachers and administrators; greater focus on authentic learning in real-world contexts; and the need for academic freedom to discuss critical issues without fear of retribution by teachers, administrators, or other students.

The purpose of this research study was to examine the role that public education and private Christian education at the high school level plays in furthering the academic and spiritual development of its graduates. The research question addressed in the study was: What impact does one's high school experience have on academic achievement and spiritual formation during the college years?

Theoretical Framework

One of the primary tasks during adolescence is the formation of a personal identity. According to Erikson (1968), identity formation is a dynamic, developmental process that begins at birth and culminates during the adolescent period. One aspect of identity development involves the exploration and solidification of religious beliefs and values, in essence, spiritual formation. Erikson argues that identity is more than a summation of previously held roles and requires complex integration strategies. The integration process includes experiences that help clarify interests, abilities and beliefs, as well as experiences that help the individual consolidate his/her thinking and to make commitments. An individual's environment can facilitate identity achievement by allowing for: 1) experimentation with varied roles; 2) the experiencing of choice; 3) meaningful achievement; 4) freedom from excessive anxiety; 5) time for reflection and introspection.

James Marcia (1980) identified a non-developmental model of four identity statuses based on Erikson's theory. Each status represented a particular coping style with the task of identity achievement. Marcia used the two Eriksonian concepts of crisis and commitment to define the four statuses. The term 'crisis' referred to the young adult's critical exploration of occupational, religious, and sociopolitical goals and beliefs.

Commitment referred to one's selection of goals and beliefs from among alternatives. Marcia's four categories may be characterized as follows:

- Identity diffusion: a disinterested or detached young adult who is not critically exploring goals and beliefs and does not have commitments.

- Identity foreclosure: commitments without crisis or 'borrowed' commitments; a young adult with firm commitments that are not based on a process of personal, critical exploration; borrowed goals and beliefs from significant others, such as parents, teachers, pastors, or peers.

- Identity moratorium: In crisis and on a path to commitments; a young person in the midst of critical exploration of alternatives; there are no commitments; however, this individual is actively engaged in a search for commitments.

- Identity achieved: Post-crisis with personal commitments. A young adult with commitments to goals and beliefs based upon critical exploration.

Research on college students classified by Marcia's scheme also suggested that students of different identity statuses experienced college in different ways (Baylis & Longman, 2007). Although foreclosed individuals may appear to be more satisfied with college experiences, the moratorium and identity achieved students were more likely to use the college experience to open themselves to the opportunities available and to be more successful in the learning environment. Foreclosed students tended to not take advantage of opportunities for exploration and to avoid challenging academic experiences. According to Marcia, one can meaningfully apply these status designations to one's overall identity or to individual areas such as occupational, religious, political, or gender role identity. For example, it is possible for a college senior

to be occupationally diffused, religiously foreclosed, and politically achieved.

Students typically enter college identity diffused or foreclosed (Marcia, 1980; Baylis, 1997). Several factors may interact to stimulate a process of exploration: independence from home, having to make many decisions for oneself, and exposure to alternative goals and beliefs. Pascarella and Terenzini (1991) claim that 40 to 60% of freshmen may enter college and leave four years later with their identity status relatively unexamined.

Many academics argue that they have neither the inclination nor the responsibility to promote the personal development of student identity or the spiritual development of students. The life of the mind is considered to be separate from the life of the soul and spirit in the academy.

In their recent (2011) book *Cultivating the Spirit: How Colleges Can Enhance Students' Inner Lives*, Astin, Astin, and Lindholm present nation-wide data describing today's college students at public, private, and faith-based colleges and universities. Their research indicates that 75% of students surveyed in the U.S. reported that they believed in God and have a sense of connection with God or a higher power; 66% felt that it is essential or very important that the college experience help students to develop their personal values and understanding of self. The results indicate that, on the whole, today's students are asking bigger questions about values and mission, actively questing for their spiritual identity, have high expectations for the role that their educational experience at university will play in their emotional and spiritual development, are anxious to engage peers and professors in activities that promote commitment, and are frustrated with the unnatural separation of intellectual and spiritual

domains in higher education. In other words, today's students are less foreclosed than in the past and are actively pursuing commitment and identity of self in all domains of development: cognitive, social, emotional, and spiritual.

While a great deal of research exists on the spiritual formation of college students, much less research exists on the spiritual formation of adolescents during the high school years, their identity status, and readiness for college.

Review of Relevant Research

Many religious K-12 schools have in their mission/vision statements the goals of nurturing and supporting the growth of the mind, body, and spirit of young people. However, the attainment of these goals has not been comprehensively measured or assessed.   Are students who graduate from Christian high schools in the United States spiritually and academically prepared for the challenges of higher education? How does this preparation compare to students who graduate from public high schools? This study examined the influence of school type during the high school years on subsequent spiritual formation and academic achievement of its graduates.

Spiritual Formation

As early as 1977, Astin found decreases in religious behaviors of college students at both public and selective, prominent, non-religious colleges and universities. A four year longitudinal study conducted by Madsen and Vernon (1983) found a significant decrease in traditional religiosity of college students, with 50% of study participants indicating a decrease in religiosity over a four year period. Similar results were found by Railsback (1994) who reported that 34% of all students who entered a public university claiming to be "born again" no longer held to their faith four years later

upon graduation. A more recent study by Railsback (2006) found that 27% of students who attended public universities "fell away" from "born again" status compared to the 34% in the earlier cohort. Results from the early cohort also showed that 28% of self-proclaimed Christian students, upon completion at a public university, had not attended a church or religious service in the previous year. In the more recent cohort, 32% of respondents at public universities indicated not attending religious services at all.   If one combines the two percentages for each cohort, 62% in the early cohort deliberately or subtly stepped away from their faith as did 59% of students in the later cohort. In other words, more than one out of two Christian young people at public universities discard their faith by the time they finish their undergraduate degree. Steve Henderson (2003) further established the negative impact public universities have on students' faith. He found that it was difficult for students to maintain their Christian faith at private colleges that have a history of religious affiliation but have fallen away from those roots. Up to two-thirds of Christian students abandoned their relationship with God at these institutions.

Students attending Christian schools of higher education are also likely to encounter challenges to their spiritual growth and formation. Joeckel and Chesnes (2010) argued that in an effort to protect against secularization, many Christian colleges and universities cultivate homogeneity in culture/climate, political ideology, theology, and epistemology. As such, the intellectual and spiritual growth of students on these campuses could be limited and stifled.

Nevertheless, some researchers' results suggest that attending a religiously-affiliated institution benefits spiritual growth and formation. Ma (2003) found that

students who attended a Christian college reported positive spiritual growth as a result of their experience. Students reported that nonacademic factors such as relationships with peers, engaging in personal spiritual disciplines, and praise and worship opportunities had a bigger influence on their spiritual growth than academic factors. In addition, those students who lived on campus reported more positive spiritual growth experiences than those living off campus. This finding supports a similar one by Wighting and Liu (2009) who reported a moderate, positive correlation, r (71) = .62, between sense of community and sense of religious commitment for Christian high school students. Furthermore, in 2000, Gay reported that for middle school and high school students, religious lessons and corporate worship promoted spiritual development by helping them to acquire a better understanding of their own beliefs as well as those held by other people. These findings corroborate those of Small and Bowman (2011) that evangelical students reported strengthening their faith while in college (in contrast with other groups).

Astin, Astin, and Lindholm (2011) defined spirituality in *Cultivating the Spirit* as "a multi-faceted quality that involves an active quest for answers to life's big questions (spiritual quest), a global worldview that transcends ethnocentricism and egocentrism (ecumentical worldview), a sense of caring and compassion for others (ethic of caring), coupled with a lifestyle that includes service to others (charitable involvement), and a capacity to maintain one's sense of calm and centeredness, especially in times of stress (equanimity)." Using the College Students' Beliefs and Values Survey (CSBV) developed at UCLA, the researchers surveyed 14,527 students attending 136 colleges and universities nation-wide as they entered college as freshmen and again when they

were seniors. The researchers examined the five spiritual measures contained in the

definition above as well as five religious measures: religious commitment, religious

engagement, religious/social conservatism, religious skepticism, and religious struggle.

The researchers also explored the relationships of these measures to measures of

traditional outcomes including:

- Intellectual/Academic Outcomes: grades in college; educational aspirations, and
  intellectual self-esteem;

- Personal/Emotional Outcomes: psychological well-being, leadership abilities and
  skills, and satisfaction with college;

- Attitudinal Outcomes: growth in the ability to get along with people of different
  races and cultures, growth in the importance placed on promoting racial
  understanding (combined by the researchers to produce a global citizenship
  index).

The results of this comprehensive longitudinal study are fascinating and point to the

overall benefits of intentional spiritual development/questing in the academy.

The conclusions of Astin, Astin, and Lindholm's research are summarized in the

2011 book and are quoted here:

- Growth in equanimity during college enhances students' grade point
  average, leadership skills, psychological well-being, self-rated ability to
  get along with other races and cultures, and satisfaction with college;

- Growth over time in the qualities of equanimity and global citizenship
  has positive effects on all of the 8 traditional measures of college
  outcomes;

- Growth in global citizenship enhances students' interests in postgraduate study, self-rated ability to get along with other races and cultures, and commitment to promoting racial understanding;

- Growth in spiritual quest enhances the student's intellectual self-esteem, but tends to lower the students' satisfaction with college, and sense of psychological well-being;

- Growth in religious engagement is correlated with a lowering of students' degree aspirations, less satisfaction with college, and a weakened commitment to promoting racial understanding;

- Growth in religious struggle shows a positive effect on students' commitment to promoting racial understanding but negative effects on the students' leadership skills, sense of psychological well-being, and satisfaction with college;

- Students' performance in the academic and intellectual realm is enhanced if their faculty employ student centered pedagogical practices and put a priority on students' personal and spiritual development;

- Educational experiences and practices that promote spiritual development, especially service learning, interdisciplinary courses, study abroad, self-reflection, and meditation/prayer, have positive effects on the 8 traditional outcome measures examined in the study;

- Donating money to charity has a significant positive correlation to 7 of the 8 traditional outcomes measured, including GPA, psychological

well-being, leadership abilities, satisfaction with college, commitment to

promoting racial understanding, and ability to get along with people of

other races and cultures. (p. 135-136)

Overall, previous research indicates that a religious school experience in

secondary and post-secondary education and/or experiences that stimulate thinking

about spirituality have a positive impact on spiritual growth and formation. However,

more research is needed to investigate whether the apparent benefits to spiritual

formation at private Christian secondary schools "carry over" from high school to

college. What impact does one's high school experience have on spiritual preparation

and formation during the college years? The current study sought to address this

question.

Academic Achievement

According to the U.S. Department of Labor, Bureau of Labor Statistics (2011),

68% of 2010 high school graduates were enrolled in colleges or universities by the fall

of 2010 with approximately 60% attending 4-year institutions. Recent data indicate that

only 26% of high school students who took college preparatory courses are prepared

and ready for college level work in English, mathematics, science, and social studies

with 19% of students not adequately prepared in any of the stated content areas

(Arenson, 2007). Students who did not take the core college prep classes fared less

well, with only 14% determined to be equipped to handle college work in all four areas;

36% were not prepared to assume college level work in any area.

With only one-quarter of high school graduates seemingly prepared and ready for

college in the United States, one might wonder whether or not students who graduate

from private schools fare better than those who graduate from public schools. The College Board, which publishes and scores the Scholastic Aptitude Test (SAT), reported in 2010 that private school students, who accounted for 16% of SAT test takers, outperformed public school students on the writing, verbal, and math sections of the SAT. The average SAT writing score for public school students was 488, compared to 530 for students in religious schools. The average SAT score on the critical reading portion of test was 498 for public school students, compared to an average score of 533 for religious school students. Finally, average math scores were 511 and 534 for public and religious schools respectively.

Some researchers argue that students in private schools exhibit higher levels of achievement and attend college at higher rates than students who attend public schools (Coleman, Hoffer, & Kilgore, 1982; Falsev & Heyns, 1984; Jeynes, 2005). One of the foremost researchers in this area is William Jeynes, who studied the impact of religious schools and religious commitment on academic achievement. In 2005, Jeynes conducted a meta-analysis of research that investigated the academic outcomes of low socioeconomic groups who attended religious school with those whose who attended public schools. Results of the meta-analysis indicated that for four of five outcomes (reading achievement, math achievement, science achievement, social studies achievement, and student behavior), low-income students attending religious schools showed statistically significant positive gains over low-income students attending public schools. Furthermore, the advantage of attending a religious school appeared to be greater for middle and high school students than for elementary school students. Finally, results indicated that when students who attend religious schools are compared

and socio-economic status (SES) is controlled for, students in the lowest SES quartile had the greatest benefit academically; in addition, there was a noticeable and smaller difference in the achievement gap between high-SES and low-SES in religious schools than those same groups of students in public schools.

In another meta-analysis that used the National Education Longitudinal Study (NELS) dataset, Jeynes (2007) found that when the data were adjusted for SES status and for gender, African American and Latino adolescents who described themselves as religious and who came from intact families did just as well academically as their Caucasian counterparts. Additional analysis of the NELS dataset, which included family structure as a variable, indicated that adolescent students who reported high levels of religious commitment and who came from non-intact families had significantly higher levels of academic achievement than adolescents who were less religious. When African American and Latino adolescents were examined specifically, the pattern was similar; minorities who were religious and who came from non-intact homes had statistically higher levels of academic achievement than their less religious counterparts. In sum, it appears that academic achievement is enhanced for students who attend religious schools (over public schools) and/or who have higher levels of religious commitment, regardless of family structure or socioeconomic level.

Within the broader context of religious commitment, an interest in examining the effect of Biblical literacy on academic success and behaviors has emerged. In a recent study, Jeynes (2009) demonstrated that students who had the highest measured level of Biblical literacy also had significantly higher GPAs and significantly higher percentile

rankings in test and grade results. These trends in the data remained constant for students whether they attended a private Christian school or a public school.

Overall, research on these issues seems to have produced mixed results, and more research is warranted. In addition, little research has addressed the question of whether or not private schools, and more specifically, private Christian schools prepare graduates for the academic challenges of college life. Are students who graduate from Christian high schools adequately prepared for college? Are they prepared academically? Are they prepared spiritually?

Definition of Terms

Spiritual Formation

The scripture from I Peter 3:15 inspired the researchers' definition of spiritual growth and development and served to guide the research questions addressed in the study:

☐ Has your high school education prepared you to live out your Christian faith in the world?

☐ Has high school prepared you to intelligently defend your faith and share it with others?

☐ Has high school prepared you to function in a diverse world?

☐ How can Christian education better support your academic and spiritual development?

Academic Achievement

In this study, academic achievement was defined by self-reported measures of student perceptions of their preparation for college level work and comparisons of GPA

between public and private Christian school students. The guiding research question in

this area of the study was: Has your high school education prepared you to be

successful academically at the university level?

Methods

Participants

Participants were selected from the total population of currently enrolled students

at a private, Christian university in the southeastern part of the United States.

Southeastern University (SEU) is located in central Florida and is one of 28

independent colleges and universities in Florida and one of 11 private Christian

colleges/universities in Florida. The student population at SEU in fall 2009 was 2,950

undergraduate and graduate students.   Fifty-eight percent of the students enrolled that

semester were female, and 42% were male. Sixty-three percent of the students

enrolled in fall 2009 came from within the state of Florida. Three and a half percent of

the total student population came from 40 different countries world-wide. At the time of

this study, the racial/ethnic composition of the student population at SEU was

determined to be 25% minority. Two-thirds of the student population at SEU came from

public high schools, while one-third came from private schools or homeschools.

Thirty-five percent of SEU students who reported their denominational affiliation

(n=2215) in fall 2009 claimed affiliation with Pentecostal churches; twenty-one percent

claimed affiliation with non-denominational or multi-denominational congregations;

seventeen percent reported affiliation with mainline Protestant churches; four percent

reported affiliation with Catholic or other churches; 25% of the students did not respond

to the question on the admissions application.

Participants in this study were recruited via an email to all faculty, staff, and students (n = 3158) requesting their participation in an online survey developed by the researchers. Two-hundred and fifty-three students (79% of the respondents) responded to the online survey.

Seventeen percent of the student respondents classified themselves as freshmen, 22% were sophomores, 30% were juniors, 24% were seniors, and 8% were classified as graduate students.   Seventy percent of the student respondents attended public high schools, and 29% attended private Christian schools during their high school years; 1% of those surveyed attended private secular high schools, attended more than one type, or were homeschooled.

One hundred twenty-seven currently enrolled students participated in face to face interviews. The mean age of this sample of students was 22.   Of the 127 interviews that were conducted, 114 were suitable for analysis.

Procedures

Phase I

This research study consisted of two phases. During phase one, an online survey was distributed via email to all faculty, staff, and students (n=3158) at SEU with the view of compiling comparison data at some point in the future. Students were contacted twice more during the semester to complete the survey if they hadn't already done so. The survey was configured so that a respondent could take the survey just once. Most items provided open-ended sections so that students could not only respond, but also make comments anonymously.

From the 253 student responses to the online survey, 183 currently enrolled students were selected who were recent high school graduates (within 4 years). This sample of students was invited to participate in face to face interviews to gain further information. Graduate and undergraduate student interviewers were trained by the researchers and given contact information to personally approach students who had taken the online survey to schedule face to face interviews.

Phase II

During the spring 2010 semester, interviewers conducted 127 face to face interviews with recent high school graduates currently enrolled at Southeastern, many of whom did not fill out the online survey. Of the 127 interviews, 114 were suitable for analysis. Fifty-three of the 127 interviewees also filled out the online survey, allowing the researchers to triangulate data from two different sources.

The data were compiled by the researchers and a graduate research assistant during the summer months of 2010. The researchers were looking primarily for trends in the data and for comparisons between those graduating from public vs Christian high schools.

Instruments

For purposes of this study, two instruments were developed for data collection purposes. First, an online survey was created and distributed to the campus community (see Appendix A). This survey sought to elicit information pertaining to respondents' high school experiences, including the influence of high school experience on spiritual formation and academic achievement. Students who completed the online survey were invited to participate in face to face interviews with trained interviewers. The

interviewers asked 127 students a series of open-ended questions pertaining to their

high school experience (see appendix B). The items for both the online survey and the

interview questions were carefully selected by the researchers to measure demographic

variables and spiritual formation attributes found to be pertinent in the literature and of

particular interest to the university. Because these instruments were created by the

primary researchers for use in the present study, no reliability or validity data are

available.

Results and Discussion

The purpose of the current study was twofold. First, this study investigated the

influence of high school type, public versus private Christian, on students' spiritual

formation. A second purpose of this study was to examine the influence of school type

on students' perceptions of academic achievement and preparation for university level

work. This section discusses the findings related to the above stated purposes by

focusing on the trends observed and supported by the research findings.

Spiritual Formation

One of the primary tasks during adolescence is the formation of a personal

identity. This study examined the influence of school type during the adolescent years

on subsequent spiritual formation as operationalized by ratings of statements related to

spiritual disciplines and fruits of the spirit in an online survey and responses to interview

questions.

Online Survey Results

Several notable trends were observed in the research results, particularly survey

comments. One of the surprising findings of this study was that, contrary to predictions,

public school students reported that the antagonism and hostility to Christian faith and values in public high schools served to strengthen students' commitments to Christ, taught them how to resist peer pressure and how to defend their faith intelligently, and increased their desire to share the gospel through witnessing. Sharing the gospel is considered to be one of the indicators of stage 3 in both Fortosis' model (1992) and Willett's model (2010) of spiritual growth and development. Many public school students felt that their high school was a mission field. Ninety-five percent of the survey respondents indicated that they were able to defend their faith effectively and respectfully (Table 1). While public and Christian school graduates did not differ significantly on their ability to defend their faith intelligently or to share their faith with others, the reported influence from high school on these same measures was significantly different (see Table 4). Christian school graduates were significantly more influenced by their high school experience to intellectually defend their beliefs (p<.001) and to share their faith with others (p<.004).

Public and Private Christian graduates were not significantly different with regard to responses on many of the spiritual formation statements (Table 3), except for the item on respecting the beliefs of others. Public school students reported significantly greater ability to respect beliefs of others (p<.049), probably due to the greater diversity in public schools.

Christian school graduates reported significantly greater influence from high school compared to public school graduates on the following measures (see Tables 1 and 4): taking their studies seriously (p<.010), helping others (p<.027), intelligently defending their beliefs (p<.001), sharing their faith with others (p<.004), taking

responsibility for their actions (p<.001), receiving constructive criticism (p<.049), and being honest with themselves about doubts and beliefs (p<.010). These results are corroborated by comments on the survey and in the interviews.

Analysis of the survey item "I appreciate the multicultural nature of the university," indicates that 92% of the respondents indicated "very true" or "mostly true" for both school types (Table 1). Even though private Christian school students reported in the survey that their schools were not as diverse as those of graduates of public schools (Table 5), most of the students from both types of schools believed that they have made the adjustment to the multicultural nature of the university, which is evidence of spiritual growth. However, public school students were significantly more influenced by their high schools (Table 4) than Christian school students (p<.05). Analysis of the open ended responses to the diversity survey item indicated that private Christian school graduates tended to consider diversity with regard to race, while public school students considered a broader variety of differences, including race, religious backgrounds, handicapping conditions, and sexual orientation of both faculty and students.

Ancillary Survey Results

As anticipated, students from public high schools reported significantly higher incidences of school problems on the survey, as depicted in Tables 6 and 7. All the indicators on the online survey items related to school problems were significantly different for the two high school types except plagiarism and teachers disrespecting students. The non-significant differences found between the two school types on the

item related to teachers disrespecting students are the result of low incidence of that

behavior in both public and private Christian schools.

Parents of private Christian school students will probably be encouraged by

significantly fewer problems at Christian schools in this sample, especially for

alcohol/drug use, bullying, and teen pregnancy, perennial concerns for most parents.

However, the non-significant differences found in plagiarism should promote

parent/student discussions about these moral issues.

Public school respondents felt that promoting religious freedom and critical

thinking would improve school climate. One public school graduate wrote in a

comment, "Teachers can't even discuss important ideas if they have <u>any</u> sort of

religious overtones. What kind of a culture do you expect when living and working

under those conditions?"

The public high school students in this sample commented that their high school

experience promoted their spiritual growth because they had to defend their faith daily.

However, one has to wonder how many Christian students succumbed to peer pressure

to conform to a worldview antagonistic to Christians during high school.

Interview Results

Public and private Christian school students differed significantly in their

responses to the face to face interview items related to spiritual formation. Private

Christian school students reported that their high school experience better prepared

them to intellectually defend their faith, and public school students reported that their

high school experience better prepared them to function in a diverse world. Chi square

analysis revealed a highly significant difference between responses to the interview item

related to ability to intelligently defend faith for those who attended public schools and

those who attended private Christian schools, $\chi2$ $(1, \; n = 114) = 14.48$, p = 0001.

Students who graduated from private Christian schools were significantly better

prepared to intellectually defend their faith than students from public schools. With

regard to the interview item related to ability to function in a diverse world, public school

students reported significantly different responses $\chi2(1, n = 112) = 12.31$, p = .0005.

Public school graduates felt that they were better prepared to function in a diverse world

than private Christian school graduates.

Both public and private Christian school graduates reported in interviews that

their high school experience was not the major influence on their spiritual formation, but

rather their families, homes, churches, mission opportunities, and youth groups. The

results of interviews point to the absolutely critical need for strong youth groups to

adolescents' overall spiritual growth, especially those who attend public schools.

Students who reported strong youth groups described them as those that 1) provide

Christ-centered teaching vs doctrinal instruction, 2) give direct instruction in

evangelizing, 3) are action oriented as defined by direct involvement in real-world

contexts such as missions and social justice issues. These findings related to what

churches and schools can do to enhance spiritual development corroborate those of

Smith and Denton (2005) in the National Study of Youth and Religion.

Chi square analyses indicated that there were no significant differences between

school type and level of involvement in community service χ^2 (3, n = 163) = 1.41, p =

.7032. This finding is not especially surprising since the majority of students in this

sample were from Florida, and 75 hours of documented community service are required

for college scholarships at any of the public or private colleges and universities in the

state.

Forty-four percent of the students who were interviewed indicated that they held

leadership positions at the university, which was a slight decline from leadership

percentages reported, on average, during high school years. Given the emphasis on

servant leadership in most Christian schools, this finding merits further exploration.

In the interviews, students were asked to discuss any rebellious periods they had

in high school; thirty percent of the private Christian school students and nineteen

percent of the public school students reported that they had no rebellious periods, which

leads to questions about spiritual formation vs spiritual acquiescence. According to

Erikson (1968), young people must inevitably go through a separation period from

parents and significant others in order to establish their own identities. However, the

interviewers reported that the private Christian school students were more reluctant to

share their stories than the public school students in the face to face interviews.

Academic Achievement

Ninety-eight percent of the respondents to the online survey indicated that they

attended high schools focused on college preparation. Results of survey items related

to academic achievement indicate that this sample of students perceive themselves to

have been well-prepared for college level work regardless of the type of high school

they attended (Table 1). In interviews, 84% of the public school students said that they

were adequately prepared, while 94% of the private Christian school students

responded in the same way. Sixteen percent of the public school students said they

were not adequately prepared, while only 6% of the private Christian high school graduates felt that they were not adequately prepared for college level work.

For those students who reported that their high school did not prepare them adequately for college level work, the most frequently cited problems were insufficient preparation for the amount of reading required and insufficient development of writing skills.

Ninety-two percent reported in the survey that they take their studies and classes seriously, and two-thirds of those students indicated that their high schools were "very or moderately influential" on their ratings (Table 1). Students self-reported that they were adequately prepared to think critically and to successfully face challenging work. These students commented that they knew how to study and to do well on tests. Approximately half of the students interviewed indicated that they took AP, honors, or dual enrollment courses at their high school. Several students pointed out that they turned down excellent scholarships to other colleges and universities in order to get a Christian education at SEU.

Results of two tailed t-tests comparing college cumulative GPAs of graduates from public high schools vs private Christian high schools reveal significant differences (p>.05) between the two groups (Table 8). This sample of Private Christian high school graduates had significantly higher cumulative GPAs at university than public high school graduates in the sample.

Ancillary Interview Results

Students were asked what their high schools could do to improve, and the results were very interesting. Facilities, sports, school finances, technology, class size, and

extracurricular activities were not high on this group's list of priorities for improving high

school education. Suggestions for educational improvement from both public and

private school graduates included: the need for hiring and retaining inspiring teachers

who model moral behavior daily; the need for school personnel to listen to students and

involve them in decision making; better problem-solving skills by school administrators;

less favoritism shown to certain students by teachers and administrators; greater focus

on authentic learning in real-world contexts; and the need for academic freedom to

discuss critical issues without fear of retribution by teachers, administrators, or other

students.

The interview findings regarding what high schools did poorly corroborated those

from the phase I online survey analysis; public school students reported greater

incidences of bullying, use of alcohol and/or drugs at school and outside school,

cheating, as well as students disrespecting teachers and students disrespecting other

students (Table 6).   Of those students reporting school size (n=68), 80% came from

large high schools (1001-2000 students) or extra-large high schools (more than 2000

students). All (100%) of the students from Christian schools reported attending small

schools (less than 500 students), while 19% of the public high school students came

from small or medium sized (501-1000 students) schools. The correlation of these

problems to school size should be explored further.

Limitations

Several limitations evident in this study might be improved upon in future

research. In order to better understand participants' current level of identity status

attainment, a measure of identity development, such as the Objective Measure of Ego

Identity Status (OMEIS) (Adams, Shea, & Fitch, 1979), could be utilized. The

interaction between participants' status types and spiritual formation related to school

type could then be analyzed.

A second limitation of this study involves the measurement of spiritual formation.

In the current study, spiritual formation was measured using an online survey with

follow-up, open-ended survey and interview questions. Future studies might consider

using a standardized measure of spiritual development.

Finally, the use of non-random samples of students from a Christian university

limits the generalizability of the results.

Significance

This study adds to the body of knowledge related to private Christian education,

spiritual formation of adolescents, comparisons between public and private Christian

education, and college students' perceptions of their academic, spiritual, and social

preparation for university. In addition, the full report of the study to be published by

Cardus contains fuller descriptions of the qualitative data and student recommendations

that are useful for K-12 educators in designing, implementing, and monitoring

educational programming that promotes both academic excellence and spiritual growth.

Recommendations for Future Research

The principal investigators of this study are interested in examining a 360°

analysis of spiritual formation, in which friends, colleagues, and significant others report

on and validate the accuracy of the self-reports by students on their spiritual formation.

With the above recommendation in mind, future research must consider the

model of spiritual formation used and the measurement instrument employed. Many

models of spiritual development are stage models that depict discrete stages and categories of the developmental process. However, most instruments used to measure spiritual development involve the measurement of continuous rather than discrete variables. Therefore, future researchers will need to clearly understand the model of spiritual development from which they are working so that proper assessment measures can be employed.

Future research efforts might take a longitudinal approach to the study of spiritual formation and academic achievement during the high school and college years by following a sample of students throughout high school and the college experience. Periodic measures of spiritual formation and academic achievement could be conducted. This longitudinal data should provide a more thorough understanding of spiritual formation during the high school years and its subsequent impact on spiritual formation and academic achievement during the college years.

An interesting study would be to compare faculty perceptions of student responses to the spiritual statements to those of the students to see whether any correlations exist.

Thirty-one percent of the private Christian school responses to interview items indicated that their schools did a poor job of listening to students and respecting their views compared to 10% of the public school responses to the same items. Several of the Christian school interviewees said that the school administration and faculty were more interested in academics and students' acceptance of doctrine than in engaging them in critical thinking about their faith and issues relevant to the real world as they see it. In addition, when private Christian school graduates were asked what their high

school could do to improve, 28% of the responses were categorized by the researchers as "promoting religious freedom" compared to 7% of the responses of public school graduates to the same item. These findings need to be probed further through narrative or ethnographic studies.

Jeynes's study in 2009 found significant correlations between academic achievement of Latinos and African American high school students and Christian home environments, involvement with a faith community, and Biblical literacy. This study should be replicated at the university level.

Replication of the Astin, Astin, and Lindholm study (2011) should be conducted at the high school level to help Christian educators ascertain whether or not spiritual growth is actually being realized in the lives of secondary students. In addition, careful study of the results of the UCLA spirituality studies by Christian educators will enable them to glean important strategies for enhancing the spiritual growth of both students and faculty in their schools. The UCLA research compiled in *Cultivating the Spirit (2011)*, served as the springboard for the development of *A Guidebook of Promising Practices: Facilitating College Students' Spiritual Development* (Lindholm, Millora, Schwartz, & Spinosa, 2011). This guidebook presents research on a variety of ways that colleges and universities intentionally promote spiritual development in the academy. Many of these promising practices could easily be implemented at the secondary school level and researched for effectiveness. Key practices shown to be related to spirituality in the Astin, Astin, and Lindholm study (2011) include: interaction with faculty members that encourage students to explore questions of meaning and purpose; charitable involvement, service learning, study abroad, and self-reflection.

Finally, the principal investigators of the SEU study are keenly interested in examining academic achievement and spiritual formation and development of SEU students who are studying totally online. Are the online students achieving the same academic and spiritual formation goals as the face to face students?

Conclusion

For 78% of the survey respondents in this study, whether from public or Christian schools, the main reasons for choosing SEU were location, academics, the university's values, Christian environment, the community of believers, the desire to grow spiritually, and God's calling.

Students who attend SEU not only desire to continue the progression of spiritual growth begun in adolescence, but also believe that SEU is a place where this spiritual growth will be fostered. They are not seeking insulation from the world, but rather additional preparation to engage the world as evidenced by acts of service, cultural engagement in important social issues, and a growing walk with God. Survey and interview results from the current study indicate that these students desire their Christian education experience to challenge them to grow spiritually and help them learn how to apply their faith in "real world" contexts. They also believe that access to and interaction with Godly professors will challenge them to grow spiritually in a discipling model similar to Estep's (2002). One student said in an interview, "I have learned more here in two years in my knowledge of God and the Bible and about growing up in Christ than I learned in four years of high school and twelve years of church."

The findings of this study of online survey responses and face to face interviews point to a very dedicated group of Christian young people who are focused on academics, intimately connected to a loving God, and who feel confident in their abilities to defend and proclaim the gospel.

Overall, the researchers are encouraged by the level of commitment to a Christian worldview and actions that demonstrate this worldview that were reported by both public and private Christian school graduates at SEU. Based on developmental theory, one may presume that spiritual growth and development will continue as these young people learn and apply new knowledge and skills to their spiritual formation while advancing their academic careers.

References

Adams, G.R., Shea, J., & Fitch, S.A. (1979). Toward the development of an objective

   assessment of ego-identity status. *Journal of Youth and Adolescence*, *8*, 223-

   237.

Alexander, K.L., & Pallas, A. M. (1983). Private schools and public policy: New

   evidence on cognitive achievement in public and private school. *Sociology of

   Education, 56*, 70-182.

Arenson, K. W. (May 16, 2007). Study finds college-prep courses in high school leave

   many students lagging. *The New York Times*. Retrieved from

   http://www.nytimes.com/2007/05/16/education/16report.html .

Astin, A. W. (1977). *Four critical years: Effects of college on beliefs, attitudes, and

   knowledge*. San Francisco, CA: Jossey-Bass.

Astin, A., Astin, H., & Lindholm, J. (2011). *Cultivating the Spirit: How college

can enhance students' inner lives*. San Francisco, CA: Wiley & Sons.

Baylis, B. (1997) Paper presented at the American Association of Higher Education

   Conference on Assessment and Quality. Retrieved from

   http://www.cccu.org/~/media/filefolder/CCCU%20Collaborative%20Assessment%20project.rtf

Baylis, B. & Longman, K. (2007). *FIPSE Collaborative Assessment Project: Taking

Values Seriously: Accessing the Mission of Church-related Higher Education.*

Cain, G. C., & Goldberger, A. S. (1983). Public and private school revisited. *Sociology

   of Education, 56*, 208-218. doi:10.2307/2112551

Coleman, J., Hoffer, T., & Kilgore, S. (1982). Cognitive outcomes in public and private

   schools. *Sociology of Education, 55,* 65-76. doi:10.2307/2112288

College Board (2010). In Total Group Profile Report. Retrieved from

http://professionals.collegeboard.com/profdownload/2010-total-group-profile-

report-cbs.pdf

Council for American Private Education (n.d.). Facts and figures. Retrieved from

http://www.capenet.org/facts.html

Department of Labor, Bureau of Labor Statistics. College enrollment and work activity

of 2010 high school graduates (April 8, 2011) Retrieved November 4, 2011 from

http://www.bls.gov/news.release/hsgec.nr0.htm

Erikson, E. H. (1968). *Identity: Youth in crisis.* New York, NY: W. W. Norton

Estep, J. R. (2002). Spiritual formation as social: Toward a Vygotskyan development

perspective. *Religious Education*, *97*, 141-164.

Falsev, B., & Heyns, B. (1984). The college channel: Private and public schools

reconsidered. *Sociology of Education*, *57*, 111-122.

Fortosis, S. (1992). A developmental model for stages of growth in Christian formation.

Religious Education, *87*, 283-298.

Gay, B. (2000). Fostering spiritual development through the religious dimension of

schools: The report of a pilot study in 17 independent schools. *International

Journal of Children's Spirituality*, *5*, 61-74. doi:10.1080/713670900

Henderson, S. J. (2003). *The impact of student religion and college affiliation on student

religiosity.* [dissertation]. Fayetteville ,AR: University of Arkansas.

Jeynes, W. (2005). The impact of religious schools on the academic achievement of

low-SES students. *Journal of Empirical Theology*, *18*, 22-40.

doi:10.1163/1570925054048965

Jeynes, W. (2007). Religion, intact families, and the achievement gap. *Interdisciplinary Journal of Research on Religion*, *3*(3), 1-24.

Jeynes, W. (2009). The relationship between biblical literacy, academic achievement, and school behavior among Christian and public school students. *Journal of Research on Christian Education*, *18*, 36-55. doi:10.1080/10656210902751826

Joeckel, S., & Chesnes, T. (2010). A slippery slope to secularization? An empirical analysis of the Council for Christian Colleges and Universities. *Christian Scholar's Review*, *39*, 177-196.

Lindholm, J., Millora, M., Schwartz, L., & Spinosa, H. (2011). *A guidebook of promising practices: Facilitating college students' spiritual development*. Regents of the University of California.

Ma, S. (2003). The Christian college experience and the development of spirituality among students. *Christian Higher Education*, *2*, 321-339. doi:10.1080/15363750390246097

Madsen, G. E., & Vernon, G. M. (1983). Maintaining the faith during college: A study of campus religious group participation. *Review of Religious Research*, *25*, 127-139. doi:10.2307/3511490

Marcia, J. (1980). Ego Identity development. In J. Adelson (Ed.), *Handbook of adolescent psychology*. New York, NY: John Wiley.

Railsback, G.L. (1994). *An exploratory study of the religiosity and related outcomes among college students* (Doctoral dissertation, University Of California, Los Angeles, 1994.)

Railsback, G. (2006). Faith commitment of born-again students at secular and
    evangelical colleges. *Journal of Research on Christian Education*, *15*, 39-60.
    doi:10.1080/10656210609484993

Small, J. L., & Bowman, N. A. (2011). Religious commitment, skepticism, and struggle
    among college students: The impact of majority/minority religious affiliation and
    institutional type. *Journal for the Scientific Study of Religion, 50*(1), 154-174.

Smith, C. & Denton, M.L. (2005). *Soul searching: The religious and spiritual lives of
    American teenagers.* New York, NY: Oxford University Press.

United States Department of Education (2010). National Center for Education Statistics
    Trends in the Use of School Choice: 1993 to 2007 Statistical Analysis Report
    Retrieved from http://nces.ed.gov/pubs2010/2010004.pdf

Wighting, M.J., & Liu, J (2009). Relationships between sense of school community and
    sense of religious commitment among Christian high school students. *Journal of
    Research on Christian Education*, *18*, 56-68. doi:10.1080/10656210902751834

Willett, D. (2010). A biblical model of stages of spiritual development: The journey
    according to John. *Journal of Spiritual Formation and Soul Care*, *3*, 88-102.

Table 1

Frequencies, Percentages, and Means of Survey Responses to Spiritual Formation

Statements (n=182)

	Very true	Mostly true	Somewhat true	Not true	Count	Mean
I feel that I can worship God in a variety of places using a variety of means.	72% (131)	20% (37)	7% (12)	1% (2)	182	2.63
I regularly thank God for what He is doing in my life.	78% (142)	14% (26)	6% (10)	2% (4)	182	2.68
I spend regular quality time in God's Word and in prayer.	36% (65)	39% (72)	23% (42)	2% (3)	182	2.09
I am usually able to help people in need without being judgmental towards them.	47% (85)	45% (83)	7% (13)	1% (1)	182	2.38
I have a strong desire to know God better.	88% (160)	10% (19)	2% (3)	0.0% (0)	182	2.86
I consistently integrate my faith with my education.	48% (87)	35% (63)	16% (30)	1% (2)	182	2.29
I feel loved by God.	86% (155)	10% (19)	3% (6)	1% (1)	181	2.81
I take my studies seriously and make classes a priority.	63% (115)	29% (52)	8% (15)	0.0% (0)	182	2.55

	Very true	Mostly true	Somewhat true	Not true	Count	Mean
I enjoy helping others.	80% (145)	18% (33)	2% (4)	0.0% (0)	182	2.77
I am able to think critically about important social issues.	48% (88)	43% (79)	8% (14)	1% (1)	182	2.40
I am able to defend my beliefs in a respectful manner.	55% (101)	40% (72)	5% (9)	0.0% (0)	182	2.51
I respect the beliefs of others.	62% (112)	32% (59)	6% (11)	0.0% (0)	182	2.55
I am able to share my faith with others.	41% (74)	41% (74)	17% (33)	1% (1)	182	2.21
I appreciate the multicultural nature of the university.	70% (127)	22% (40)	8% (15)	0.0% (0)	182	2.62
I take responsibility for my actions rather than blame others.	60% (109)	39% (70)	1% (3)	0.0% (0)	182	2.58
I am open to receiving constructive feedback from others.	51% (93)	40% (72)	9% (17)	0.0% (0)	182	2.42
I have learned to be honest with myself and a few significant others about my doubts, feelings, beliefs, and struggles.	70% (127)	24% (44)	5% (10)	1% (1)	182	2.63

Students were asked to rate the statements using the following scale: 3 "very true"; 2

"mostly true"; 1 "somewhat true"; 0 "not true".

Table 2

Frequencies, Percentages, and Means of Survey Responses to Influence of High

School on Spiritual Formation (n=182)

	Very Influential	Moderately influential	Somewhat influential	Not influential	Count	Mean
I feel that I can worship God in a variety of places using a variety of means.	6% (11)	17% (30)	22% (40)	55% (100)	181	0.73
I regularly thank God for what He is doing in my life.	17% (31)	17% (31)	21% (38)	45% (80)	180	1.07
I spend regular quality time in God's Word and in prayer.	7% (13)	12% (22)	24% (43)	57% (102)	180	0.70
I am usually able to help people in need without being judgmental towards them.	14% (26)	29% (51)	31% (56)	26% (47)	180	1.31
I have a strong desire to know God better.	17% (31)	17% (30)	19% (35)	47% (84)	180	1.04
I consistently integrate my faith with my education.	13% (24)	9% (17)	25% (44)	53% (95)	180	0.83

	Very Influential	Moderately influential	Somewhat influential	Not influential	Count	Mean
I feel loved by God.	16% (28)	18% (33)	19% (35)	47% (84)	180	1.26
I take my studies seriously and make classes a priority.	36% (65)	31% (56)	17% (31)	16% (28)	180	1.88
I enjoy helping others.	21% (37)	33% (59)	24% (44)	22% (40)	180	1.52
I am able to think critically about important social issues.	22% (40)	30% (54)	35% (62)	13% (23)	179	1.62
I am able to defend my beliefs in a respectful manner.	20% (36)	22% (40)	31% (55)	27% (49)	180	1.31
I respect the beliefs of others.	27% (49)	26% (46)	28% (51)	19% (34)	180	1.61
I am able to share my faith with others.	15% (27)	24% (43)	29% (52)	32% (58)	180	1.22
I appreciate the multicultural nature of the university.	22% (40)	25% (45)	25% (45)	28% (50)	180	1.42

	Very Influential	Moderately influential	Somewhat influential	Not influential	Count	Mean
I take responsibility for my actions rather than blame others.	17% (31)	31% (56)	25% (45)	27% (48)	180	1.39
I am open to receiving constructive feedback from others.	19% (34)	28% (51)	35% (62)	18% (32)	179	0.82
I have learned to be honest with myself and a few significant others about my doubts, feelings, beliefs, and struggles.	12% (22)	20% (37)	32% (57)	36% (64)	180	1.09

Respondents were asked to rate the influence of their high school education on their rating using a scale of 3 "very influential"; 2 "moderately influential"; 1 "somewhat influential"; and 0 "not influential".

Table 3

Average Ratings of Spiritual Formation Statements by High School Type (n=179)*

	Public High School		Private Christian School	
	Mean Rating	Mean Rating of High School Influence	Mean Rating	Mean Rating of High School Influence
I feel that I can worship God in a variety of places using a variety of means.	2.63	0.40	2.68	1.62
I regularly thank God for what He is doing in my life.	2.67	0.74	2.70	1.96
I spend regular quality time in God's Word and in prayer.	2.11	0.40	2.08	1.51
I am usually able to help people in need without being judgmental towards them.	2.39	1.23	2.42	1.53
I have a strong desire to know God better.	2.86	0.67	2.88	2.10
I consistently integrate my faith with my education.	2.25	0.43	2.44	1.92
I feel loved by God.	2.78	0.65	2.88	2.10
I take my studies seriously and make classes a priority.	2.54	1.72	2.60	2.18
I enjoy helping others.	2.76	1.40	2.76	1.80
I am able to think critically about important social issues.	2.42	1.57	2.40	1.75
I am able to defend my beliefs in a respectful manner.	2.55	1.19	2.46	1.78
I respect the beliefs of others.	2.60	1.60	2.40	1.59

	Public High School		Private Christian School	
	Mean Rating	Mean Rating of High School Influence	Mean Rating	Mean Rating of High School Influence
I appreciate the multicultural nature of the university.	2.62	1.50	2.60	1.14
I take responsibility for my actions rather than blame others.	2.60	1.22	2.52	1.84
I am open to receiving constructive feedback from others.	2.47	1.41	2.32	1.73
I have learned to be honest with myself and a few significant others about my doubts, feelings, beliefs, and struggles.	2.64	.97	2.58	1.41
	n=129	n=129	n=49	n=49

*Students were asked to rate the statements using the following scale: 3 "very true"; 2 "mostly true"; 1 "somewhat true"; 0 "not true". For the same statement, respondents were asked to rate the influence of their high school education on their rating using a scale of 3 "very influential"; 2 "moderately influential"; 1 "somewhat influential"; and 0 "not influential".

Table 4

t tests of Significance Between Public and Private Christian School Graduates on Responses to Spiritual Formation Statements and Influence from High School (n=179)

	Public x Christian re: truth of statement	Public x Christian re: influence from high school
I feel that I can worship God in a variety of places using a variety of means.	t = 0.645	t = 0.00
I regularly thank God for what He is doing in my life.	t = 0.787	t = .0.00
I spend regular quality time in God's Word and in prayer.	t = 0.834	t = .0.00
I am usually able to help people in need without being judgmental towards them.	t = 0.798	t = 0.078
I have a strong desire to know God better.	t = 0.767	t = 0.00
I consistently integrate my faith with my education.	t = 0.134	t = 0.00
I feel loved by God.	t = 0.251	t = 0.00
I take my studies seriously and make classes a priority.	t = 0.557	t = 0.010**
I enjoy helping others.	t = 0.985	t = 0.027*
I am able to think critically about important social issues.	t = 0.832	t = 0.263
I am able to defend my beliefs in a respectful manner.	t = 0.384	t = 0.001***
I am able to share my faith with others.	t = 0.216	t = 0.004**
I respect the beliefs of others.	t = 0.049*	t = 0.978
I appreciate the multicultural nature of the university.	t = 0.885	t = 0.057*
I take responsibility for my actions rather than blame others.	t = 0.364	t = 0.001***

	Public x Christian re: truth of statement	Public x Christian re: influence from high school
I am open to receiving constructive feedback from others.	t = 0.241	t = 0.049*
I have learned to be honest with myself and a few significant others about my doubts, feelings, beliefs, and struggles.	t = 0.571	t = 0.010**

* p <.05   ** p<.01   *** p<.001

Students were asked to rate the statements using the following scale: 3 "very true"; 2 "mostly true"; 1 "somewhat true"; 0 "not true".   For the same statement, respondents were asked to rate the influence of their high school education on their rating using a scale of 3 "very influential"; 2 "moderately influential"; 1 "somewhat influential"; and 0 "not influential".

Table 5

Frequencies and Percentages of Online Survey Responses on Diversity of Students and Faculty at High School (n=180)

		Very diverse	Moderately diverse	Slightly diverse	Not diverse at all
Public	n=129	42 33%	48 37%	29 22%	10 0.78%
Private Christian	n=51	7 14%	11 22%	28 55%	5 0.49%

Table 6

Descriptive Statistics for School Problems by School Type (n=183)

School Problem	Number		Mean		Standard Deviation	
	Public	Private Christian	Public	Private Christian	Public	Private Christian
Verbal Bullying	130	51	2.15	1.59	0.76	0.83
Physical Bullying	128	51	1.84	0.84	0.77	0.70
Plagiarism	130	50	1.97	2.20	0.74	1.05
Cheating	130	51	2.38	1.92	0.70	0.72
Students Disrespecting Teachers	130	51	2.30	1.78	0.70	0.67
Students Disrespecting Students	130	51	2.42	1.90	0.64	0.67
Teachers Disrespecting Teachers	130	51	0.87	0.63	0.68	0.72
Teachers Disrespecting Students	130	50	1.08	0.84	0.67	0.84
Racial Tension	128	51	1.35	0.53	0.95	0.70
Alcohol Use	130	51	2.18	1.20	0.83	0.96
Drug Use	130	51	2.22	1.00	0.76	0.77
Teen Pregnancy	130	51	1.87	0.55	0.82	0.64

Table 7

t tests of Independent Samples of School Problems by School Type (n=183)

Variable	t value	Degrees of Freedom	p value (sig. level)
Verbal Bullying	4.336	179	p = .001*
Physical Bullying	7.965	177	p = .001*
Cheating	3.987	179	p = .001*
Plagiarism	1.425	68.35 (equal variances not assumed)	p = .159
Students Disrespecting Teachers	4.505	179	p = .001*
Students Disrespecting Students	4.683	88.255 (equal variances not assumed)	p = .001*
Teachers Disrespecting Teachers	2.127	179	p = .035*
Teachers Disrespecting Students	1.787	73.815 (equal variances not assumed)	p = .078
Racial Tension	6.348	123.894 (equal variances not assumed)	p = .001*
Alcohol Use	6.874	179	p = .001*
Drug Use	9.652	179	p = .001*
Teen Pregnancy	10.315	179	p = .001*

*denotes statistically significant results

Table 8

Descriptive Statistics and Two-tailed t test of Significance Between Public High School and Private Christian High School Graduates on University Cumulative GPA (n=231);

	Mean GPA (4.0 point scale)	Standard Deviation	Degrees of Freedom	t value+
Public High School (n= 169)	3.299	.6000	168	
Private Christian High School (n=62)	3.5114	.5526	61	1.9703*

+

Equal variances assumed (*F*=1.1786, p<.4637)

* Significant (p<.05)

Appendix A

Outcomes of Education Online Survey (delivered via Survey Monkey®)

This survey is designed to gather information for a research project funded by Cardus, a non-profit think tank. The principal investigators at SEU are Dr. Patty LeBlanc, Associate Professor in the College of Education, and Dr. Patty Slaughter, Associate Professor of Psychology, in the College of Arts and Sciences.
The purpose of this research study is to explore the relationship between high school experience and its influence on academic, social, and spiritual growth.

This survey should take only about 20 minutes of your time and will serve to further understanding of education and personal development. Please respond truthfully to all the items. The results of individual responses will remain confidential and will be used only for reporting grouped results. By supplying your name, phone, and email address, the researchers will be able to contact you if they have questions or to invite you to participate in a face-to-face interview. By taking this survey, you certify that you are more than 13 years of age and that you consent to participate.

Thank you so much for your assistance in this important research project! Your prompt response to the survey is very much appreciated.

1. Please tell us about yourself. Remember: your answers are confidential, and responses will not be individually identifiable. (First Name, Last Name, Age, Year Graduated from High School, Hometown, State, Country, Email Address, Phone Number)

2. With what church or denomination are you affiliated? (Amish, Anglican, Assemblies of God, Baptist, Brethren, Catholic, Church of Christ, Christian Church, Greek Orthodox, Latter-Day Saints, Lutheran, Mennonite, Methodist, Messianic Jewish, Pentecostal, Presbyterian, Seventh Day Adventist, Society of Friends, Unitarian, Universalist, None, Other)

3. Are you: (Student, Faculty, Staff, Other)

4. If you are a student at SEU, how are you classified? (Freshman, Sophomore, Junior, Senior, Graduate, Non-degree seeking)

5. If you are currently a student, what is your major and minor? (Major, Minor)

6. Describe the reasons you chose to attend SEU.

7. What type of high school did you attend? If you attended more than one type, what type did you attend the majority of your high school years? (Public, Private secular, Private Christian, Home School)

8. Was there a "faith requirement" for enrolling at your school? If yes, please describe.

9. What type of curricula did your high school offer? (College Preparation, Vocational, College Preparation + vocational, Other)

10. Were you required to complete a service learning project and/or community service hours in order to graduate from your high school? If yes, describe a project you completed.

11. In your opinion, what proportion of your high school teachers were Christians? (Almost all, More than half, About half, Less than half, Almost none, Don't know)

12. How would you describe the diversity of faculty and students at your high school? (Very diverse, moderately diverse, Slightly Diverse, Not Diverse at All)

13. What was your level of exposure to faculty and students with special needs at your high school? (High level, Moderate level, Slight level, No Exposure, Other)

14. Using the rating scale provided, how often did students and faculty in your high school have to deal with the following problems? (Frequently, Occasionally, Rarely, Never)
    a. Verbal Bullying
    b. Physical Bullying
    c. Cheating
    d. Plagiarism
    e. Students Disrespecting Teachers
    f. Students disrespecting students
    g. Teachers disrespecting teachers
    h. Teachers disrespecting students
    i. Racial tension
    j. Alcohol use
    k. Drug use
    l. Teen Pregnancy

15. Of the problems listed above, which were the most problematic at your high school? (#1, #2, #3)

16. How were school problems dealt with by administrators at your high school?

17. Think about the academic preparation you received in high school. How well did your high school prepare you academically for college on a scale of 1 to 10, with 10 being highest?

18. Where are you attending college or university? If you have already graduated, where did you attend college or university? (Public, Private secular, Private Christian, Other)

19. Please rate the following statements using the scale provided. (Very true Mostly true, Somewhat true, Not true) In the second column, indicate the level of influence your high school education had on your rating. (Very influential, Moderately influential, Somewhat influential, Not influential)

    a. I feel that I can worship God in a variety of places using a variety of means.
    b. I regularly thank God for what He is doing in my life.
    c. I spend regular quality time in God's Word and in prayer.
    d. I am usually able to help people without being judgmental towards them.
    e. I have a strong desire to know God better.
    f. I consistently integrate my faith with my education.
    g. I feel loved by God.
    h. I take my studies seriously and make classes a priority.
    i. I enjoy helping others.
    j. I am able to think critically about important social issues.
    k. I am able to defend my beliefs in a respectful manner.
    l. I respect the beliefs of others.
    m. I am able to share my faith with others.
    n. I appreciate the multicultural nature of the university.
    o. I take responsibility for my actions rather than blame others.
    p. I am open to receiving constructive feedback from others.
    q. I have learned to be honest with myself and a few significant others about my doubts, feelings, beliefs, and struggles.

Appendix B
Face to Face Interview Questions

Name:
ID Number:
Date:
Phone:
Type of High School: Public   Private Secular   Private Christian HomeSchool
Size of High School:

Describe what your high school did well.

Describe what your high school did poorly.

What could your school have done to improve in these areas?

Describe your favorite high school teacher.

Describe some of the service learning or missions projects you and your friends and fellow classmates completed during high school.

Do you feel that your high school education prepared you to be successful academically at the university level?

How has your high school education prepared you to live out your Christian faith in the world?

Did your high school education prepare you to intellectually defend your faith and share it with others? How?

Do you feel that your high school education prepared you to function in a diverse world? How?

Did your high school education help you to discover your spiritual gifts? If yes, how?

Did you high school education help you discover your calling? If yes, how?

How did you become aware of Southeastern University?

Discuss how involved your parents were in your decision to attend SEU. In the selection of a major? In your involvement and selection of a church? Volunteer activities?

Describe any leadership roles you had in high school or currently have at SEU? How did your high school education prepare you for these roles?

How did your high school experience influence your spiritual growth? Your involvement in missions? Evangelism? Community service?

Describe any rebellious periods you have had in your life, if any.

Describe a "typical" day in your life.

How could Christian education better support your academic and spiritual development?