

*A Special Report for the Council of Independent Colleges*

**Independent Colleges and Student Engagement:  
Do Religious Affiliation and Institutional Type Matter?**

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### **Abstract**

This study extends previous work on the relationships between student engagement in spirituality-enhancing activities during college and selected student and institutional variables. Using the same data set and many of the same dependent variables as an analysis performed for the Teagle Foundation, this study for CIC examined more extensively the influence of institutional variables including multiple categories of religious affiliation, Carnegie classification, and control (public/private). Block hierarchical regression models were used to estimate the relationships between institutional type characteristics and nine dependent variables. Religious affiliation explained the most variance on three dependent variables – participating in spiritual activities (worship), gains in spiritual development (gnspirit), and gains in ethical development (gnethics). Students at faith-based institutions scored the highest on these dimensions, followed by Roman Catholic and Other Protestant-affiliated institutions. At the same time, students attending non-affiliated, private institutions did not differ in any appreciable way from their public school peers, with both groups generally engaging least often in spiritual activities. Although the effects were not as strong as with religious affiliation, students attending private institutions scored higher than their public school counterparts in certain areas such as participating in spiritual activities, engaging in deep learning, and in self-reported growth in spirituality, ethical development, personal and social development, and intellectual skills. The findings indicate religiously affiliated colleges and universities are not all alike and that there is more to learn about how institutional mission and environments influence student engagement and learning.

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## Foreword

### Foreword

The Council of Independent Colleges (CIC), an association of more than 550 small and mid-sized private colleges and universities, seeks to advance institutional excellence, and enhance private higher education's contributions to society. CIC serves as a national voice for independent higher education and promotes the distinctive features of education offered by small to mid-sized, teaching-oriented, private colleges and universities. Through the "Making the Case" initiative, CIC has compiled a wide-array of research and data to demonstrate the quality and effectiveness of member institutions. Much of the analyses examine the contributions of private higher education in general, and of non-doctoral, small and mid-sized private colleges and universities in particular. Since two-thirds of CIC's membership are religiously-affiliated colleges and universities, an important aspect of "making the case" is describing the impact these institutions have on the moral and ethical, as well as the religious and spiritual development of their students. This resource is available on-line at [www.cic.edu/makingthecase](http://www.cic.edu/makingthecase).

CIC continues to analyze additional data and commission new research to supplement the existing resources and further "make the case" for independent higher education. This study, conducted for CIC by Robert Gonyea and George Kuh of Indiana University's Center for Postsecondary Research, examines data from the National Survey of Student Engagement (NSSE) with attention to two dimensions of undergraduate experience. We were intrigued by Kuh and Gonyea's (2005) recent analysis for the Teagle Foundation, a long-time CIC partner, examining the connections between spirituality, liberal learning, and student engagement. Subsequently, CIC asked these researchers to dig deeper into the data to further explore the differences on students' moral and spiritual engagement, as well as liberal learning, providing a comparative view across two segmentations of institutional characteristics, (1) the CIC sub-sector of baccalaureate and masters level private colleges and universities, and (2) major groupings of institutions by religious affiliation. This study addresses important shifts that have occurred during the past 50 years since CIC was founded in 1956, both in terms of undergraduate student interests and experiences, and regarding institutional affiliation and mission that are important to member colleges and universities.

Although the first three centuries of American higher education could be described as predominantly private and Protestant, the rise of public institutions from the mid 19th century on, and the increased enrollment of students from all backgrounds, especially since World War II, has resulted in a higher education system that is at the same time more diverse and more secular. Two structural characteristics of colleges and universities, religious affiliation and institutional type, contribute to this diversity, though the impact of these institutional factors on student experiences and outcomes remains unclear. During the last century, religion as a core element of the curriculum and religion as a predominant influence in mission, governance, and campus ethos increasingly had less influence in the academy (Burtchaell, 1998; 2004a; Marsden, 1994; Sloan, 1994). Over the past decade renewed attention has been given to the role of religion in the academy, both in terms of religion's place and impact within institutions, and in the lives of college students (Hartley, 2004a). With regard to institutional type, the latter half of the 20th century witnessed a dramatic increase in the public sector, both in numbers of institutions and in enrollment of students, far outstripping the enrollment growth of private colleges (Thelin, 2006).

The Council of Independent Colleges is interested in the impact of these structural characteristics on the engagement of undergraduate students.

A number of recent studies have detected an increased interest in religion and spirituality among students attending American colleges and universities. The multi-year study of the spiritual development of undergraduates being conducted by UCLA's Higher Education Research Institute (2004), found that of 112,232 first-year students surveyed in the early fall 2004, four out of five had an interest in spirituality and nearly half (47 percent) were seeking opportunities to grow spiritually. Similarly, a national poll conducted in March 2006 by Harvard's Institute of Politics (2006) found that seventy percent of current undergraduates said that religion is important in their lives. Moreover, of the 1,200 students in the sample, more than three times as many indicated that they have become more spiritual since entering college than those who have become less spiritual (25 percent versus 7 percent). A number of scholars have also found evidence of strong student interest and involvement in religious attitudes, beliefs, and practices (Bryant, Choi, & Yasuno, 2003; Hartley, 2004b, 2006; Lee, 2002). One examination of the religious life on four different campuses concluded that "young people in American culture have never been more enthusiastically engaged in religious practice or with religious ideas" (Cherry, DeBerg, & Porterfield, 2001, pp. 294-5). College and university leaders are with good reason seeking a better understanding of these developments and their implications for campus programs and policy.

What is particularly noteworthy of the recently documented student interest in religion and spirituality is that it runs counter to the findings of decades of prior research. Studies dating back to the 1960s consistently found that attending college led to declines in students' religious beliefs and practices (Astin, 1993; Feldman & Newcome, 1969; Kuh, 1976, 1999, 2000, August 15; Pascarella & Terenzini, 1991). Overall, these studies found that college had a liberalizing effect on students' religious attitudes and beliefs, and that by their senior year students' beliefs were more individual and less dogmatic. Moreover, students experienced marked declines in their involvement in religious activities, such as attending services of worship. In particular, students' interactions with other members of the campus community appeared to influence changes in their religious beliefs and practices. For example, students who lived at home were more likely to sustain their religious identities. Stronger religious commitments among faculty and peers also helped students maintain their religious beliefs.

The developmental theories of James Fowler (1981) and Sharon Parks (1986; 2000) contend that changes in students' religious convictions are to be expected. Tisdell (2003) noted that developing an authentic spiritual identity is a critical-reflective process that typically occurs in young adulthood, involving a move away from or a questioning of one's childhood religious tradition. When you add to this developmental struggle the rarified environment of analytical scrutiny characteristic of higher education, you have a situation ripe for change. The academic community, thus, has the potential to enhance or inhibit this process of faith development. As Parks (1986) pointed out, "higher education—self-consciously or unselfconsciously—serves the young adult as his or her primary community of imagination, within which every professor is potentially a spiritual guide and every syllabus a confession of faith" (pp. 133-134).

While there is mounting evidence that student interest in religion and spirituality is stronger than in recent decades, and growing support for the conclusion that some collegiate experiences may strengthen students' beliefs, if not their practices, an unresolved dynamic is the influence of institutional characteristics in this process of change. Earlier studies found that students attending

Protestant and Catholic affiliated institutions experienced declines in their religious beliefs and practices, though to lesser degrees than their peers at non-sectarian institutions, with students attending highly selective institutions experiencing the greatest declines (Pascarella & Terenzini, 1991). More recent studies present contradictory findings, some concluding that religiously-affiliated institutions positively influence religious engagement (Cherry et al., 2001), while others concluding that they do not (Lee, 2002). Campus culture can be a potent environmental influence on students' religious and spiritual practice (Kuh, 2000, August 15), as well as on participation in activities linked with moral and character development (Kuh & Umbach, 2004).

Religiously-affiliated colleges continue to play a vital role in American higher education, despite doomsday predictions of the certain demise of religious influence in higher education (Burtchaell, 1998). The survival of these unique institutions, in spite of uncertainty regarding their religious identity, may be due in part to their adaptability and determination to succeed in the academic marketplace. As Paul Dove (2002) noted at a Harvard-sponsored conference on the future of religious colleges, "from a material point of view most of them prospered; from an academic point of view most of them improved; and from a cultural perspective the graduates of these institutions exercised a positive impact" (pp. ix-x). Given the renewed student interest in religion and spirituality, religiously-affiliated institutions may be better suited to respond to these trends.

Smaller, private colleges, religiously-affiliated or not, also continue to thrive, despite challenges to their existence in the last half-century (Astin & Lee, 1971). As Alexander Astin (1977; 1993) has found, smaller, residential liberal arts colleges promote student intellectual growth, moral development, and academic success. Other research supports the conclusion that private institutions have a modest, positive impact on educational aspirations and attainment (Pascarella & Terenzini, 2005). Students attending these institutions are more likely to persist in their studies and graduate on time. Furthermore, smaller private colleges, including religiously-affiliated institutions, are more effective in fostering principled moral reasoning. These are but some of the important reasons for promoting this sub-sector of American higher education.

The Council of Independent Colleges is grateful to Bob Gonyea and George Kuh for undertaking this study on our behalf. Their experience and expertise applied to a robust dataset lend important understandings of the moral and spiritual engagement of college students today, and provide keen insight into important differentiations among the varying types of institutions that comprise the American higher education landscape. This analysis will assist CIC in further "making the case" for the quality and effectiveness of small and mid-sized private colleges and universities. And in so doing, we seek to enrich the contributions of these vital institutions to students and to society for the next 50 years, and beyond.

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## **Independent Colleges and Student Engagement: Do Religious Affiliation and Institutional Type Matter?**

### **Purpose of the Inquiry**

This study was undertaken at the request of the Council of Independent Colleges (CIC) to help ‘make the case’ for independent higher education. The analysis builds on a previous study conducted for the Teagle Foundation entitled, “Exploring the Relationships between Spirituality, Liberal Learning, and College Student Engagement” (Kuh & Gonyea, 2006). The CIC project expands upon the Teagle analysis in two major respects.

First, the CIC analysis focuses specifically on two aspects of the student experience thought to be important at non-affiliated private colleges:

- The perceived quality of relationships with other students at the institution, which is considered a proxy for sense of belonging (‘envstu’ is the variable name in the analyses), and
- The extent to which the student’s college experience contributed to developing a personal code of values and ethics (‘gnetics’).

Second, the data were analyzed using institutional groupings different than those used in previous analyses. For this study we assigned schools to one of six categories of religious affiliation determined by the CIC (‘relig6’):

- (1) Faith-based/fundamentalist (n=29),
- (2) Roman Catholic (n=70),
- (3) Mainline Protestant (member of the National Council of Churches, NCC) (n=73),
- (4) Other Protestant (n=11),
- (5) Non-affiliated, private (n=87), and
- (6) Public (n=203).

Institutions were also assigned to four other categories, representing a combination of Carnegie type and control. The four resulting ‘Carnegie/control’ (‘carnctrl4’) categories are:

- (1) Baccalaureate and Masters Private institutions (BA/MA private, which is CIC's predominant membership profile)
- (2) Baccalaureate and Masters Public institutions (BA/MA public)
- (3) Doctoral Private institutions
- (4) Doctoral Public institutions

### **Other Variables of Interest**

In addition to the new variables just described, other variables of interest used in the Teagle analysis were also examined in this study:

Religion and Spirituality. Three independent variables from NSSE of special interest in this analysis are:

- ‘worship’: In your experience at this institution, how often have you participated in activities to enhance your spirituality (worship, meditation, prayer, etc.)?
- ‘diffstu’: In your experience at this institution, how often have you had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values?
- ‘gnspirit’: To what extent has your experience at this institution contributed to developing a deepened sense of spirituality?

We use these and other variable names occasionally throughout the report as shorthand labels to represent the concepts.

Deep Learning. A measure of deep learning from NSSE is particularly relevant to this inquiry because it is composed of the eight behaviors listed below that are essential to acquiring the skills and competencies needed to become an intentional learner, one of the more important outcomes claimed by proponents of liberal learning (Association of American Colleges and Universities, 2002; Entwistle & Entwistle, 1991; Schneider, 2004; Tagg, 2003).

- Worked on a paper or project that required integrating ideas or information from various sources
- Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments
- Put together ideas or concepts from different courses when completing assignments or during class discussions
- Discussed ideas from your readings or classes with faculty members outside of class
- Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)
- Synthesizing and organizing ideas, information, or experiences into new, more complex interpretations and relationships
- Analyzing the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components
- 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
- Applying theories or concepts to practical problems or in new situations



Self-Reported Outcomes. In addition to the deepened sense of spirituality outcome noted earlier, NSSE asks students to estimate the progress or gains they have made since starting college in 15 additional areas, almost all of which are valued in the liberal arts tradition. These can be divided into three clusters: personal-social development (gnpersoc), practical competence (gnprac), and intellectual skills (gnintsk). We included these outcomes in the analysis to determine the degree to which practicing religious or other spirituality-enhancing activities was associated with students' growth and development in these important areas, relative to other educational activities known to be positively correlated with desired outcomes of college.

## **Analysis**

The analysis was done in three stages.

First, crosstabulation tables were computed for all variables for the two student groups (first-year students, seniors) using the two institutional type variables noted earlier (religious affiliation and Carnegie/control). The frequency distributions for all relevant items allow us to more closely examine the patterns of student responses to each item.

Second, to test for significant differences between institutional types, one-way analysis of variance (ANOVA) was conducted on all variables of interest for both the religious affiliation and Carnegie/control groupings. Scheffe post-hoc tests were run to identify which types differed from the others, and homogenous subset tables were produced to provide a better visual display of these differences. Homogenous groups are identified by the Scheffe post hoc tests in the tables that follow the ANOVA results. The columns in the table define each homogenous group. The mean of each group is displayed in the table, arranged from lowest to highest, within the homogenous group columns. Group means that are significantly different ( $p < .01$ ) appear in separate columns, thus forming the homogenous sets.

Finally, blocked hierarchical regression models were produced with all the variables of interest as dependent variables, and institutional types (models using religious affiliation and Carnegie/control were run separately), student characteristics, and other engagement variables as independent variables. For each dependent variable, three models were run. The first model entered only the institutional type variable (i.e., dummy categories for religious affiliation or Carnegie/control) to identify the bivariate relationship between the institutional types and the dependent variable. The second model entered additional student and institutional variables as controls. Changes in the coefficients for the religious affiliation (relig6) or Carnegie/control (carnctrl4) dummy variables from the first model to the second model represent the common variance accounted for by the control variables. Similarly, the third model added several additional variables from the NSSE survey related to student activities and perceptions of the environment.

Results from these three stages of the analysis are presented in the appendix.

## **Major findings**

The ANOVA tests for both first-year students and seniors produced significant differences ( $p < .001$ ) between institutional religious affiliation categories (relig6) on all variables of interest. This is not surprising given the large number of cases analyzed. However, the magnitudes of the

F statistics varied greatly, suggesting that differences between groups are greater on some items than others. As might be expected, for the religious affiliation the F statistics are greatest on the two items that have religious content – participating in spiritual activities (worship) and self-reported gains in spiritual development (gnspirit.)

Significant differences ( $p < .001$ ) were also found between Carnegie/control (carnctrl4) categories on all variables of interest in the ANOVA tests for both first-year students and seniors. Again, the size of the F statistic varied, but not as much as for religious affiliation. The largest differences were between Carnegie/control groups on gains in spiritual development (gnspirit).

Findings from each of the variables of interest are discussed below, with results for religious affiliation (relig6) and Carnegie/control (carnctrl4) institution variables reported separately.

### How often do students participate in activities that enhance their spirituality (worship)?

#### *Religious affiliation (relig6)*

ANOVA results show that of the six types of institutions in this category, five distinct groupings emerged, with similar patterns and magnitudes for both first-year and senior students. Students attending non-affiliated private institutions least frequently participated in religious activity – even less than students at public institutions, while students at faith-based/fundamentalist institutions did the most. For example, only a fifth (21%) of first-year and seniors students at private non-affiliated institutions say they “frequently” (‘often’ or ‘very often’) engage in spiritual activity, while more than four fifths (83%) of first-year students and three quarters (77%) of seniors at faith-based schools do so. The Roman Catholic and mainline Protestant group means were comparable, falling in the mid-range of this variable. Across all institutional types, seniors indicated somewhat lower rates of participation over first-year students, except for seniors at non-affiliated private colleges and universities which indicated little change.

Regression results confirm the ANOVA findings, showing that religious affiliation (relig6) accounted for 9% of the variance in the frequency of students’ spiritual practice (worship). The sizeable coefficients for the religious affiliation dummy variables did not change much after adding controls. Compared with public institutions (the reference group), a very strong effect (1.08) exists for students attending faith-based institutions even after controls are added. This means that, consistent with what one would expect, students at faith-based schools participate more than their peers elsewhere in spirituality-enhancing activities. The coefficient for the non-affiliated private group has a small negative value (-.17), indicating that students at these schools participate less in worship activities than their peers at public colleges and universities, after controls.

#### *Carnegie/control (carnctrl4)*

ANOVA post hoc tests show that the means of the private institution groups for both first-year and senior students are higher than both public group means. The BA/MA public mean was significantly lower than the doctoral public group of institutions. More than a third (FY=36%; seniors=34%) of BA/MA private students say they “frequently” engage in spiritual activity, while only about a quarter (FY=24%; seniors=26%) of students attending BA/MA publics do so. Regression results show that in contrast to the religious affiliation (relig6) groups, the

Carnegie/control groupings explain only a trivial amount (1%) of the variance in participating in spiritual activities (worship).

How often do students have serious conversations with students who are very different from them in terms of their religious beliefs, political opinions, or personal values (diffstu)?

*Religious affiliation (relig6)*

The ANOVA produced four homogenous groups for first-year students, and three for seniors. The F statistic was not large for this item, suggesting that any differences between the types of institutions – even though statistically significant – are not great in any practical sense. Nonetheless, in a reversal to the pattern on the previous item, the faith-based group mean was significantly lower than the other five groups, with both first-year and senior students at the mainline Protestant and non-affiliated private college groups more frequently engaging in serious conversations with peers with different views (diffstu). For example, about 43% of first-year students at faith-based institutions “frequently” have such conversations, while well over 60% of mainline Protestant and non-affiliated private students do so.

Regression results show that religious affiliation explains very little (1%) of the variance in having conversations with diverse peers. After controlling for student and institution-level variables (model 2), the small effects of attending these different types of schools on talking with students of diverse religious beliefs and political opinions remained significant and stable.

*Carnegie/control (carnctrl4)*

Carnegie/control groupings do not explain much of the variance in how often students have conversations with others who differ from them religiously, politically, or personally. Still, as with the previous item, the private institutions generally have higher means than the public schools, and the doctoral privates are significantly higher than the BA/MA privates. For example, two thirds of first-year students at doctoral private institutions have such discussions “frequently,” compared with 60% of BA/MA private students and 54% of BA/MA public students. Seniors follow this same pattern. The regression model shows that these institutional types (carnctrl4) have a trivial impact on whether or not students have serious conversations with diverse others.

How much do students engage in activities associated with deep learning (deep)?

*Religious affiliation (relig6)*

Modest differences in deep learning were found between groups defined by their religious affiliation, with public institutions and faith-based institutions having the lowest means. Other Protestant, Roman Catholic, non-affiliated private, and mainline Protestant institutions scored highest overall, but did not generally differ from one another. To better understand the actual differences in student experiences, the frequency of participation in deep learning activities distribution was divided into thirds. This revealed that while 28% of first-year students at non-affiliated private institutions were in the highest third of all deep learning scores (close behind were 27% at mainline Protestant, 26% at other Protestant, and 25% at Roman Catholic institutions), only 18% of public institution first-year students and 21% of faith-based students were in this top category. The pattern is similar for seniors – 42% of non-affiliated private school

seniors scored in the top third of the deep learning scale (43% for seniors at mainline Protestant, 42% at other Protestant, and 40% at Roman Catholic institutions) versus 32% for public institutions and 36% for faith-based institutions. The regression models show that all groups of institutions have small, positive effects compared to the public institution reference group, though religious affiliation accounts for very little variance (2%) in deep learning.

#### *Carnegie/control (carnctrl4)*

Institutional control also is associated with student engagement in deep learning. Both first-year students and seniors at private schools more frequently participated in deep learning activities than their counterparts at public schools. For example, 30% of first year students attending BA/MA private schools but only 18% of BA/MA public students scored in the highest third of the distribution of deep learning scores. For seniors these numbers were 42% and 34% respectively. The regression model using deep learning as the dependent variable shows that unlike the models for participation in spiritual activities (worship) and gains in spiritual development (gnspirit) the size of the Carnegie/control coefficients are reduced somewhat when other student and institutional controls are introduced, but remain significant. This means that other institutional and student factors are involved in explaining what matters to deep learning. For example, among the variables that seem to be related to deep learning are being a senior, full-time enrollment, self-reported grades, and race and ethnicity (Blacks and Latinos scored higher than White students).

#### How do students rate the quality of their relationships with other students at their institution (envstu)?

#### *Religious affiliation (relig6)*

Although significant differences exist by religious affiliation, they are not particularly sizeable overall. Post hoc tests show that the faith-based group for first-year students, and the faith-based and 'other Protestant' groups for seniors differ from the other groups. Students at non-affiliated private and public institutions rate the quality of their relationships with other students somewhat lower than other types. For example, 74% of first-year students and 73% of seniors at faith-based institutions rate their campus relationships with other students highly (i.e., marking at least a '6' on the 7-point scale) contrasted with 60% of first-year students and 64% of seniors at public colleges and universities.

The regression model expands upon these results. Adding student and institutional controls did not increase the explanatory power to the model to any appreciable degree. The largest student characteristic effects are for fraternity/sorority members, athletes, and full-time students. In the third model, variables with the strongest correlations include relationships with faculty and overall satisfaction with the institution.

#### *Carnegie/control (carnctrl4)*

Carnegie/control was associated with small, though statistically significant effects. The pattern favoring private schools appeared once again, with BA/MA private first-year students also having slightly higher scores than their counterparts at doctoral privates. But for seniors a different pattern emerged where the smaller BA/MA schools had somewhat higher means than the larger doctoral schools, regardless of control. For example, among seniors at BA/MA institutions, 67%

of those attending privates and 65% of those attending publics highly rated the quality of their campus relationships, while among those attending doctoral institutions, 64% of private seniors and 61% of public seniors reported the same rating. The regression model produced similar results.

How much do students self-report making progress or gains in developing a deepened sense of spirituality (gnspirit)?

*Religious affiliation (relig6)*

ANOVA results for the religious affiliation institutional types show the largest between-group differences of any of the variables of interest. Generally the results mirror those of the spiritual practices (worship) item. Private non-affiliated and public institutions have the lowest group means, while the faith-based institutions have the highest scores. In the mid-range, the mean of the mainline Protestant group is significantly higher than the Roman Catholic and other Protestant group means. For first-year students, but not seniors, the other Protestant group mean is also significantly higher than the Roman Catholic mean. To highlight these differences, frequencies show that fully 79% of faith-based/fundamentalist seniors report “substantial” (‘very much’ or ‘quite a bit’) gains in spiritual growth, while only a fifth of public (20%) or non-affiliated private school students (19%) report such gains. The regression model shows that an institution’s religious affiliation alone accounts for 14% of the variance in students’ reports of spiritual gains. Adding student and institutional controls has little effect on these patterns of findings.

Other variables impacting this outcome were students’ perceptions of the out-of-classroom environment, engagement in deep learning, and overall satisfaction with the institution. In addition, seniors and Asian-American/Pacific Island students were also more likely to experience gains on this measure.

*Carnegie/control (carnctrl4)*

The greatest between-group differences for various institutional types defined by Carnegie classification and control exist on students’ self-reported gains in spiritual development. Each group mean is statistically significant from the others for both first-year students and seniors. The private group means are higher than public group means as follows: BA/MA private, doctoral private, BA/MA public, and doctoral public. The greatest differences are between the publics and privates. For example, about 40% of first year students at private schools reported making “substantial” gains in this area, while less than a quarter of public school students reported as such. For seniors, the frequencies are slightly lower, but the differences are of the same magnitude. These large group differences explain why the Carnegie/control variable alone accounted for 5% of the total variance in the regression model. The strength of these coefficients did not change when student and institutional controls were added.

How much do students self-report making progress or gains in developing a personal code of values and ethics (gnethics)?

*Religious affiliation (relig6)*

Substantive differences were found between the religious affiliation groups for students' gains in ethical development. Post hoc analyses for both first-year students and seniors show five homogenous subsets, with the pattern and size of the means similar for both classes. Public institutions have the lowest score, followed in increasing order by the non-affiliated privates, mainline Protestants, other Protestants, and Roman Catholics. Both first-year and senior students at faith-based institutions have markedly higher mean scores than their counterparts at Roman Catholic schools – the next highest group. For example, nearly half of all first-year students (44%) and seniors (51%) at faith-based schools say they gained 'very much' in ethical development, whereas only 26% of first-year students and 35% of seniors attending Roman Catholic institutions, the next highest group, responded as such. The first regression model repeats the ANOVA results – all religious affiliation types are significantly higher than the reference group (public institutions), but the size of the faith-based coefficient is double that of the others. Adding student and institutional controls lowers these coefficients somewhat, though religious affiliation remains significant and moderately influential on students' self-reported gains in ethical development.

*Carnegie/control (carnctrl4)*

Substantial differences in students' self-reported gains in personal values and ethics also exist between different Carnegie/control groups. Again, private group means were greater than public group means overall, and BA/MA privates had the highest of the four group means. In the first-year student frequencies, those that report "substantial" gains in this area ranged from 45% (doctoral publics) to 60% (BA/MA privates). For seniors, those reporting "substantial" gains ranged from 48% (doctoral publics) to 66% (BA/MA privates). The regression model shows that the Carnegie/control dummy variables have modest coefficients (with doctoral public as the reference group), and that these coefficients change little when controls are added. This indicates that institutional type has at least some role in shaping students gains in personal values and ethics, though only a sliver (2%) of the total variance is explained by the type variable alone.

How much progress or gains do students report making in personal and social development (gnpersoc), practical competence (gnprac), and intellectual skills (gnintsk)?

*Religious affiliation (relig6)*

Small differences exist across these institutional types on gains in practical competencies (gnprac). The mean for public institutions is the lowest overall. Faith-based, Roman Catholic, and mainline Protestant groups students report making greater gains in personal-social development (gnpersoc), but otherwise no identifiable results emerge that show distinctiveness for any of the types on these general outcome measures. Regression results indicate that religious affiliation does not account for much variance in these gains scales.

### *Carnegie/control (carnctrl4)*

Consistent with most other variables of interest, private group means were higher than the public institutions for both first-year students and seniors on all three gains items. The greatest differences were found for gains in intellectual skills (gnintsk) where each group of schools differed from the others. Students reporting gaining the most (top quartile) were more likely to attend BA/MA private institutions. For first year students, 35% of doctoral public students reported gains in the two highest quartiles, compared to 48% at BA/MA private schools. For seniors, these percentages are larger for both groups: 46% for doctoral publics and 63% for BA/MA privates. The patterns are generally the same (though weaker in effects) for gains in personal-social development (gnpersoc) and gains in practical competencies (gnprac). Regression models confirmed these patterns, with student and institutional controls reducing somewhat the net effect of institutional type in each model. Year in school also made a difference, with seniors as expected reporting greater gains along with full-time students compared with part-time students and Black or Latino students compared with Whites. Still, the largest amount of variance is accounted for by the other NSSE variables suggesting that what matters more to student outcomes is the nature of the campus environment and the quality of effort students invest in their own learning. This is clearly illustrated by the relatively large ‘deep learning’ coefficient in all three of these models.

## **Conclusions and Implications**

Because this study used the same data set and many of the same dependent variables as the Teagle Foundation analysis, it is not surprising that the findings and conclusions essentially mirror those we reported in a previous study (Kuh & Gonyea, (2006). At the same time, using some different analytical methods and including additional variables in the analysis produced instructive insights into the relationships between independent higher education, student engagement, and desired outcomes of college. More specifically, this study:

1. Categorized institutions into six categories based on more precise definitions of religious affiliation rather using simply dividing the universe of institutions into faith-based/fundamentalist and all others;
2. Assigned schools to four groups using Carnegie classification and control;
3. Incorporated two additional dependent variables in the analysis: (a) students’ perceptions of the quality of relationships with other students at the institution, and (b) students’ self-reported progress toward developing a personal code of values and ethics.
4. Used block hierarchical regression models to estimate the effects of religious affiliation and Carnegie/control on each dependent variable (a) without controls (bivariate) (b) with only student and institutional controls, and (c) with other engagement variables included.

The findings reported above and summarized in Table 1 point to six conclusions.

1. *Students attending institutions with different religious affiliations exhibit different patterns of engagement and effects in certain areas.* Although students attending religiously-affiliated institutions were more likely to participate frequently in

spirituality enhancing activities and gain substantially spiritually and ethically than those attending non-affiliated private or public institutions, students at faith-based institutions do so even more than their peers at mainline Protestant schools and Catholic institutions. Students attending non-affiliated private and public institutions scored below the others. It cannot be determined from these data specifically what it is about the environments of schools with different religious affiliations that contribute to these results, or to what extent students select colleges and universities that match their religious preferences. The latter point is especially important, given that students select colleges that suit their religious predispositions and preferences for institutional types and missions. The effects of religious affiliation on other dependent variables were not as strong, but almost always favored religiously affiliated schools over publics. One notable exception is that students attending faith-based institutions were somewhat less likely to have serious conversations with diverse peers in terms of their political, religious, and personal values, and were no different in terms of deep learning activities, than their public institution counterparts. Overall, the effects for this institutional type variable were not as strong as the religious affiliation categories.

Table 1:  
Summary of Effects of Institutional Type on Student Engagement and Self-Reported Gains after Controlling for Student and Institutional Characteristics

<i>Institutional Type</i>	<i>Dependent Variable</i>									
	worship	diffstu	gnspirit	deep	envstu	gnperssoc	gnprac	gnintsk	gnethics	
<i>Religious Affiliation (vs. public)</i>										
Faith-based/fundamentalist	++++	-	++++		+	+		+	+++	
Roman Catholic	+		+++	+		+	+	+	++	
Mainline Protestant	+	+	+	+		+		+	+	
Other Protestant	+++		+++	+					+	
Non-affiliated, private	-	+		+						
<i>Carnegie/control (vs. doctoral public)</i>										
Doctoral Private	+		++	+		+		+	+	
BA/MA Private	+		++	+		+		+	+	
BA/MA Public	-									

'++++'  $B > .7$ , '+++'  $B > .5$ , '++'  $B > .3$ , '+'  $B > .1$ , '-'  $B < -.1$

2. Private colleges generally score higher on the variables examined in this study. That is, as can be seen in the Carnegie/control section of Table 1, students at Doctoral and BA/MA private colleges tend to engage more frequently in deep learning and spirituality-enhancing activities and to gain more in deepening their sense of spirituality, developing



values and ethics, and making strides toward personal/social growth and intellectual skills. This pattern is consistent with other analyses using student engagement and related variables (Kuh, 2003, 2005; National Survey of Student Engagement, 2003, 2005). At the same time, other research also shows that not all independent colleges outperform public institutions (Kuh, 2003, 2005).

3. *Institutions with strong religious commitments, the "faith-based/fundamentalist" group, scored highest on items related to spirituality.* This finding is consistent with the Teagle report. Interesting differences, however, emerged among the additional religious groups not examined in the Teagle project, but introduced in the current study. Compared to the Teagle findings, the faith-based coefficients appear even more pronounced now that the reference group is limited to just the public institutions. Other religious schools (lumped together in the "other" group in Teagle) also have positive effects compared to publics.
4. *Engagement in deep learning activities differs by institutional religious affiliation. Compared with public institutions, involvement in deep learning depended to a significant degree on the religious affiliation of the college or university.* In the Teagle analysis faith-based schools were lower when compared to all other institutions on the deep learning measure. In the current study, while the differences between the "faith-based/fundamentalist" and public institutions were trivial on this measure, the other religiously-affiliated groupings generally performed *better* than their public counterparts.
5. *Students at "faith-based/fundamentalist" institutions have a more homogeneous experience.* As with the Teagle study, the faith-based students had less frequent conversations with other students who are different from them in terms of religious beliefs, political opinions, or personal values than students at public institutions. This differentiation, however, can not be construed as a result of the institutions' religious-affiliation, since differences among Roman Catholic, Other Protestant, and Publics were trivial, and Mainline Protestants actually performed better on this measure. Students at faith-based/fundamentalist schools also reported a stronger sense of community or "belonging" compared with other types of institutions.
6. *Finally, students at non-affiliated private colleges and universities differ in systematic ways from their counterparts at private religiously-affiliated institutions on some key aspects of the college experience of interest in this study.* For example, they engage less frequently in spirituality enhancing activities, interact more often with students with diverse views, and engage more frequently in deep learning activities.

### *Implications*

To the extent that institutional mission is shaped by religious affiliation, it appears to be linked in distinctive ways to patterns of student engagement and self-reported educational outcomes. That is, schools that emphasize religion and participating in spirituality-enhancing practices almost certainly attract greater numbers of students who are predisposed to engaging in spirituality-enhancing practices. Students are not randomly assigned to institutions. Rather, students choose institutions that suit their needs, religious and cultural values, and that fit their own personal narratives about what a college experience should be like.

At the same time, religiously-affiliated colleges and universities are not all alike. Why is it, for example, that students attending Roman Catholic institutions do not engage as frequently in spiritual practices or report gaining as much in this area compared with their peers attending other types of religiously-affiliated schools? Why do students attending non-affiliated private institutions engage less in religious or spirituality-enhancing activities than students at public colleges and universities?

This study furthers our understanding of student engagement and desired college outcomes at different types of private and public institutions. But as the questions posed above indicate, there is more to learn about how institutional mission and environments shape the learning environment and influence student engagement and learning.

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## Appendix A: NSSE 2004 Participating Institutions by Religious Affiliation (relig6)

### Faith-based/Fundamentalist

Abilene Christian University (TX)	BA/MA Private
*Berry College (GA)	BA/MA Private
Brigham Young University (UT)	Doctoral Private
*Brigham Young University Hawaii (HI)	BA/MA Private
*Cedarville University (OH)	BA/MA Private
*Concordia College (NY)	BA/MA Private
*Dordt College (IA)	BA/MA Private
*Eastern Mennonite University (VA)	BA/MA Private
*Friends University (KS)	BA/MA Private
*Grove City College (PA)	BA/MA Private
*Houghton College (NY)	BA/MA Private
*Huntington University (IN)	BA/MA Private
*Indiana Wesleyan University (IN)	BA/MA Private
*John Brown University (AR)	BA/MA Private
Johnson Bible College (TN)	Other
*Judson College (IL)	BA/MA Private
Judson College (AL)	BA/MA Private
Lincoln Christian College and Seminary (IL)	Other
Lipscomb University (TN)	BA/MA Private
*Malone College (OH)	BA/MA Private
*Milligan College (TN)	BA/MA Private
Northwest Christian College (OR)	BA/MA Private
Southwestern Assemblies of God University (TX)	Other
*Trinity Christian College (IL)	BA/MA Private
*Union University (TN)	BA/MA Private
*Warner Southern College (FL)	BA/MA Private
*Waynesburg College (PA)	BA/MA Private
*Westmont College (CA)	BA/MA Private
*Wisconsin Lutheran College (WI)	BA/MA Private

### Roman Catholic

*Barry University (FL)	BA/MA Private
*Bellarmine University (KY)	BA/MA Private
*Benedictine College (KS)	BA/MA Private
Canisius College (NY)	BA/MA Private
*Cardinal Stritch University (WI)	BA/MA Private
*Chaminade University of Honolulu (HI)	BA/MA Private
*College Misericordia (PA)	BA/MA Private
*College of Saint Benedict (MN)	BA/MA Private
*College of Saint Elizabeth (NJ)	BA/MA Private
College of the Holy Cross (MA)	BA/MA Private
*DePaul University (IL)	Doctoral Private
*Dominican University (IL)	BA/MA Private
*Duquesne University (PA)	Doctoral Private
*Edgewood College (WI)	BA/MA Private
*Emmanuel College (MA)	BA/MA Private
Fairfield University (CT)	BA/MA Private
*Fontbonne University (MO)	BA/MA Private
*Franciscan University of Steubenville (OH)	BA/MA Private
*Georgian Court College (NJ)	BA/MA Private
*Gwynedd Mercy College (Pa)	BA/MA Private
*Holy Family University (PA)	BA/MA Private
*Holy Names University (CA)	BA/MA Private
Iona College (NY)	BA/MA Private
La Salle University (PA)	BA/MA Private
*Le Moyne College (NY)	BA/MA Private
*Lewis University (IL)	BA/MA Private
*Loyola College in Maryland (MD)	BA/MA Private
Loyola University Chicago (IL)	Doctoral Private
*Loyola University New Orleans (LA)	BA/MA Private
*Madonna University (MI)	BA/MA Private
*Marian College of Fond du Lac (WI)	BA/MA Private
Marquette University (WI)	Doctoral Private
*Marymount University (VA)	BA/MA Private
*Marywood University (PA)	BA/MA Private
*Mount Mary College (WI)	BA/MA Private
*Nazareth College (NY)	BA/MA Private
*Neumann College (PA)	BA/MA Private
Niagara University (NY)	BA/MA Private
*Regis University (CO)	BA/MA Private
*Rockhurst University (MO)	BA/MA Private
*Sacred Heart University (CT)	BA/MA Private
Saint John Vianney College Seminary (FL)	Other
Saint Josephs University (PA)	BA/MA Private
Saint Louis University (MO)	Doctoral Private
Saint Mary's University of Minnesota (MN)	BA/MA Private

*Saint Michael's College (VT)	BA/MA Private
*Saint Vincent College (PA)	BA/MA Private
*Saint Xavier University (IL)	BA/MA Private
Santa Clara University (CA)	BA/MA Private
Seattle University (WA)	BA/MA Private
Seton Hall University (NJ)	Doctoral Private
*Seton Hill University (PA)	BA/MA Private
*Siena College (NY)	BA/MA Private
*Spring Hill College (AL)	BA/MA Private
*St. Bonaventure University (NY)	BA/MA Private
*St. Edwards University (TX)	BA/MA Private
St. Johns University (NY)	Doctoral Private
St. Marys University (TX)	BA/MA Private
*St. Thomas University (FL)	BA/MA Private
The Catholic University of America (DC)	Doctoral Private
*The College of Saint Rose (NY)	BA/MA Private
*The College of St. Scholastica (MN)	BA/MA Private
Trinity College (DC)	BA/MA Private
University of Dayton (OH)	Doctoral Private
University of San Francisco (CA)	Doctoral Private
*University of St. Francis (IL)	BA/MA Private
*University of The Incarnate Word (TX)	BA/MA Private
*Ursuline College (OH)	BA/MA Private
*Xavier University (OH)	BA/MA Private

### Mainline Protestant (members of the National Council of Churches, NCC)

*Agnes Scott College (GA)	BA/MA Private
*Alaska Pacific University (AK)	BA/MA Private
*Alma College (MI)	BA/MA Private
American University (DC)	Doctoral Private
*Augsburg College (MN)	BA/MA Private
*Baker University (KS)	BA/MA Private
Baldwin Wallace College (OH)	BA/MA Private
*Barton College (NC)	BA/MA Private
*Birmingham Southern College (AL)	BA/MA Private
*Bloomfield College (NJ)	BA/MA Private
*Carroll College (WI)	BA/MA Private
*Catawba College (NC)	BA/MA Private
*Central College (IA)	BA/MA Private
*Centre College (KY)	BA/MA Private
*Clafflin University (SC)	BA/MA Private
*Columbia College (SC)	BA/MA Private
*Cornell College (IA)	BA/MA Private
DePauw University (IN)	BA/MA Private
*Earlham College (IN)	BA/MA Private
*Eckerd College (FL)	BA/MA Private
Elon University (NC)	BA/MA Private
Florida Southern College (FL)	BA/MA Private
*Grand View College (IA)	BA/MA Private
*Greensboro College (NC)	BA/MA Private
*Hamline University (MN)	BA/MA Private
*Hanover College (IN)	BA/MA Private
Hope College (MI)	BA/MA Private
*Huston Tillotson College (TX)	BA/MA Private
*Illinois College (IL)	BA/MA Private
*Illinois Wesleyan University (IL)	BA/MA Private
*Jarvis Christian College (TX)	BA/MA Private
*LaGrange College (GA)	BA/MA Private
Lewis and Clark College (OR)	BA/MA Private
*Lindsey Wilson College (KY)	BA/MA Private
*Manchester College (IN)	BA/MA Private
*Maryville College (TN)	BA/MA Private
*McKendree College (IL)	BA/MA Private
*Miles College (AL)	BA/MA Private
Muhlenberg College (PA)	BA/MA Private
Nebraska Methodist College of Nursing & Allied Health (NE)	Other
*North Central College (IL)	BA/MA Private
*Ohio Northern University (OH)	BA/MA Private
*Oklahoma City University (OK)	BA/MA Private
*Otterbein College (OH)	BA/MA Private
Oxford College of Emory University (GA)	Other
*Pacific Lutheran University (WA)	BA/MA Private
*Peace College (NC)	Other
*Pfeiffer University (NC)	BA/MA Private
*Philander Smith College (AR)	BA/MA Private
Presbyterian College (SC)	BA/MA Private

*Ripon College (WI)	BA/MA Private	*Mercy College Main Campus (NY)	BA/MA Private
*Southwestern College (KS)	BA/MA Private	Milwaukee School of Engineering (WI)	Other
*Southwestern University (TX)	BA/MA Private	*Monmouth College (IL)	BA/MA Private
*St. Andrews Presbyterian College (NC)	BA/MA Private	*Morehouse College (GA)	BA/MA Private
*Susquehanna University (PA)	BA/MA Private	Mountain State University (WV)	Other
Texas Christian University (TX)	Doctoral Private	National University (CA)	BA/MA Private
*The University of the South (TN)	BA/MA Private	Northeastern University (MA)	Doctoral Private
*Thiel College (PA)	BA/MA Private	*Norwich University (VT)	BA/MA Private
*Transylvania University (KY)	BA/MA Private	Nova Southeastern University (FL)	Doctoral Private
University of Denver (CO)	Doctoral Private	*Pace University (NY)	Doctoral Private
*University of Dubuque (IA)	BA/MA Private	*Paul Smiths College (NY)	Other
*University of Indianapolis (IN)	BA/MA Private	*Philadelphia University (PA)	BA/MA Private
University of La Verne (CA)	Doctoral Private	*Pitzer College (CA)	BA/MA Private
*University of the Ozarks (AR)	BA/MA Private	Polytechnic University (NY)	Doctoral Private
University of Tulsa The (OK)	Doctoral Private	Quinnipiac University (CT)	BA/MA Private
*Wartburg College (IA)	BA/MA Private	*Rider University (NJ)	BA/MA Private
*West Virginia Wesleyan College (WV)	BA/MA Private	*Rollins College (FL)	BA/MA Private
*Westminster College (MO)	BA/MA Private	*Russell Sage College (NY)	BA/MA Private
*Wiley College (TX)	BA/MA Private	*Springfield College (MA)	BA/MA Private
*William Woods University (MO)	BA/MA Private	St. Francis College NY (NY)	BA/MA Private
*Wilmington College (OH)	BA/MA Private	Suffolk University (MA)	BA/MA Private
Wittenberg University (OH)	BA/MA Private	*Sweet Briar College (VA)	BA/MA Private
*Wofford College (SC)	BA/MA Private	Teikyo Post University (CT)	BA/MA Private
<b><u>Other Protestant</u></b>		*The College of Wooster (OH)	BA/MA Private
Baptist Memorial College of Health Sciences (TN)	Other	The University of Tampa (FL)	BA/MA Private
*Belmont University (TN)	BA/MA Private	The University of the Arts (PA)	Other
Campbell University Inc (NC)	BA/MA Private	*Thomas University (GA)	BA/MA Private
Furman University (SC)	BA/MA Private	*University of Charleston (WV)	BA/MA Private
*Keuka College (NY)	BA/MA Private	University of New Haven (CT)	BA/MA Private
*Lee University (TN)	BA/MA Private	*University of Richmond (VA)	BA/MA Private
*Mercer University (GA)	BA/MA Private	University of The Sciences In Philadelphia (PA)	Other
*Meredith College (NC)	BA/MA Private	*Ursinus College (PA)	BA/MA Private
Samford University (AL)	BA/MA Private	Vassar College (NY)	BA/MA Private
Valparaiso University (IN)	BA/MA Private	*Villa Julie College (MD)	BA/MA Private
*Virginia Union University (VA)	BA/MA Private	*Wabash College (IN)	BA/MA Private
<b><u>Non-affiliated, Private</u></b>		*Washington College (MD)	BA/MA Private
Adelphi University (NY)	Doctoral Private	*Webster University (MO)	BA/MA Private
Alfred University (NY)	BA/MA Private	*Wheaton College (MA)	BA/MA Private
*Alice Lloyd College (KY)	BA/MA Private	*Wheelock College (MA)	BA/MA Private
Alliant International University (CA)	Other	*Whittier College (CA)	BA/MA Private
*Antioch College (OH)	BA/MA Private	*Widener University Main Campus (PA)	Doctoral Private
*Aurora University (IL)	BA/MA Private	*York College of Pennsylvania (PA)	BA/MA Private
Beacon College (FL)	BA/MA Private	<b><u>Public</u></b>	
Beloit College (WI)	BA/MA Private	Adams State College (CO)	BA/MA Public
Bradley University (IL)	BA/MA Private	Alcorn State University (MS)	BA/MA Public
Bryant College (RI)	BA/MA Private	Angelo State University (TX)	BA/MA Public
Butler University (IN)	BA/MA Private	Appalachian State University (NC)	BA/MA Public
California College of the Arts (CA)	Other	Arkansas Tech University (AR)	BA/MA Public
Case Western Reserve University (OH)	Doctoral Private	Armstrong Atlantic State University (GA)	BA/MA Public
*Chatham College (PA)	BA/MA Private	Auburn University (AL)	Doctoral Public
Clark University (MA)	Doctoral Private	Austin Peay State University (TN)	BA/MA Public
Coker College (SC)	BA/MA Private	Ball State University (IN)	Doctoral Public
*Colby Sawyer College (NH)	BA/MA Private	Black Hills State University (SD)	BA/MA Public
Colorado College (CO)	BA/MA Private	Boise State University (ID)	BA/MA Public
*Columbia College Chicago (IL)	BA/MA Private	California State University Bakersfield (CA)	BA/MA Public
*Connecticut College (CT)	BA/MA Private	California State University Chico (CA)	BA/MA Public
*Daemen College (NY)	BA/MA Private	California State University Dominguez Hills (CA)	BA/MA Public
Denison University (OH)	BA/MA Private	California State University Stanislaus (CA)	BA/MA Public
*Drake University (IA)	BA/MA Private	Capella University (MN)	Other
Drexel University (PA)	Doctoral Private	Central Michigan University (MI)	Doctoral Public
*Endicott College (MA)	BA/MA Private	Central Missouri State University (MO)	BA/MA Public
Franklin & Marshall College (PA)	BA/MA Private	Central Washington University (WA)	BA/MA Public
*Franklin Pierce College (NH)	BA/MA Private	Chadron State College (NE)	BA/MA Public
Franklin W. Olin College of Engineering ()	Other	Chicago State University (IL)	BA/MA Public
*Hamilton College (NY)	BA/MA Private	Clayton College & State University (GA)	Other
*Hartwick College (NY)	BA/MA Private	Clemson University (SC)	Doctoral Public
Harvey Mudd College (CA)	BA/MA Private	Columbus State University (GA)	BA/MA Public
*Heritage University (WA)	BA/MA Private	CUNY Bernard M. Baruch College (NY)	BA/MA Public
*Hiram College (OH)	BA/MA Private	CUNY Herbert H. Lehman College (NY)	BA/MA Public
Hobart and William Smith Colleges (NY)	BA/MA Private	CUNY Medgar Evers College (NY)	BA/MA Public
*Hollins University (VA)	BA/MA Private	CUNY New York City College of Technology (NY)	Other
Husson College (ME)	BA/MA Private	Dakota State University (SD)	BA/MA Public
Illinois Institute of Technology (IL)	Doctoral Private	Delta State University (MS)	BA/MA Public
Kalamazoo College (MI)	BA/MA Private	Dickinson State University (ND)	BA/MA Public
*Keystone College (PA)	Other	East Carolina University (NC)	Doctoral Public
*Lincoln Memorial University (TN)	BA/MA Private	Eastern Oregon University (OR)	BA/MA Public
Long Island University Brooklyn Campus (NY)	BA/MA Private	Edinboro University of Pennsylvania (PA)	BA/MA Public
Manhattanville College (NY)	BA/MA Private	Elizabeth City State University (NC)	BA/MA Public
*Marlboro College (VT)	BA/MA Private	Emporia State University (KS)	BA/MA Public
*Marymount Manhattan College (NY)	BA/MA Private	Fitchburg State College (MA)	BA/MA Public
*McDaniel College (MD)	BA/MA Private	Florida International University (FL)	Doctoral Public

Fort Hays State University (KS)	BA/MA Public	The University of Texas at El Paso (TX)	Doctoral Public
Fort Lewis College (CO)	BA/MA Public	The University of Texas at San Antonio (TX)	BA/MA Public
Framingham State College (MA)	BA/MA Public	The University of Texas at Tyler (TX)	BA/MA Public
Georgia Southern University (GA)	BA/MA Public	The University of Texas at The Permian Basin (TX)	BA/MA Public
Georgia Southwestern State University (GA)	BA/MA Public	The University of Texas Pan American (TX)	BA/MA Public
Idaho State University (ID)	Doctoral Public	Troy State University Montgomery (AL)	BA/MA Public
Illinois State University (IL)	Doctoral Public	Truman State University (MO)	BA/MA Public
Indiana University Bloomington (IN)	Doctoral Public	United States Merchant Marine Academy (NY)	Other
Indiana University East (IN)	BA/MA Public	University of Akron The (OH)	Doctoral Public
Indiana University Kokomo (IN)	BA/MA Public	University of Alabama The (AL)	Doctoral Public
Indiana University Northwest (IN)	BA/MA Public	University of Alaska Anchorage (AK)	BA/MA Public
Indiana University Southeast (IN)	BA/MA Public	University of Arkansas at Fort Smith (AR)	Other
Indiana University-Purdue University Indianapolis (IN)	Doctoral Public	University of Central Florida (FL)	Doctoral Public
James Madison University (VA)	BA/MA Public	University of Colorado at Colorado Springs (CO)	BA/MA Public
Johnson State College (VT)	BA/MA Public	University of Colorado at Denver (CO)	Doctoral Public
Kansas State University (KS)	Doctoral Public	University of Connecticut (CT)	Doctoral Public
Kennesaw State University (GA)	BA/MA Public	University of Hawaii at Manoa (HI)	Doctoral Public
Kentucky State University (KY)	BA/MA Public	University of Hawaii West Oahu (HI)	BA/MA Public
Louisiana State University A&M College (LA)	Doctoral Public	University of Illinois at Springfield (IL)	BA/MA Public
Lyndon State College (VT)	BA/MA Public	University of Illinois at Urbana Champaign (IL)	Doctoral Public
Massachusetts College of Liberal Arts (MA)	BA/MA Public	University of Kansas (KS)	Doctoral Public
Metropolitan State College of Denver The (CO)	BA/MA Public	University of Louisiana at Monroe (LA)	BA/MA Public
Middle Tennessee State University (TN)	Doctoral Public	University of Maine at Fort Kent (ME)	BA/MA Public
Millersville University of Pennsylvania (PA)	BA/MA Public	University of Maryland Baltimore County (MD)	Doctoral Public
Mississippi State University (MS)	Doctoral Public	University of Maryland Eastern Shore (MD)	BA/MA Public
Mississippi State University Meridian Campus (MS)	Other	University of Massachusetts Boston (MA)	Doctoral Public
Mississippi Valley State University (MS)	BA/MA Public	University of Minnesota Duluth (MN)	BA/MA Public
Missouri Western State College (MO)	BA/MA Public	University of Minnesota Morris (MN)	BA/MA Public
Montclair State University (NJ)	BA/MA Public	University of Missouri Columbia (MO)	Doctoral Public
Morgan State University (MD)	BA/MA Public	University of Missouri Kansas City (MO)	Doctoral Public
New College of Florida (FL)	BA/MA Public	University of Missouri Rolla (MO)	Doctoral Public
New Jersey Institute of Technology (NJ)	Doctoral Public	University of Missouri St. Louis (MO)	Doctoral Public
New Mexico State University (NM)	Doctoral Public	University of Montana The (MT)	Doctoral Public
North Carolina Central University (NC)	BA/MA Public	University of Nebraska at Kearney (NE)	BA/MA Public
Northeastern Illinois University (IL)	BA/MA Public	University of Nebraska at Omaha (NE)	BA/MA Public
Northern Michigan University (MI)	BA/MA Public	University of Nebraska Lincoln (NE)	Doctoral Public
Northern State University (SD)	BA/MA Public	University of New Mexico Main Campus (NM)	Doctoral Public
Northwest Missouri State University (MO)	BA/MA Public	University of North Carolina at Asheville (NC)	BA/MA Public
Ohio State University Newark Campus (OH)	Other	University of North Carolina at Charlotte (NC)	BA/MA Public
Ohio State University The (OH)	Doctoral Public	University of North Carolina at Wilmington (NC)	BA/MA Public
Ohio University (OH)	Doctoral Public	University of Pittsburgh (PA)	Doctoral Public
Oregon State University (OR)	Doctoral Public	University of Puerto Rico Ponce (PR)	BA/MA Public
Penn State Abington (PA)	Other	University of South Carolina at Aiken (SC)	BA/MA Public
Plymouth State University (NH)	BA/MA Public	University of South Florida St. Petersburg (FL)	Other
Purdue University Calumet (IN)	BA/MA Public	University of Southern Maine (ME)	BA/MA Public
Purdue University Main Campus (IN)	Doctoral Public	University of The District of Columbia (DC)	BA/MA Public
Purdue University North Central Campus (IN)	Other	University of Toledo The (OH)	Doctoral Public
Radford University (VA)	BA/MA Public	University of Utah (UT)	Doctoral Public
Sam Houston State University (TX)	BA/MA Public	University of West Florida (FL)	BA/MA Public
San Diego State University (CA)	Doctoral Public	University of Wisconsin Eau Claire (WI)	BA/MA Public
San José State University (CA)	BA/MA Public	University of Wisconsin Green Bay (WI)	BA/MA Public
School of Visual Arts (NY)	Other	University of Wisconsin La Crosse (WI)	BA/MA Public
Shippensburg University (PA)	BA/MA Public	University of Wisconsin Milwaukee (WI)	Doctoral Public
South Dakota School of Mines and Technology (SD)	Other	University of Wisconsin Oshkosh (WI)	BA/MA Public
South Dakota State University (SD)	Doctoral Public	University of Wisconsin Parkside (WI)	BA/MA Public
Southern Illinois University Edwardsville (IL)	BA/MA Public	University of Wisconsin Platteville (WI)	BA/MA Public
Southern Utah University (UT)	BA/MA Public	University of Wisconsin River Falls (WI)	BA/MA Public
Southwest Minnesota State University (MN)	BA/MA Public	University of Wisconsin Stevens Point (WI)	BA/MA Public
St. Marys College of Maryland (MD)	BA/MA Public	University of Wisconsin Stout (WI)	BA/MA Public
Stephen F. Austin State University (TX)	BA/MA Public	University of Wisconsin Superior (WI)	BA/MA Public
SUNY College at Brockport (NY)	BA/MA Public	University of Wisconsin Whitewater (WI)	BA/MA Public
SUNY College at Fredonia (NY)	BA/MA Public	University of Wisconsin Madison (WI)	Doctoral Public
SUNY College at Oswego (NY)	BA/MA Public	Utah State University (UT)	Doctoral Public
SUNY College at Plattsburgh (NY)	BA/MA Public	Virginia Commonwealth University (VA)	Doctoral Public
SUNY College at Potsdam (NY)	BA/MA Public	Virginia Military Institute (VA)	BA/MA Public
Texas A&M International University (TX)	BA/MA Public	Washburn University (KS)	BA/MA Public
Texas State University San Marcos (TX)	BA/MA Public	Washington State University (WA)	Doctoral Public
The Evergreen State College (WA)	BA/MA Public	Wayne State University (MI)	Doctoral Public
The Richard Stockton College of New Jersey (NJ)	BA/MA Public	Western Carolina University (NC)	BA/MA Public
The University of Maine at Farmington (ME)	BA/MA Public	Western Illinois University (IL)	BA/MA Public
The University of South Dakota (SD)	Doctoral Public	Western New Mexico University (NM)	BA/MA Public
The University of Tennessee (TN)	Doctoral Public	Wichita State University (KS)	Doctoral Public
The University of Tennessee at Martin (TN)	BA/MA Public	Winston Salem State University (NC)	BA/MA Public
The University of Tennessee Chattanooga (TN)	BA/MA Public	Winthrop University (SC)	BA/MA Public
The University of Texas at Arlington (TX)	Doctoral Public	Wright State University (OH)	Doctoral Public
The University of Texas at Austin (TX)	Doctoral Public	Youngstown State University (OH)	BA/MA Public
The University of Texas at Brownsville (TX)	BA/MA Public		
The University of Texas at Dallas (TX)	Doctoral Public		

\* Members of the Council of Independent Colleges



**Appendix B:  
Frequencies  
by Six Religious Affiliation Categories (relig6): *First-Year Students***

		NEW RATING						Total
		Faith-based/ Fundamental ist	Roman Catholic	Mainline Protestant (NCC)	Other Protestant	Independent	No Religious/ Secular	
		Col %	Col %	Col %	Col %	Col %	Col %	Col %
Participated in activities to enhance your spirituality (worship, meditation, prayer, etc.)	Never	4.0%	33.4%	32.0%	15.7%	52.5%	48.6%	41.6%
	Sometimes	13.5%	33.6%	33.3%	27.8%	26.9%	25.5%	27.2%
	Often	23.6%	16.0%	15.8%	21.7%	10.4%	11.6%	13.5%
	Very often	58.9%	17.0%	18.9%	34.8%	10.3%	14.3%	17.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values	Never	15.8%	9.4%	7.8%	7.4%	7.9%	12.1%	10.6%
	Sometimes	41.6%	30.6%	28.6%	31.3%	27.8%	32.8%	31.6%
	Often	24.8%	30.5%	31.3%	29.9%	30.8%	29.1%	29.6%
	Very often	17.8%	29.4%	32.4%	31.3%	33.5%	26.1%	28.1%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Institutional contribution: Developing a deepened sense of spirituality	Very little	5.0%	22.3%	32.6%	19.6%	50.4%	47.4%	39.4%
	Some	14.3%	31.2%	32.2%	27.7%	27.1%	28.5%	28.3%
	Quite a bit	25.9%	26.2%	21.1%	27.8%	14.2%	15.1%	18.2%
	Very much	54.9%	20.2%	14.1%	24.9%	8.2%	9.0%	14.0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Quality of Relationships among Students (3 categories)	Low	3.9%	7.1%	6.6%	6.4%	7.9%	7.3%	7.1%
	Mid-range	22.3%	27.9%	26.7%	26.1%	29.8%	32.4%	29.9%
	High	73.8%	65.0%	66.7%	67.5%	62.2%	60.3%	63.0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Institutional contribution: Developing a personal code of values and ethics	Very little	5.3%	10.6%	12.6%	12.6%	15.9%	19.2%	15.7%
	Some	18.4%	28.3%	30.4%	26.0%	31.6%	34.1%	31.4%
	Quite a bit	32.7%	35.6%	34.4%	34.8%	32.1%	30.3%	32.1%
	Very much	43.7%	25.5%	22.7%	26.6%	20.5%	16.4%	20.9%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Deep Learning (Thirds)	lowest third	40.9%	35.0%	33.3%	33.8%	33.8%	47.7%	41.3%
	middle third	38.2%	39.6%	40.2%	40.7%	38.6%	34.8%	37.1%
	highest third	20.9%	25.4%	26.6%	25.5%	27.5%	17.5%	21.7%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Gains in Personal/Social Development	1st Quartile	19.8%	22.0%	23.1%	26.2%	26.4%	29.6%	26.6%
	2nd Quartile	22.9%	22.8%	22.8%	23.5%	22.9%	24.1%	23.5%
	3rd Quartile	32.8%	31.1%	31.4%	29.8%	29.3%	28.3%	29.5%
	4th Quartile	24.5%	24.1%	22.7%	20.6%	21.5%	18.1%	20.4%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Gains in Practical Competencies	1st Quartile	25.8%	25.3%	27.2%	28.1%	27.1%	30.5%	28.5%
	2nd Quartile	33.2%	32.3%	32.9%	33.7%	32.1%	32.7%	32.6%
	3rd Quartile	27.9%	28.4%	27.5%	25.5%	26.5%	25.4%	26.4%
	4th Quartile	13.0%	14.0%	12.4%	12.7%	14.2%	11.4%	12.5%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Gains in Intellectual Skills	1st Quartile	27.4%	26.1%	27.1%	29.3%	29.7%	35.7%	31.7%
	2nd Quartile	26.0%	26.8%	25.0%	25.1%	25.4%	27.5%	26.6%
	3rd Quartile	28.6%	27.8%	28.7%	26.5%	26.9%	23.1%	25.4%
	4th Quartile	18.0%	19.3%	19.2%	19.1%	17.9%	13.7%	16.2%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Frequencies**  
**by Six Religious Affiliation Categories (relig6): Seniors**

		NEW RATING						Total
		Faith-based/ Fundamental ist	Roman Catholic	Mainline Protestant (NCC)	Other Protestant	Independent	No Religious/ Secular	
		Col %	Col %	Col %	Col %	Col %	Col %	Col %
Participated in activities to enhance your spirituality (worship, meditation, prayer, etc.)	Never	6.2%	35.3%	35.7%	21.0%	52.1%	46.8%	42.1%
	Sometimes	16.6%	33.8%	32.3%	28.9%	27.1%	25.7%	27.3%
	Often	22.8%	14.8%	13.7%	19.4%	9.9%	11.6%	12.8%
	Very often	54.4%	16.0%	18.2%	30.7%	10.9%	15.9%	17.8%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values	Never	14.6%	8.9%	7.1%	8.4%	7.4%	10.6%	9.7%
	Sometimes	43.9%	34.2%	31.3%	35.5%	30.5%	34.3%	33.9%
	Often	24.0%	29.9%	30.3%	29.5%	30.3%	29.8%	29.6%
	Very often	17.5%	27.0%	31.3%	26.6%	31.8%	25.3%	26.8%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Institutional contribution: Developing a deepened sense of spirituality	Very little	6.2%	24.0%	37.8%	23.9%	57.1%	56.1%	46.5%
	Some	15.1%	30.5%	31.3%	28.7%	24.1%	24.3%	25.5%
	Quite a bit	25.4%	23.5%	16.8%	22.2%	11.1%	11.2%	14.5%
	Very much	53.2%	22.0%	14.0%	25.3%	7.8%	8.3%	13.5%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Quality of Relationships among Students (3 categories)	Low	4.4%	6.3%	6.4%	4.3%	7.6%	6.2%	6.3%
	Mid-range	22.9%	26.7%	26.7%	26.4%	29.6%	30.1%	28.7%
	High	72.7%	66.9%	66.9%	69.3%	62.8%	63.7%	64.9%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Institutional contribution: Developing a personal code of values and ethics	Very little	4.4%	8.3%	11.1%	10.8%	14.6%	18.8%	14.9%
	Some	14.4%	22.4%	26.5%	24.2%	29.0%	30.9%	27.9%
	Quite a bit	30.7%	34.1%	32.1%	31.9%	31.0%	29.2%	30.6%
	Very much	50.5%	35.3%	30.4%	33.1%	25.5%	21.2%	26.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Deep Learning (Thirds)	lowest third	24.4%	22.1%	20.9%	24.1%	22.2%	29.8%	26.3%
	middle third	39.8%	37.5%	36.6%	34.3%	36.3%	37.8%	37.4%
	highest third	35.8%	40.4%	42.5%	41.6%	41.5%	32.4%	36.3%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Gains in Personal/Social Development	1st Quartile	13.4%	15.8%	15.9%	17.5%	20.1%	23.6%	20.4%
	2nd Quartile	19.9%	19.3%	20.0%	21.4%	21.1%	22.0%	21.1%
	3rd Quartile	34.1%	31.8%	32.6%	31.1%	31.2%	30.3%	31.1%
	4th Quartile	32.6%	33.0%	31.5%	30.0%	27.7%	24.1%	27.3%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Gains in Practical Competencies	1st Quartile	13.6%	13.9%	14.6%	16.9%	16.9%	16.9%	16.0%
	2nd Quartile	27.9%	26.1%	28.9%	26.1%	27.3%	27.9%	27.7%
	3rd Quartile	35.0%	33.1%	33.2%	33.9%	32.4%	31.9%	32.5%
	4th Quartile	23.5%	26.9%	23.3%	23.1%	23.5%	23.3%	23.8%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Gains in Intellectual Skills	1st Quartile	18.2%	16.5%	16.2%	20.3%	19.5%	25.9%	22.1%
	2nd Quartile	22.9%	20.9%	19.2%	20.6%	21.1%	24.8%	22.9%
	3rd Quartile	32.5%	31.7%	32.3%	31.4%	30.7%	27.9%	29.6%
	4th Quartile	26.4%	31.0%	32.3%	27.7%	28.7%	21.4%	25.4%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Frequencies**  
**by Four Carnegie/control Categories (carnctrl4): *First-Year Students***

		Carnegie-Control Variable - 4 Categories				Total
		BA/MA Private	BA/MA Public	Doc Private	Doc Public	Col %
		Col %	Col %	Col %	Col %	
Participated in activities to enhance your spirituality (worship, meditation, prayer, etc.)	Never	34.4%	50.2%	36.7%	45.8%	41.6%
	Sometimes	29.5%	25.8%	28.2%	25.7%	27.5%
	Often	15.6%	11.0%	14.1%	12.6%	13.5%
	Very often	20.5%	13.1%	21.0%	15.9%	17.4%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
Had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values	Never	9.3%	12.5%	7.6%	11.1%	10.5%
	Sometimes	30.9%	33.6%	27.8%	31.7%	31.6%
	Often	30.4%	29.0%	29.8%	29.2%	29.7%
	Very often	29.4%	24.9%	34.8%	28.0%	28.3%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
Institutional contribution: Developing a deepened sense of spirituality	Very little	30.7%	46.1%	33.8%	48.9%	39.3%
	Some	28.7%	28.9%	27.0%	28.0%	28.5%
	Quite a bit	21.5%	15.5%	21.3%	14.7%	18.3%
	Very much	19.1%	9.4%	17.8%	8.5%	13.9%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
Quality of Relationships among Students (3 categories)	Low	6.6%	7.2%	8.1%	7.3%	7.0%
	Mid-range	27.4%	32.3%	27.6%	32.5%	29.9%
	High	66.1%	60.6%	64.3%	60.2%	63.1%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
Institutional contribution: Developing a personal code of values and ethics	Very little	11.9%	18.5%	13.2%	20.1%	15.7%
	Some	28.5%	33.8%	29.7%	34.5%	31.4%
	Quite a bit	34.2%	30.8%	32.9%	29.9%	32.2%
	Very much	25.3%	16.9%	24.1%	15.5%	20.7%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
Deep Learning (Thirds)	lowest third	34.6%	47.5%	35.1%	47.8%	41.2%
	middle third	39.4%	34.5%	39.6%	35.1%	37.1%
	highest third	25.9%	18.0%	25.4%	17.1%	21.7%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
Gains in Personal/Social Development	1st Quartile	23.4%	29.3%	24.4%	29.8%	26.6%
	2nd Quartile	22.9%	23.5%	23.0%	24.8%	23.5%
	3rd Quartile	31.1%	28.2%	29.6%	28.4%	29.6%
	4th Quartile	22.6%	19.1%	23.0%	16.9%	20.4%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
Gains in Practical Competencies	1st Quartile	26.8%	30.8%	26.0%	30.4%	28.6%
	2nd Quartile	32.8%	33.1%	32.1%	32.5%	32.8%
	3rd Quartile	27.3%	25.0%	27.8%	25.8%	26.4%
	4th Quartile	13.1%	11.1%	14.1%	11.4%	12.3%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
Gains in Intellectual Skills	1st Quartile	26.7%	34.3%	31.6%	37.4%	31.6%
	2nd Quartile	25.7%	27.8%	25.9%	27.3%	26.6%
	3rd Quartile	28.4%	23.3%	25.8%	22.9%	25.5%
	4th Quartile	19.2%	14.6%	16.8%	12.4%	16.2%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Frequencies  
by Four Carnegie/control Categories (carnctrl4): Seniors**

		Carnegie-Control Variable - 4 Categories				Total
		BA/MA Private	BA/MA Public	Doc Private	Doc Public	Col %
		Col %	Col %	Col %	Col %	
Participated in activities to enhance your spirituality (worship, meditation, prayer, etc.)	Never	36.2%	48.3%	39.1%	44.1%	41.9%
	Sometimes	29.8%	25.8%	27.3%	25.9%	27.5%
	Often	14.4%	11.2%	13.2%	12.2%	12.8%
	Very often	19.6%	14.7%	20.4%	17.8%	17.8%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
Had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values	Never	8.5%	10.9%	8.5%	9.7%	9.5%
	Sometimes	33.8%	35.5%	31.5%	32.5%	33.9%
	Often	29.4%	29.7%	29.2%	30.1%	29.6%
	Very often	28.2%	23.9%	30.7%	27.7%	26.9%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
Institutional contribution: Developing a deepened sense of spirituality	Very little	34.4%	53.7%	39.5%	59.4%	46.3%
	Some	27.6%	25.3%	25.1%	22.9%	25.6%
	Quite a bit	18.7%	11.9%	16.5%	10.4%	14.6%
	Very much	19.3%	9.1%	18.9%	7.3%	13.5%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
Quality of Relationships among Students (3 categories)	Low	6.1%	5.5%	8.0%	7.3%	6.3%
	Mid-range	27.0%	29.4%	28.3%	31.3%	28.8%
	High	66.9%	65.1%	63.7%	61.3%	64.9%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
Institutional contribution: Developing a personal code of values and ethics	Very little	10.2%	17.3%	12.1%	21.0%	14.9%
	Some	24.3%	30.6%	25.7%	31.3%	27.9%
	Quite a bit	32.7%	29.5%	30.5%	28.6%	30.6%
	Very much	32.9%	22.5%	31.7%	19.0%	26.5%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
Deep Learning (Thirds)	lowest third	21.7%	28.5%	24.4%	31.7%	26.2%
	middle third	36.8%	37.4%	37.8%	38.1%	37.4%
	highest third	41.5%	34.0%	37.9%	30.1%	36.4%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
Gains in Personal/Social Development	1st Quartile	16.6%	22.8%	18.4%	24.8%	20.5%
	2nd Quartile	20.1%	21.2%	20.3%	23.1%	21.1%
	3rd Quartile	32.2%	30.1%	31.8%	30.4%	31.1%
	4th Quartile	31.1%	25.9%	29.5%	21.8%	27.3%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
Gains in Practical Competencies	1st Quartile	15.2%	16.5%	14.2%	17.9%	16.1%
	2nd Quartile	28.0%	28.2%	25.0%	28.0%	27.8%
	3rd Quartile	33.3%	32.3%	32.7%	31.2%	32.5%
	4th Quartile	23.6%	23.0%	28.1%	22.9%	23.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
Gains in Intellectual Skills	1st Quartile	16.7%	24.5%	21.1%	28.2%	22.0%
	2nd Quartile	20.2%	24.5%	22.4%	25.4%	22.9%
	3rd Quartile	31.8%	27.8%	31.5%	27.9%	29.6%
	4th Quartile	31.3%	23.3%	25.0%	18.5%	25.5%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Appendix C:  
Tests of Group Differences  
by Religious Affiliation (relig6): *First-Year Students***

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
worship	Between Groups	10155.977	5	2031.195	1819.499	.000
	Within Groups	84294.385	75509	1.116		
	Total	94450.362	75514			
diffstu2	Between Groups	994.504	5	198.901	210.052	.000
	Within Groups	71500.460	75509	.947		
	Total	72494.964	75514			
gnspirit	Between Groups	11080.116	5	2216.023	2247.639	.000
	Within Groups	74446.889	75509	.986		
	Total	85527.005	75514			
envstu	Between Groups	723.030	5	144.606	85.454	.000
	Within Groups	127777.7	75509	1.692		
	Total	128500.7	75514			
gnethics	Between Groups	2614.012	5	522.802	556.567	.000
	Within Groups	70928.166	75509	.939		
	Total	73542.178	75514			
deep	Between Groups	39795.229	5	7959.046	368.957	.000
	Within Groups	1628860	75509	21.572		
	Total	1668656	75514			
gnpersoc	Between Groups	288.035	5	57.607	132.553	.000
	Within Groups	32815.991	75509	.435		
	Total	33104.027	75514			
gnprac	Between Groups	100.328	5	20.066	45.787	.000
	Within Groups	33090.662	75509	.438		
	Total	33190.989	75514			
gnintsk	Between Groups	369.400	5	73.880	180.456	.000
	Within Groups	30913.843	75509	.409		
	Total	31283.243	75514			

**worship**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01				
		1	2	3	4	5
Independent	11323	1.78				
No Religious/Secular	37810		1.92			
Roman Catholic	10569			2.16		
Mainline Protestant (NCC)	9986			2.22		
Other Protestant	1551				2.76	
Faith-based/ Fundamentalist	4276					3.38
Sig.		1.000	1.000	.328	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5049.956.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**diffstu2**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01			
		1	2	3	4
Faith-based/Fundamentalist	4276	2.45			
No Religious/Secular	37810		2.69		
Roman Catholic	10569			2.80	
Other Protestant	1551			2.85	2.85
Mainline Protestant (NCC)	9986				2.88
Independent	11323				2.90
Sig.		1.000	1.000	.231	.276

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5049.956.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnspirit**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01				
		1	2	3	4	5
Independent	11323	1.80				
No Religious/Secular	37810	1.86				
Mainline Protestant (NCC)	9986		2.17			
Roman Catholic	10569			2.44		
Other Protestant	1551				2.58	
Faith-based/Fundamentalist	4276					3.31
Sig.		.185	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5049.956.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**envstu**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01			
		1	2	3	4
No Religious/Secular	37810	5.60			
Independent	11323	5.64	5.64		
Roman Catholic	10569		5.72	5.72	
Mainline Protestant (NCC)	9986			5.75	
Other Protestant	1551			5.79	
Faith-based/Fundamentalist	4276				5.98
Sig.		.867	.059	.281	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5049.956.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnethics**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01				
		1	2	3	4	5
No Religious/Secular	37810	2.44				
Independent	11323		2.57			
Mainline Protestant (NCC)	9986			2.67		
Other Protestant	1551				2.75	
Roman Catholic	10569				2.76	
Faith-based/Fundamentalist	4276					3.15
Sig.		1.000	1.000	1.000	.999	1.000

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 5049.956.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**deep**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01		
		1	2	3
No Religious/Secular	37810	23.94		
Faith-based/Fundamentalist	4276		24.66	
Other Protestant	1551			25.32
Roman Catholic	10569			25.32
Independent	11323			25.48
Mainline Protestant (NCC)	9986			25.50
Sig.		1.000	1.000	.540

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 5049.956.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnpersoc**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01			
		1	2	3	4
No Religious/Secular	37810	2.47			
Other Protestant	1551		2.53		
Independent	11323		2.54	2.54	
Mainline Protestant (NCC)	9986			2.58	2.58
Roman Catholic	10569				2.60
Faith-based/Fundamentalist	4276				2.63
Sig.		1.000	.985	.024	.013

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 5049.956.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnprac**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01		
		1	2	3
No Religious/Secular	37810	2.66		
Other Protestant	1551	2.69	2.69	
Mainline Protestant (NCC)	9986		2.72	2.72
Independent	11323		2.72	2.72
Faith-based/Fundamentalist	4276			2.74
Roman Catholic	10569			2.75
Sig.		.481	.141	.316

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 5049.956.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnintsk**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01	
		1	2
No Religious/Secular	37810	2.91	
Independent	11323		3.02
Other Protestant	1551		3.02
Faith-based/Fundamentalist	4276		3.05
Mainline Protestant (NCC)	9986		3.06
Roman Catholic	10569		3.06
Sig.		1.000	.030

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 5049.956.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.



**Tests of Group Differences  
by Religious Affiliation (relig6): Seniors**

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
worship	Between Groups	7043.038	5	1408.608	1214.868	.000
	Within Groups	84125.635	72555	1.159		
	Total	91168.673	72560			
diffstu2	Between Groups	683.325	5	136.665	149.642	.000
	Within Groups	66262.927	72555	.913		
	Total	66946.252	72560			
gnspirit	Between Groups	12232.752	5	2446.550	2501.246	.000
	Within Groups	70968.411	72555	.978		
	Total	83201.162	72560			
envstu	Between Groups	382.050	5	76.410	47.253	.000
	Within Groups	117325.3	72555	1.617		
	Total	117707.4	72560			
gnethics	Between Groups	3280.291	5	656.058	656.392	.000
	Within Groups	72518.103	72555	.999		
	Total	75798.394	72560			
deep	Between Groups	22804.232	5	4560.846	202.494	.000
	Within Groups	1634180	72555	22.523		
	Total	1656984	72560			
gnpersoc	Between Groups	392.051	5	78.410	176.858	.000
	Within Groups	32167.369	72555	.443		
	Total	32559.420	72560			
gnprac	Between Groups	48.197	5	9.639	22.835	.000
	Within Groups	30628.183	72555	.422		
	Total	30676.381	72560			
gnintsk	Between Groups	545.867	5	109.173	276.282	.000
	Within Groups	28670.252	72555	.395		
	Total	29216.119	72560			

**worship**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01				
		1	2	3	4	5
Independent	10216	1.79				
No Religious/Secular	38724		1.97			
Roman Catholic	9900			2.12		
Mainline Protestant (NCC)	8668			2.14		
Other Protestant	1131				2.60	
Faith-based/Fundamentalist	3922					3.25
Sig.		1.000	1.000	.927	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4056.160.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**diffstu2**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01		
		1	2	3
Faith-based/Fundamentalist	3922	2.44		
No Religious/Secular	38724		2.70	
Other Protestant	1131		2.74	
Roman Catholic	9900		2.75	
Mainline Protestant (NCC)	8668			2.86
Independent	10216			2.87
Sig.		1.000	.349	1.000

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 4056.160.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnspirit**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01			
		1	2	3	4
Independent	10216	1.69			
No Religious/Secular	38724	1.72			
Mainline Protestant (NCC)	8668		2.07		
Roman Catholic	9900			2.44	
Other Protestant	1131			2.49	
Faith-based/Fundamentalist	3922				3.26
Sig.		.947	1.000	.395	1.000

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 4056.160.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**envstu**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01			
		1	2	3	4
Independent	10216	5.65			
No Religious/Secular	38724	5.71	5.71		
Mainline Protestant (NCC)	8668		5.78		
Roman Catholic	9900		5.79	5.79	
Other Protestant	1131			5.90	5.90
Faith-based/Fundamentalist	3922				5.96
Sig.		.605	.089	.019	.372

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 4056.160.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnethics**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01				
		1	2	3	4	5
No Religious/Secular	38724	2.53				
Independent	10216		2.67			
Mainline Protestant (NCC)	8668			2.82		
Other Protestant	1131			2.87		
Roman Catholic	9900				2.96	
Faith-based/Fundamentalist	3922					3.27
Sig.		1.000	1.000	.314	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4056.160.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**deep**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01		
		1	2	3
No Religious/Secular	38724	26.05		
Faith-based/Fundamentalist	3922		26.67	
Other Protestant	1131		27.00	27.00
Roman Catholic	9900			27.13
Independent	10216			27.15
Mainline Protestant (NCC)	8668			27.38
Sig.		1.000	.070	.025

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4056.160.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnpersoc**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01			
		1	2	3	4
No Religious/Secular	38724	2.59			
Independent	10216		2.66		
Other Protestant	1131		2.71	2.71	
Mainline Protestant (NCC)	8668			2.74	2.74
Roman Catholic	9900			2.76	2.76
Faith-based/Fundamentalist	3922				2.77
Sig.		1.000	.027	.036	.554

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4056.160.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnprac**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01	
		1	2
No Religious/Secular	38724	2.95	
Other Protestant	1131	2.96	
Independent	10216	2.96	
Mainline Protestant (NCC)	8668	2.98	2.98
Faith-based/Fundamentalist	3922	2.99	2.99
Roman Catholic	9900		3.03
Sig.		.219	.042

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 4056.160.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnintsk**

Scheffe<sup>a,b</sup>

relig6	N	Subset for alpha = .01			
		1	2	3	4
No Religious/Secular	38724	3.09			
Other Protestant	1131		3.21		
Independent	10216		3.22	3.22	
Faith-based/Fundamentalist	3922		3.22	3.22	
Roman Catholic	9900			3.27	3.27
Mainline Protestant (NCC)	8668				3.29
Sig.		1.000	.999	.014	.895

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 4056.160.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**Tests of Group Differences  
by Carnegie/control (carnctrl4): First-Year Students**

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
worship	Between Groups	1714.993	3	571.664	468.751	.000
	Within Groups	88745.295	72769	1.220		
	Total	90460.289	72772			
diffstu2	Between Groups	391.262	3	130.421	137.011	.000
	Within Groups	69268.735	72769	.952		
	Total	69659.997	72772			
gnspirit	Between Groups	3267.851	3	1089.284	1006.083	.000
	Within Groups	78786.810	72769	1.083		
	Total	82054.661	72772			
envstu	Between Groups	352.421	3	117.474	69.496	.000
	Within Groups	123005.5	72769	1.690		
	Total	123358.0	72772			
gnethics	Between Groups	1499.544	3	499.848	526.284	.000
	Within Groups	69113.694	72769	.950		
	Total	70613.237	72772			
deep	Between Groups	36255.133	3	12085.044	561.494	.000
	Within Groups	1566209	72769	21.523		
	Total	1602464	72772			
gnpersoc	Between Groups	236.431	3	78.810	181.325	.000
	Within Groups	31628.053	72769	.435		
	Total	31864.484	72772			
gnprac	Between Groups	92.228	3	30.743	70.442	.000
	Within Groups	31758.206	72769	.436		
	Total	31850.433	72772			
gnintsk	Between Groups	412.176	3	137.392	336.713	.000
	Within Groups	29692.591	72769	.408		
	Total	30104.768	72772			

**worship**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01		
		1	2	3
BA/MA Public	20613	1.87		
Doc Public	15828		1.99	
Doc Private	6170			2.19
BA/MA Private	30162			2.22
Sig.		1.000	1.000	.276

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 13032.665.

b.

The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**diffstu2**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01			
		1	2	3	4
BA/MA Public	20613	2.67			
Doc Public	15828		2.74		
BA/MA Private	30162			2.80	
Doc Private	6170				2.92
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 13032.665.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnspirit**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01			
		1	2	3	4
Doc Public	15828	1.83			
BA/MA Public	20613		1.88		
Doc Private	6170			2.23	
BA/MA Private	30162				2.29
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 13032.665.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**envstu**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01		
		1	2	3
Doc Public	15828	5.59		
BA/MA Public	20613	5.61		
Doc Private	6170		5.68	
BA/MA Private	30162			5.75
Sig.		.658	1.000	1.000

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 13032.665.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnethics**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01			
		1	2	3	4
Doc Public	15828	2.41			
BA/MA Public	20613		2.46		
Doc Private	6170			2.68	
BA/MA Private	30162				2.73
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 13032.665.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**deep**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01	
		1	2
Doc Public	15828	23.91	
BA/MA Public	20613	23.96	
Doc Private	6170		25.28
BA/MA Private	30162		25.36
Sig.		.791	.486

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 13032.665.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnpersoc**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01		
		1	2	3
Doc Public	15828	2.45		
BA/MA Public	20613		2.48	
Doc Private	6170			2.57
BA/MA Private	30162			2.58
Sig.		1.000	1.000	.421

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 13032.665.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnprac**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01	
		1	2
BA/MA Public	20613	2.65	
Doc Public	15828	2.66	
BA/MA Private	30162		2.72
Doc Private	6170		2.74
Sig.		.469	.160

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 13032.665.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnintsk**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01			
		1	2	3	4
Doc Public	15828	2.88			
BA/MA Public	20613		2.93		
Doc Private	6170			2.98	
BA/MA Private	30162				3.06
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 13032.665.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.



**Tests of Group Differences  
by Carnegie/control (carnctrl4): Seniors**

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
worship	Between Groups	813.110	3	271.037	218.263	.000
	Within Groups	87145.066	70177	1.242		
	Total	87958.177	70180			
diffstu2	Between Groups	188.093	3	62.698	68.273	.000
	Within Groups	64446.347	70177	.918		
	Total	64634.440	70180			
gnspirit	Between Groups	4425.308	3	1475.103	1363.365	.000
	Within Groups	75928.491	70177	1.082		
	Total	80353.798	70180			
envstu	Between Groups	288.468	3	96.156	59.452	.000
	Within Groups	113502.9	70177	1.617		
	Total	113791.4	70180			
gnethics	Between Groups	2266.334	3	755.445	746.739	.000
	Within Groups	70995.147	70177	1.012		
	Total	73261.481	70180			
deep	Between Groups	23817.291	3	7939.097	352.935	.000
	Within Groups	1578594	70177	22.494		
	Total	1602412	70180			
gnpersoc	Between Groups	366.858	3	122.286	275.408	.000
	Within Groups	31159.795	70177	.444		
	Total	31526.653	70180			
gnprac	Between Groups	44.050	3	14.683	34.805	.000
	Within Groups	29605.578	70177	.422		
	Total	29649.628	70180			
gnintsk	Between Groups	636.375	3	212.125	539.489	.000
	Within Groups	27593.368	70177	.393		
	Total	28229.743	70180			

**worship**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01		
		1	2	3
BA/MA Public	21698	1.92		
Doc Public	15535		2.04	
Doc Private	5480			2.15
BA/MA Private	27468			2.17
Sig.		1.000	1.000	.398

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12145.292.

b.

The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**diffstu2**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01		
		1	2	3
BA/MA Public	21698	2.67		
Doc Public	15535		2.76	
BA/MA Private	27468		2.77	
Doc Private	5480			2.82
Sig.		1.000	.682	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12145.292.

b.

The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnspirit**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01			
		1	2	3	4
Doc Public	15535	1.66			
BA/MA Public	21698		1.76		
Doc Private	5480			2.15	
BA/MA Private	27468				2.23
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12145.292.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**envstu**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01	
		1	2
Doc Public	15535	5.63	
Doc Private	5480	5.67	
BA/MA Public	21698		5.76
BA/MA Private	27468		5.79
Sig.		.094	.222

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 12145.292.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnethics**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01			
		1	2	3	4
Doc Public	15535	2.46			
BA/MA Public	21698		2.57		
Doc Private	5480			2.82	
BA/MA Private	27468				2.88
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 12145.292.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**deep**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01			
		1	2	3	4
Doc Public	15535	25.78			
BA/MA Public	21698		26.25		
Doc Private	5480			26.80	
BA/MA Private	27468				27.22
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 12145.292.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnpersoc**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01		
		1	2	3
Doc Public	15535	2.55		
BA/MA Public	21698		2.62	
Doc Private	5480			2.70
BA/MA Private	27468			2.73
Sig.		1.000	1.000	.016

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12145.292.

b.

The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnprac**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01		
		1	2	3
Doc Public	15535	2.94		
BA/MA Public	21698	2.96	2.96	
BA/MA Private	27468		2.98	
Doc Private	5480			3.04
Sig.		.304	.105	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12145.292.

b.

The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**gnintsk**

Scheffe<sup>a,b</sup>

carnctrl4	N	Subset for alpha = .01			
		1	2	3	4
Doc Public	15535	3.04			
BA/MA Public	21698		3.12		
Doc Private	5480			3.18	
BA/MA Private	27468				3.27
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12145.292.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**Appendix D:  
Regression Tables**

**Blocked Hierarchical Regression Models Using the New Religious Affiliation Groupings  
(Compare with Teagle Report)**

Dependent Variables		WORSHIP						DIFFSTU						GNSPIRIT						DEEP						ENVSTU						
		1		2		3		1		2		3		1		2		3		1		2		3		1		2		3		
		B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	
(Constant)		-.11 ***		-.12 ***		-.09 ***		-.04 ***		-.32 ***		-.07 ***		-.21 ***		-.27 ***		-.12 ***		-.12 ***		-.11 ***		.08 ***		-.03 ***		-.02		.09 ***		
Religious affil.	<i>Faith-based/fundamentalist</i>	1.23 ***		1.21 ***		1.08 ***		-.26 ***		-.26 ***		-.32 ***		1.40 ***		1.36 ***		.83 ***		.13 ***		.05 ***		-.06 ***		.25 ***		.16 ***		-.04 ***		
(public institutions ref group)	<i>Roman Catholic</i>	.18 ***		.16 ***		.12 ***		.08 ***		.04 ***		-.07 ***		.61 ***		.61 ***		.46 ***		.25 ***		.19 ***		.08 ***		.08 ***		.04 ***		-.07 ***		
	<i>Mainline Protestant</i>	.21 ***		.17 ***		.09 ***		.18 ***		.11 ***		-.02 **		.32 ***		.27 ***		.14 ***		.28 ***		.16 ***		.03 ***		.09 ***		-.05 ***		-.15 ***		
	<i>Other Protestant</i>	.66 ***		.63 ***		.52 ***		.11 ***		.06 **		-.06 ***		.70 ***		.66 ***		.39 ***		.21 ***		.13 ***		.00		.13 ***		.03		-.07 ***		
	<i>Non-affiliated, private</i>	-.14 ***		-.16 ***		-.17 ***		.19 ***		.12 ***		-.05 ***		-.03 ***		-.05 ***		-.02 **		.27 ***		.14 ***		.08 ***		-.01		-.08 ***		-.10 ***		
Class: Being a first-year student				-.01		.05 ***				-.03 ***		.10 ***				.08 ***		.06 ***				-.38 ***		-.31 ***				-.08 ***		-.10 ***		
Sex: Being male				-.05 ***		-.02 ***				.02 ***		.02 ***				-.05 ***		-.01 *				-.05 ***		-.03 ***				-.03 ***		-.03 ***		
Full-time student				.07 ***		-.07 ***				.25 ***		.08 ***				.09 ***		-.01				.24 ***		.05 ***				.14 ***		.06 ***		
Transfer student				-.05 ***		.05 ***				-.08 ***		-.06 ***				-.07 ***		-.02 **				.04 ***		.13 ***				-.09 ***		-.03 ***		
Fraternity/sorority participation				.08 ***		-.08 ***				.07 ***		.01				.11 ***		.00				.08 ***		-.03 ***				.31 ***		.18 ***		
Varsity athlete				.05 ***		-.22 ***				-.01		-.06 ***				.04 ***		-.02 *				-.04 ***		-.06 ***				.22 ***		.04 ***		
First generation student				-.12 ***		-.06 ***				-.06 ***		-.03 ***				.00		.03 ***				-.02 **		.01 **				-.02 **		-.01		
International Student				-.10 ***		-.09 ***				-.09 ***		-.08 ***				.17 ***		.16 ***				.03 *		.00				-.07 ***		-.08 ***		
Self-reported college grades				.10 ***		.05 ***				.04 ***		.00 *				.02 ***		-.04 ***				.13 ***		.07 ***				.05 ***		-.04 ***		
Race/ethnicity	<i>Black or African Amer.</i>			.27 ***		.25 ***				.11 ***		-.16 ***				.29 ***		.15 ***				.21 ***		.10 ***				-.08 ***		-.07 ***		
(White ref group)	<i>Asian Amer. or Pacific Isl.</i>			-.06 ***		-.03 *				.02		-.20 ***				.14 ***		.15 ***				.03 *		-.02				-.06 ***		.00		
	<i>Hispanic or Latino</i>			-.05 ***		-.06 ***				.08 ***		-.13 ***				.13 ***		.09 ***				.17 ***		.05 ***				.05 ***		.00		
	<i>Other race</i>			.00		.00				.10 ***		-.09 ***				.05 **		.04 **				.08 ***		.00				-.04 *		-.04 *		
Institutional enrollment size				-.02 ***		-.02 ***				-.01		-.02 ***				.00		.01				.00		.00				.00		-.01 **		
Institutional selectivity rating (Barron's)				.01 *		-.02 ***				.04 ***		.02 ***				-.02 ***		-.02 ***				.04 ***		.02 ***				.00		-.03 ***		
Carnegie type	<i>Doc-extensive</i>			.14 ***		.14 ***				.17 ***		.06 ***				-.10 ***		-.06 ***				-.09 ***		-.07 ***				-.12 ***		-.06 ***		
(Bac-general ref group)	<i>Doc-intensive</i>			.02		.05 ***				.12 ***		.03 **				-.16 ***		-.08 ***				-.06 ***		-.01				-.13 ***		-.04 ***		
	<i>Master's</i>			-.02		-.02				.09 ***		.03 ***				-.08 ***		-.04 ***				-.02		-.02 *				-.07 ***		-.05 ***		
	<i>Bac-liberal arts</i>			-.02 *		-.09 ***				.20 ***		.05 ***				-.05 ***		-.07 ***				.18 ***		.08 ***				-.04 **		-.11 ***		
	<i>Other Carnegie type</i>			.07 ***		.14 ***				.00		-.08 ***				-.05 **		-.04 **				.00		.01				-.06 ***		-.02		
Relaxing and socializing						-.07 ***				.03 ***		.03 ***				-.02 ***		.02 ***				-.03 ***		.03 ***				.02 ***		.02 ***		
Participating in co-curric. Activities						.06 ***				.02 ***		.02 ***				.03 ***		.03 ***				-.04 ***		.04 ***				.06 ***		.06 ***		
Attended art exhibit, play, theater, etc.						.12 ***				.06 ***		.06 ***				-.01 **		.01 **				.05 ***		.05 ***				-.01 ***		-.01 ***		
Exercised/physical fitness activities						.18 ***				.01 **		.01 **				-.03 ***		.03 ***				.03 ***		.03 ***				.07 ***		.07 ***		
Worked w/ faculty/other than coursework						.02 ***				.02 ***		.02 ***				.03 ***		.03 ***				.17 ***		.17 ***				.00		.00		
Community-based project, part of course						.04 ***				-.01 ***		-.01 ***				.06 ***		.06 ***				.12 ***		.12 ***				.02 ***		.02 ***		
Community service or volunteer work						.17 ***				.04 ***		.04 ***				-.04 ***		-.04 ***				-.02 **		.02 **				.03 ***		.03 ***		
Serious conversations: diff. race/ethnic.						-.01 **				.59 ***		.59 ***				-.01 ***		-.01 ***				.11 ***		.11 ***				.05 ***		.05 ***		
Deep learning						.00				.17 ***		.17 ***				.06 ***		.06 ***				--		--				.01 *		.01 *		
Serious conversations: relig/pols/values						.03 ***				--		--				-.03 ***		-.03 ***				.21 ***		.21 ***				.02 ***		.02 ***		
Activities to enhance spirit. devpt.						--				.02 ***		.02 ***				.31 ***		.31 ***				.00		.00				.02 ***		.02 ***		
Perceptions of campus relationships						.01 ***				-.02 ***		-.02 ***				.04 ***		.04 ***				.08 ***		.08 ***				--		--		
Perceptions of the non-academic envt.						.03 ***				.01 ***		.01 ***				.25 ***		.25 ***				.13 ***		.13 ***				.10 ***		.10 ***		
Overall satisfaction with institution						.06 ***				-.01 **		-.01 **				.07 ***		.07 ***				.10 ***		.10 ***				.25 ***		.25 ***		
Perception of relationships w/ faculty						--				--		--				--		--				--		--				.14 ***		.14 ***		
Perception of relationships with admin.						--				--		--				--		--				--		--				.095 ***		.095 ***		
		<i>Model R<sup>2</sup></i>		.09		.12		.22		.01		.03		.50		.14		.16		.40		.02		.09		.39		.00		.03		.26

\* p<.05, \*\* p<.01, \*\*\* p<.001

**Blocked Hierarchical Regression Models Using the New Religious Affiliation Groupings  
(Compare with Teagle Report)**

Dependent Variables		GNPERSSOC						GNPRAC						GNINTSK						GNETHICS						
		1		2		3		1		2		3		1		2		3		1		2		3		
		B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	
(Constant)		-.09 ***		-.09 ***		.09 ***		-.03 ***		.02		.14 ***		-.11 ***		.06 ***		.16 ***		-.15 ***		-.14 ***		.00		
Religious affil.	<i>Faith-based/fundamentalist</i>	.26 ***		.20 ***		-.08 ***		.08 ***		.03 *		-.19 ***		.21 ***		.12 ***		-.07 ***		.72 ***		.66 ***		.45 ***		
(public institutions ref group)	<i>Roman Catholic</i>	.23 ***		.21 ***		.01 *		.11 ***		.12 ***		-.05 ***		.26 ***		.21 ***		.06 ***		.37 ***		.35 ***		.21 ***		
	<i>Mainline Protestant</i>	.19 ***		.11 ***		-.05 ***		.04 ***		.03 **		-.09 ***		.26 ***		.13 ***		.02 *		.26 ***		.16 ***		.05 ***		
	<i>Other Protestant</i>	.12 ***		.07 **		-.10 ***		-.01		.00		-.12 ***		.17 ***		.07 ***		-.03		.32 ***		.25 ***		.13 ***		
	<i>Non-affiliated, private</i>	.10 ***		.03 **		-.02 ***		.04 ***		.03 ***		-.01		.19 ***		.06 ***		.02 **		.14 ***		.06 ***		.03 ***		
Class: Being a first-year student				-.22 ***		-.20 ***				-.42 ***		-.37 ***				-.30 ***		-.24 ***				-.15 ***		-.14 ***		
Sex: Being male				-.06 ***		-.01 ***				.05 ***		.09 ***				-.10 ***		-.05 ***				-.08 ***		-.05 ***		
Full-time student				.17 ***		-.01 *				.17 ***		.04 ***				.09 ***		-.03 ***				.15 ***		.02		
Transfer student				-.09 ***		-.03 ***				-.03 ***		-.01				-.08 ***		-.07 ***				-.10 ***		-.05 ***		
Fraternity/sorority participation				.17 ***		.03 ***				.14 ***		.04 ***				.11 ***		.03 ***				.15 ***		.04 ***		
Varsity athlete				.06 ***		-.03 ***				.07 ***		.01				.01		-.01				.07 ***		-.01		
First generation student				.04 ***		.05 ***				.07 ***		.06 ***				.07 ***		.06 ***				.02 **		.02 ***		
International Student				.14 ***		.09 ***				.16 ***		.12 ***				.09 ***		.06 ***				.16 ***		.12 ***		
Self-reported college grades				.06 ***		-.03 ***				.07 ***		-.03 ***				.11 ***		.01 ***				.03 ***		-.04 ***		
Race/ethnicity	<i>Black or African Amer.</i>	.28 ***		.16 ***		.16 ***		.22 ***		.15 ***		.15 ***		.22 ***		.17 ***		.17 ***		.16 ***		.16 ***		.09 ***		
(White ref group)	<i>Asian Amer. or Pacific Isl.</i>	.11 ***		.11 ***		.11 ***		.06 ***		.08 ***		.08 ***		-.06 ***		.00		.00		.11 ***		.11 ***		.13 ***		
	<i>Hispanic or Latino</i>	.21 ***		.08 ***		.08 ***		.14 ***		.04 ***		.04 ***		.17 ***		.07 ***		.07 ***		.12 ***		.12 ***		.05 ***		
	<i>Other race</i>	.05 **		.02		.02		.04 *		.03 *		.03 *		.04 *		.04 **		.04 **		.04 *		.04 *		.03 *		
Institutional enrollment size				.02 ***		.01 *		.01		.00		.00		.02 ***		.01 ***		.01 ***		.01		.01		.00		
Institutional selectivity rating ( <i>Barron's</i> )				.01 ***		-.01 ***		.02 ***		-.01 ***		-.01 ***		.04 ***		.00		.00		.01 ***		.01 ***		-.01 ***		
Carnegie type	<i>Doc-extensive</i>	-.10 ***		.01		.01		-.10 ***		.01		.01		-.20 ***		-.09 ***		-.09 ***		-.10 ***		-.10 ***		-.01		
(Bac-general ref group)	<i>Doc-intensive</i>	-.15 ***		-.03 **		-.03 **		-.07 ***		.04 ***		.04 ***		-.18 ***		-.07 ***		-.07 ***		-.13 ***		-.13 ***		-.03 *		
	<i>Master's</i>	-.05 ***		-.01		-.01		-.08 ***		-.04 ***		-.04 ***		-.07 ***		-.03 ***		-.03 ***		-.04 ***		-.04 ***		.00		
	<i>Bac-liberal arts</i>	.08 ***		-.02 **		-.02 **		-.13 ***		-.21 ***		-.21 ***		.15 ***		.05 ***		.05 ***		.05 ***		.05 ***		-.03 **		
	<i>Other Carnegie type</i>	-.01		.03 *		.03 *		.09 ***		.12 ***		.12 ***		-.08 ***		-.05 ***		-.05 ***		.03		.03		.07 ***		
Relaxing and socializing				-.02 ***		-.02 ***				-.03 ***		-.03 ***				-.01 ***		-.01 ***				-.01 ***		-.01 ***		
Participating in co-curric. Activities				.01 ***		.01 ***				-.01 ***		-.01 ***				-.02 ***		-.02 ***				.02 ***		.02 ***		
Attended art exhibit, play, theater, etc.				.00		.00				-.07 ***		-.07 ***				-.02 ***		-.02 ***				.00		.00		
Exercised/physical fitness activities				.02 ***		.02 ***				.03 ***		.03 ***				.03 ***		.03 ***				.02 ***		.02 ***		
Worked w/ faculty/other than coursework				.02 ***		.02 ***				.01 ***		.01 ***				-.03 ***		-.03 ***				.02 ***		.02 ***		
Community-based project, part of course				.07 ***		.07 ***				.03 ***		.03 ***				-.01 **		-.01 **				.04 ***		.04 ***		
Community service or volunteer work				.02 ***		.02 ***				.00		.00				.01		.01				-.01 *		-.01 *		
Serious conversations: diff. race/ethnic.				.03 ***		.03 ***				.01 **		.01 **				-.02 ***		-.02 ***				-.01 ***		-.01 ***		
Deep learning				.25 ***		.25 ***				.30 ***		.30 ***				.36 ***		.36 ***				.18 ***		.18 ***		
Serious conversations: relig/pols/values				.00		.00				-.02 ***		-.02 ***				-.01 ***		-.01 ***				.00		.00		
Activities to enhance spirit. devpt.				.02 ***		.02 ***				.00		.00				-.01 ***		-.01 ***				.02 ***		.02 ***		
Perceptions of campus relationships				.10 ***		.10 ***				.13 ***		.13 ***				.10 ***		.10 ***				.07 ***		.07 ***		
Perceptions of the non-academic envt.				.36 ***		.36 ***				.24 ***		.24 ***				.19 ***		.19 ***				.25 ***		.25 ***		
Overall satisfaction with institution				.17 ***		.17 ***				.21 ***		.21 ***				.24 ***		.24 ***				.15 ***		.15 ***		
Perception of relationships w/ faculty				--		--				--		--				--		--				--		--		
Perception of relationships with admin.				--		--				--		--				--		--				--		--		
<i>Model R<sup>2</sup></i>				.01		.04		.51		.00		.06		.45		.01		.07		.45		.04		.06		.30

\* p<.05, \*\* p<.01, \*\*\* p<.001

**Blocked Heirarchical Regression Models Using the New Carnegie/Control Groupings**

Dependent Variables		WORSHIP						DIFFSTU						GNSPIRIT						DEEP						ENVSTU						
		1		2		3		1		2		3		1		2		3		1		2		3								
		B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.							
(Constant)																																
Carnegie/Control	<i>Doctoral-private</i>	.14 ***		.10 ***		.04 ***		.15 ***		.09 ***		-.02 *		.39 ***		.39 ***		.29 ***		.22 ***		.13 ***		.05 ***		.04 ***		-.01		-.07 ***		
(doctoral-public ref group)	<i>Bac/Master's-private</i>	.16 ***		.13 ***		.03 **		.06 ***		.03 **		-.04 ***		.45 ***		.46 ***		.30 ***		.28 ***		.18 ***		.06 ***		.11 ***		.05 ***		-.09 ***		
	<i>Bac/Master's-public</i>	-.11 ***		-.10 ***		-.14 ***		-.07 ***		-.01		.03 ***		.04 ***		.03 **		.03 ***		.04 ***		.03 ***		.01		.05 ***		.05 ***		.00		
Class: Being a first-year student				.00		.05 ***				-.03 ***		.10 ***				.08 ***		.06 ***				-.39 ***		-.31 ***				-.08 ***		-.10 ***		
Sex: Being male				-.05 ***		-.01 **				.02 **		.02 ***				-.05 ***		-.01				-.06 ***		-.03 ***				-.03 ***		-.03 ***		
Full-time student				.09 ***		-.05 ***				.25 ***		.08 ***				.11 ***		.00				.24 ***		.05 ***				.14 ***		.06 ***		
Transfer student				-.04 ***		.07 ***				-.09 ***		-.06 ***				-.06 ***		-.01				.03 ***		.12 ***				-.09 ***		-.02 ***		
Fraternity/sorority participation				.06 ***		-.11 ***				.09 ***		.03 ***				.05 ***		-.04 ***				.09 ***		-.03 ***				.30 ***		.17 ***		
Varsity athlete				.03 **		-.26 ***				.00		-.06 ***				.01		-.04 ***				-.02 **		-.05 ***				.22 ***		.03 ***		
First generation student				-.12 ***		-.07 ***				-.07 ***		-.03 ***				.00		.03 ***				-.02 ***		.01 **				-.02 **		.00		
International Student				-.06 ***		-.06 ***				-.10 ***		-.10 ***				.20 ***		.17 ***				.02		.00				-.07 ***		-.07 ***		
Self-reported college grades				.10 ***		.05 ***				.04 ***		.00				.03 ***		-.05 ***				.13 ***		.07 ***				.05 ***		-.04 ***		
Race/ethnicity	<i>Black or African Amer.</i>	.23 ***		.21 ***				.12 ***		-.15 ***				.24 ***		.11 ***						.21 ***		.10 ***				-.08 ***		-.08 ***		
(White ref group)	<i>Asian Amer. or Pacific Isl.</i>	-.07 ***		-.02		-.02 ***		.01		-.21 ***				.15 ***		.16 ***						.02		-.02				-.06 ***		.00		
	<i>Hispanic or Latino</i>	-.09 ***		-.09 ***				.09 ***		-.12 ***				.11 ***		.08 ***						.17 ***		.06 ***				.04 ***		.00		
	<i>Other race</i>	-.05 **		-.04 **				.12 ***		-.08 ***				.00		.01						.08 ***		.01				-.05 **		-.04 **		
Institutional enrollment size				.00		.00		.00		.00		.00		.00		.01 ***						-.03 ***		-.02 ***				-.01 **		-.01 *		
Institutional selectivity rating ( <i>Barron's</i> )				.00		-.03 ***		.06 ***		.02 ***				-.03 ***		-.04 ***						.06 ***		.03 ***				.00		-.04 ***		
Relaxing and socializing						-.08 ***				.03 ***						-.02 ***						-.03 ***						.02 ***				
Participating in co-curr. activities						.05 ***				.03 ***						.02 ***						-.04 ***						.06 ***				
Attended art exhibit, play, theater, etc.						.13 ***				.06 ***						-.02 ***						.05 ***						-.01 ***				
Exercised/physical fitness activities						.20 ***				.01 ***						-.03 ***						.03 ***						.07 ***				
Worked w/ faculty/other than coursework						.02 ***				.02 ***						.03 ***						.17 ***						-.01 *				
Community-based project, part of course						.06 ***				-.02 ***						.07 ***						.12 ***						.02 ***				
Community service or volunteer work						.20 ***				.04 ***						-.03 ***						-.02 ***						.03 ***				
Serious conversations: diff. race/ethnic.						-.01				.59 ***						-.01 *						.11 ***						.05 ***				
Deep learning						-.01 ***				.18 ***						.05 ***						--						.01				
Serious conversations: relig/pols/values						.00				--						-.05 ***						.22 ***						.01 ***				
Activities to enhance spirit. devpt.						--				.00						.37 ***						-.01 ***						.03 ***				
Perceptions of campus relationships						.02 ***				-.02 ***						.04 ***						.08 ***						--				
Perceptions of the non-academic envt.						.05 ***				.01 *						.26 ***						.13 ***						.10 ***				
Overall satisfaction with institution						.07 ***				-.01 **						.07 ***						.10 ***						.25 ***				
Perception of relationships w/ faculty						--				--						--						--						.14 ***				
Perception of relationships with admin.						--				--						--						--						.10 ***				
	<i>Model R<sup>2</sup></i>			.01		.03		.15		.00		.02		.49		.05		.06		.36		.02		.08		.38		.00		.03		.26

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$



### Blocked Heirarchical Regression Models Using the New Carnegie/Control Groupings

Dependent Variables		GNPERSSOC						GNPRAC						GNINTSK						GNETHICS					
		1		2		3		1		2		3		1		2		3		1		2		3	
		B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.
(Constant)																									
Carnegie/Control	<i>Doctoral-private</i>	.18 ***		.14 ***		.01		.09 ***		.06 ***		-.03 ***		.17 ***		.10 ***		.01		.28 ***		.23 ***		.14 ***	
(doctoral-public ref group)	<i>Bac/Master's-private</i>	.21 ***		.18 ***		-.03 ***		.04 ***		.00		-.17 ***		.31 ***		.25 ***		.08 ***		.34 ***		.28 ***		.12 ***	
	<i>Bac/Master's-public</i>	.06 ***		.07 ***		.01		-.02 **		-.04 ***		-.09 ***		.09 ***		.09 ***		.04 ***		.05 ***		.04 ***		.00	
Class: Being a first-year student				-.23 ***		-.20 ***				-.42 ***		-.37 ***				-.31 ***		-.24 ***				-.15 ***		-.14 ***	
Sex: Being male				-.07 ***		-.02 ***				.05 ***		.09 ***				-.10 ***		-.06 ***				-.08 ***		-.05 ***	
Full-time student				.17 ***		-.02 *				.17 ***		.03 ***				.09 ***		-.03 ***				.15 ***		.02 *	
Transfer student				-.10 ***		-.03 ***				-.10 ***		.00				-.09 ***		-.07 ***				-.10 ***		-.05 ***	
Fraternity/sorority participation				.16 ***		.02 ***				.13 ***		.03 ***				.10 ***		.02 ***				.13 ***		.02 **	
Varsity athlete				.07 ***		-.03 ***				.07 ***		.00				.03 **		-.01				.06 ***		-.02 *	
First generation student				.04 ***		.05 ***				.07 ***		.06 ***				.07 ***		.06 ***				.02 **		.03 ***	
International Student				.14 ***		.09 ***				.16 ***		.12 ***				.08 ***		.05 ***				.17 ***		.13 ***	
Self-reported college grades				.07 ***		-.03 ***				.07 ***		-.03 ***				.11 ***		.01 ***				.04 ***		-.04 ***	
Race/ethnicity	<i>Black or African Amer.</i>	.27 ***		.16 ***				.21 ***		.15 ***				.22 ***		.18 ***						.13 ***		.07 ***	
(White ref group)	<i>Asian Amer. or Pacific Isl.</i>	.11 ***		.11 ***				.06 ***		.09 ***				-.06 ***		.00						.11 ***		.13 ***	
	<i>Hispanic or Latino</i>	.20 ***		.08 ***				.15 ***		.04 ***				.17 ***		.08 ***						.11 ***		.04 ***	
	<i>Other race</i>	.05 **		.02				.04 *		.03 *				.04 *		.04 ***						.02		.02	
Institutional enrollment size		.00		.01 ***				-.02 ***		.00				-.01 *		.00						-.01 ***		-.01	
Institutional selectivity rating ( <i>Barron's</i> )		.02 ***		-.01 ***				.01 *		-.03 ***				.05 ***		.01 **						.01 ***		-.01 ***	
Relaxing and socializing				-.02 ***						-.03 ***						-.01 ***								-.01 ***	
Participating in co-curr. activities				.01 ***						-.01 ***						-.02 ***								.02 ***	
Attended art exhibit, play, theater, etc.				.00						-.07 ***						-.02 ***								-.01 *	
Exercised/physical fitness activities				.02 ***						.03 ***						.03 ***								.02 ***	
Worked w/ faculty/other than coursework				.02 ***						.01 ***						-.03 ***								.02 ***	
Community-based project, part of course				.07 ***						.03 ***						-.01 **								.05 ***	
Community service or volunteer work				.02 ***						.00						.01								-.01 *	
Serious conversations: diff. race/ethnic.				.03 ***						.01 **						-.02 ***								-.01 *	
Deep learning				.25 ***						.29 ***						.37 ***								.18 ***	
Serious conversations: relig/pols/values				.00						-.02 ***						-.01 **								-.01 ***	
Activities to enhance spirit. devpt.				.01 ***						.00						-.01 ***								.05 ***	
Perceptions of campus relationships				.10 ***						.13 ***						.10 ***								.08 ***	
Perceptions of the non-academic envt.				.36 ***						.24 ***						.19 ***								.26 ***	
Overall satisfaction with institution				.17 ***						.21 ***						.24 ***								.15 ***	
Perception of relationships w/ faculty				--						--						--								--	
Perception of relationships with admin.				--						--						--								--	
<i>Model R<sup>2</sup></i>		.01		.04		.51		.00		.06		.44		.02		.05		.39		.02		.04		.29	

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$