

CIRP Freshman Survey Constructs and Values 2009
Austin College Office of Institutional Research and Assessment
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Introduction

The Higher Education Research Institute (HERI) at UCLA administers a number of instruments that Austin College uses. The Cooperative Institutional Research Program (CIRP) Freshman Survey is administered to all incoming first year students during orientation weekend. This year the Freshman Survey instrument was analyzed in terms of constructs (more like NSSE benchmarks than previous Freshman Survey analyses). The following analysis contrasts the means for 387 Austin College first year students with 77,961 students at private four-year baccalaureate institutions.

Executive Summary

1. Students come to Austin College with strong habits of mind;
2. They see themselves as having the intellectual skills necessary to be successful here;
3. They have a much higher pluralistic orientation – they are well prepared for a diverse workplace;
4. They anticipate high levels of involvement in student government, organizations and study abroad;
5. They choose Austin College for its academic reputation and ability to prepare them challenging work and careers;
6. When asked about the “importance” of various values and activities, more than half of Austin students report that the following are essential or very important to them: helping others who are in difficulty, being well off financially, raising a family, becoming an authority in one’s field, improving one’s understanding of other countries and cultures, obtaining recognition from my colleagues for contributions to one’s field, and developing a meaningful philosophy of life; the remaining three in their “top ten” are becoming successful in a business of one’s own, keeping up to date with political affairs, and influencing social values.

Methodology

All first year students are asked to complete the CIRP Freshman Survey on their second day on campus. In Fall 2009, 391 students completed the CIRP Freshman Survey. HERI (the Higher Education Research Institute at UCLA) used Item Response Theory to create the constructs which purport to aggregate responses to related items. The findings below use different data comparisons – means, percentages of students who scored “high” on the constructs, and comparisons with the entire national sample, students at other religious four-year colleges and “highly selective” religious four-year colleges.

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Findings

Table 1 contrasts Austin College students with the national sample of almost 78000 comparable peers³. It is followed by Table 2 providing the percentage of students who scored high on each construct (as opposed to moderate or low).

In both tables, **Bold** indicates the higher mean in each comparison. Another comparison contrasts Austin College students with 14,490 students at “other religious highly selective four-year colleges” and 27,550 students at “other religious four-year colleges.” Those comparisons are provided in Table 2.

Table 1. CIRP Freshman Survey Construct Means – Austin vs. National Sample

| Construct | Austin (387 incoming first year students) | National private 4 yr baccalaureate colleges (77,961 incoming first year students) | Mean difference: Austin – National sample (Austin is higher on all of them) |
|---|--|---|--|
| | Mean | Mean | Mean difference |
| Habits of Mind | 51.7 | 50.2 | 1.5 |
| Academic self-concept | 50.6 | 48.3 | 2.3 |
| Social self- concept | 50.1 | 49.2 | 0.9 |
| Pluralistic orientation | 52.1 | 49.6 | 2.5 |
| Social agency | 49.1 | 48.9 | 0.2 |
| College reputation orientation | 51.7 | 49.1 | 2.6 |
| Likelihood of college involvement | 49.7 | 46.3 | 3.4 |

Bold = higher mean

Austin College students have a higher mean than the national sample on each of the seven constructs. The highest mean difference is in Likelihood of College Involvement, followed by College Reputation Orientation, Pluralistic Orientation (Skills for a diverse workplace), Academic Self-Concept, Habits of Mind, Social Self-concept, and Social Agency.

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The CIRP Freshman Survey for 2009 is available at:
<http://www.heri.ucla.edu/researchers/instruments/CIRP/2009SIF.PDF>.

Table 2 examines the percentage of students scoring high (defined as greater than one standard deviation above the mean) on each construct. A higher percentage of Austin College students score high on every construct except Social Agency. Here, the peer group is all national four-year private colleges.

Table 2. Percent of Students Who Score “High” on Each Construct

| Construct | % at AC “high” on construct (greater than ½ SD above the mean) | % national private 4-yr bacc “high” on construct | Difference Austin – National % (Only on social agency, fewer Austin students are high) |
|-----------------------------------|--|--|---|
| | Percent | Percent | Percent Difference |
| Habits of Mind | 34.7% | 27.9% | 6.8% |
| Academic self-concept | 27.9% | 21.7% | 6.2% |
| Social self-concept | 31.3% | 28.8% | 2.5% |
| Pluralistic orientation | 37.6% | 26.7% | 10.9% |
| Social agency | 29.3% | 30.4% | -1.1% |
| College reputation orientation | 55.3% | 33.7% | 21.6% |
| Likelihood of college involvement | 51.2% | 31.1% | 20.1% |

Note especially the last two constructs on which more than half of the students entering Austin College score high – well above the national mean.

It is also clear from the item clusters below that the constructs generally move from past activities in high school to self-ratings and values, then to factors influencing choice of Austin College and expected future behaviors.

As the items on the constructs are presented, an asterisk is placed next to any item on which, when compared with the “highly selective religious” (non-Catholic) and “all religious” (non-Catholic) four year colleges, the Austin College mean is substantially higher than means for both of those samples.

There are fewer asterisks designating high means in the early constructs which reflect their high school experience than in the later constructs which look more at their values and aspirations. In general, the mean for the “highly selective religious” colleges is higher than that for “all religious” colleges. Comments beneath each construct offer specific comparisons of Austin students with peers.

Habits of Mind:

This construct asks students how frequently “in the last year” they engaged in various activities. They can respond “frequently,” “occasionally,” or “not at all.”

1. Ask questions in class
2. Support your opinions with a logical argument
3. Seek solutions to problems and explain them to others
4. Revise papers to improve your own writing
5. Evaluate the quality and reliability of information you receive*
6. Take a risk because you felt you had more to gain
7. Seek alternate solutions to a problem*
8. Look up scientific articles and research*
9. Explore topics on your own even when not required for class
10. Accept failure as part of the learning process
11. Seek feedback on your academic work

The Habits of Mind are recollections of high school experience. Austin College students have means between 2 and 3 (occasionally and frequently, respectively) on every item.

Academic Self-concept:

Here students are asked to rate themselves; they can respond “highest 10%,” “above average,” “average,” “below average,” or “lowest 10%.”

1. Academic ability*
2. Intellectual self-confidence
3. Drive to achieve
4. Mathematical ability*

On this construct, Austin students have means higher on all four items, but only slightly higher means than peers on Intellectual Self-confidence and Drive to Achieve.

Social Self-concept:

Here also students are asked to rate themselves; they can respond “highest 10%,” “above average,” “average,” “below average,” or “lowest 10%.”

1. Leadership ability*
2. Public speaking ability*
3. Popularity
4. Social self-confidence*

While Austin College students have substantially higher means on the three items with asterisks, their mean for “popularity” falls below (by .03 and .06, respectively) the other two means. This indicates that students at “religious” colleges have higher self-perceived popularity than students at highly selective religious colleges and at Austin.

This is consistent with interview data from sophomores in the class of 2012, many of whom report becoming much more comfortable at Austin College than in high school because they saw their high schools as very “cliqueish.” As they arrive here, fewer

Austin students than peers see themselves as having been among the “popular” kids at school.

Pluralistic Orientation:

Again, students are asked to rate themselves; they can respond “highest 10%,” “above average,” “average,” “below average,” or “lowest 10%.”

1. Work cooperatively with diverse others*
2. Tolerance of diverse others*
3. See the world from different perspectives*
4. Discuss controversial issues*
5. Openness to my views being challenged*

The subtitle for this construct is “Skills for a Diverse Workplace.” Not only do Austin College students have substantially higher means on each item, but also their means on the first three items are above 4 (indicating self-ratings of “above average” or “highest 10%” when compared with their peers). Students at highly selective religious colleges have a mean above 4 only on the first two items and students at religious colleges only on the first item. This is a construct on which, by every comparison, Austin College students are extraordinary.

The interviews with sophomores in the class of 2012 suggest that students appreciate Austin because they can develop multiple support systems and are not forced into cliques as is often the case in high school.

Social Agency:

For this construct, students are asked how important each item is “to you personally;” responses can be “essential,” “very important,” “somewhat important,” or “not at all important.”

1. Participating in a community action program
2. Helping to promote racial understanding
3. Becoming a community leader
4. Influencing social values
5. Keeping up to date with political affairs*
6. Helping others who are in difficulty

In contrast with the other constructs, on this one Austin students are at or just below the means of peers at highly selective and other religious colleges – except for interest in keeping up to date with political affairs. Although the instruction does not limit the number of items (there are 20) which can be checked as essential or very important. Further analysis of all 20 items is provided below the two remaining constructs.

College Reputation Orientation:

The items for this construct come from a series of questions about how important various factors were “in your decision to come here.” Responses can be “very important,” “somewhat important,” or “not important.”

1. This college’s graduates get good jobs*
2. This college’s graduates gain admission to top graduate/professional schools*
3. This college has a very good academic reputation*

It is especially notable that Austin students, when compared with students at “highly selective religious” colleges, far more often see these qualities of the college as “very important.”

Likelihood of College Involvement:

Here, students are asked the “best chances” that you will engage in various activities. They can report “very good chance,” “some chance,” “very little chance,” or “no chance.”

1. Socialize with someone of another racial/ethnic group*
2. Participate in a study abroad program*
3. Participate in volunteer or community service work
4. Participate in student government*
5. Participate in student clubs/groups*

Item 3 is one on which Austin students do not have an asterisk. While they have a mean well above that of peers at all religious colleges, they fall below the mean for students at “highly selective religious” colleges. On the other four items, Austin College means are well above the means for both peer groups.

“Values” on the CIRP Freshman Survey

The constructs are extracted from various questions on the CIRP Freshman Survey. The six items on the Social Agency construct are in a question that begins with the prompt:

“Please indicate the importance to you personally of each of the following.” Students can respond:

- Essential
- Very important
- Somewhat important
- Not important

In the contrasts below, Austin is compared with “Highly Selective Religious” (but non-Catholic) institutions or Religious (again non-Catholic). Non-sectarian private colleges, public colleges and both public and private universities are also treated separately with each organized into low, moderate and high selectivity. Austin College is a “Highly Selective Other Religious Four-Year College.” In the tables and text below, the word “other” has been deleted so that the groups of colleges will be clear.

Table 3. Mean Scores for Importance of Experiences to Students at Austin College. “Highly Selective Religious Four-Year Colleges” and “Religious Four-Year Colleges”⁴

| Item | Austin College mean | Rank (1 is high) | Highly selective religious | Rank (1 is high) | Religious | Rank (1 is high) |
|---|---------------------|------------------|----------------------------|------------------|-----------|------------------|
| Becoming accomplished in one of the performing arts (acting, dancing, etc.) | 1.53 | 20 | 1.81*** | 17 | 1.71*** | 18 |
| Becoming an authority in my field | 2.75 | 5 | 2.64 | 5 | 2.70 | 4 |
| Obtaining recognition from my colleagues for contributions to my field | 2.63 | 6 | 2.53 | 7 | 2.57 | 5 |
| Influencing the political structure | 1.89 | 17 | 1.86 | 16 | 1.90 | 16 |
| Influencing social values | 2.39 | 9.5 | 2.45 | 8 | 2.46 | 8 |
| Raising a family | 2.93 | 3 | 3.07** | 1 | 3.15 | 1 |
| Being very well off financially | 3.08 | 1 | 2.83*** | 3 | 3.05 | 2 |
| Helping others who are in difficulty | 3.01 | 2 | 3.02 | 2 | 3.03 | 3 |
| Making a theoretical contribution to science | 1.94 | 16 | 1.72*** | 19 | 1.75*** | 17 |
| Writing original works (poems, novels, short stories, etc.) | 1.70 | 18 | 1.74 | 18 | 1.69 | 19 |
| Creating artistic works (painting, sculpture, etc.) | 1.56 | 19 | 1.66* | 20 | 1.62 | 20 |
| Becoming successful in a business of my own | 2.34 | 11 | 2.12*** | 14 | 2.28 | 9.5 |
| Becoming involved in programs to clean up the environment | 2.12 | 15 | 2.07 | 15 | 2.05 | 15 |
| Developing a meaningful philosophy of life | 2.60 | 7 | 2.61 | 6 | 2.49* | 7 |
| Participating in a community action program | 2.21 | 13.5 | 2.22 | 13 | 2.19 | 13 |
| Helping to promote racial understanding | 2.21 | 13.5 | 2.24 | 12 | 2.23 | 12 |
| Keeping up to date with political affairs | 2.39 | 9.5 | 2.29* | 10 | 2.18*** | 14 |
| Becoming a community leader | 2.24 | 12 | 2.28 | 11 | 2.27 | 11 |
| Improving my understanding of other countries and cultures | 2.77 | 4 | 2.73 | 4 | 2.55** | 6 |
| Adopting “green” practices to protect the environment | 2.43 | 8 | 2.41 | 9 | 2.28** | 9.5 |

⁴ Here, the asterisks indicate statistically significant differences * = $p < .05$, ** = $p < .01$, and *** = $p < .001$; **Bold means a higher rank relative to one or both peer groups.**

The twenty items have been ranked with 1 indicating the highest sum of “essential” and “very important” responses. There are several interesting findings in Table 3. Students at Austin attribute greater importance to making a theoretical contribution to science (significantly more so), keeping up to date with political affairs and adopting “green” practices than both peer groups. Although Austin students have a higher rank for creating works of art, Table 4 below illustrates that fewer of them, relative to these peer groups see doing so as very important or essential.

Their mean is significantly higher than that of “highly selective peers” for becoming successful in a business of my own.

Table 4 examines the percentage of students who select either “essential” or “very important” as responses; once again, the twenty items have been ranked. Austin has a higher rank than both peer groups for helping others who are in difficulty, becoming successful in a business of my own, keeping up to date with political affairs, and making a theoretical contribution to science,

Finally, Table 5 provides the top ten items for each peer group and Austin College, ranked from 1 to 10; those items on which more than 50% of the students selected very important or essential are in bold. Note that helping others who are in difficulty is ranked 1 by Austin students, whereas it is ranked 2 by the other peer groups. Similarly, being well off financially is 2 for Austin and 3 for the other two groups. This is primarily due to the fact that raising a family is 1 for the other two groups and comes in at 3 at Austin. Consistent with previous analyses, being successful in a business of my own and keeping up to date with political affairs come in at a higher rank than they do for peers.

Not surprisingly, the items on which more than half of all students select “essential” or “very important” are the same seven – in a slightly different order – For students at Austin and other highly selective religious colleges. Taken together, these data suggest that students coming to Austin College have values consistent with a liberal arts education. Especially when the earlier data on constructs are taken into account, we find that these students have high aspirations – in work and career, collaborative interests – in family, in other cultures, and in enjoying the esteem of colleagues, global interests – in other people, influencing social values and in political affairs. Although they hope to do well financially, they also value developing a meaningful philosophy of life.

The next challenge for the college is to examine the ways in which their values and aspirations are achieved or transformed as they move through the college and beyond.

Table 4. Percentage of Students Selecting Either “Essential” or “Very Important” (Bold = highest percentage)

| Item | Austin College % | Rank (1 = high) | Highly selective religious % | Rank (1 = high) | Religious % | Rank (1 = high) |
|---|------------------|-----------------|------------------------------|-----------------|-------------|-----------------|
| Becoming accomplished in one of the performing arts (acting, dancing, etc.) | 12.3 | 20 | 22.8 | 16 | 19.5 | 17 |
| Becoming an authority in my field | 61.6 | 4 | 55.9 | 5 | 58.0 | 4 |
| Obtaining recognition from my colleagues for contributions to my field | 55.2 | 6 | 50.1 | 7 | 52.0 | 5 |
| Influencing the political structure | 22.7 | 17 | 20.6 | 17 | 21.6 | 16 |
| Influencing social values | 42.4 | 10 | 46.3 | 8 | 47.0 | 8 |
| Raising a family | 67.6 | 3 | 73.8 | 1 | 76.7 | 1 |
| Being very well off financially | 73.9 | 2 | 62.1 | 3 | 71.8 | 3 |
| Helping others who are in difficulty | 75.9 | 1 | 73.3 | 2 | 73.0 | 2 |
| Making a theoretical contribution to science | 25.0 | 16 | 18.5 | 20 | 18.9 | 19 |
| Writing original works (poems, novels, short stories, etc.) | 19.4 | 18 | 20.3 | 18 | 18.1 | 19 |
| Creating artistic works (painting, sculpture, decorating, etc.) | 14.4 | 19 | 18.3 | 19 | 17.7 | 20 |
| Becoming successful in a business of my own | 43.2 | 8 | 34.1 | 13 | 40.6 | 9 |
| Becoming involved in programs to clean up the environment | 27.2 | 15 | 27.0 | 15 | 26.5 | 15 |
| Developing a meaningful philosophy of life | 54.6 | 7 | 54.0 | 6 | 48.6 | 7 |
| Participating in a community action program | 33.7 | 14 | 34.0 | 14 | 33.0 | 14 |
| Helping to promote racial understanding | 35.3 | 13 | 35.1 | 12 | 35.2 | 12 |
| Keeping up to date with political affairs | 42.6 | 9 | 38.7 | 10 | 33.6 | 13 |
| Becoming a community leader | 35.7 | 12 | 38.2 | 11 | 38.0 | 10 |
| Improving my understanding of other countries and cultures | 60.4 | 5 | 58.9 | 4 | 50.1 | 6 |
| Adopting "green" practices to protect the environment | 42.2 | 11 | 43.3 | 9 | 37.1 | 11 |

Table 5. Top Ten Items Based on Percent Reporting “Very Important” or “Essential” (BOLD = more than 50% selecting very important or essential)

| | Austin College | Highly Selective religious (non-Catholic) | All religious (non-Catholic) |
|-----|---|---|---|
| 1. | Helping others who are in difficulty | Raising a family | Raising a family |
| 2. | Being very well off financially | Helping others who are in difficulty | Helping others who are in difficulty |
| 3. | Raising a family | Being very well off financially | Being very well off financially |
| 4. | Becoming an authority in my field | Improving my understanding of other countries and cultures | Becoming an authority in my field |
| 5. | Improving my understanding of other countries and cultures | Becoming an authority in my field | Obtaining recognition from my colleagues for my contributions to my field |
| 6. | Obtaining recognition from my colleagues for my contributions to my field | Developing a meaningful philosophy of life | Improving my understanding of other countries and cultures |
| 7. | Developing a meaningful philosophy of life | Obtaining recognition from my colleagues for my contributions to my field | Developing a meaningful philosophy of life |
| 8. | Becoming successful in a business of my own | Influencing social values | Influencing social values |
| 9. | Keeping up to date on political affairs | Adopting “green” practices to protect the environment | Becoming successful in a business of my own |
| 10. | Influencing social values | Keeping up to date on political affairs | Becoming a community leader |