

COOPERATIVE INSTITUTIONAL RESEARCH PROGRAM at the HIGHER EDUCATION RESEARCH INSTITUTE AT UCLA

2008 CIRP Freshman Survey CIRP Construct Report

Sample University

(NOTE: The full report will include all CIRP Constructs available for the survey and year requested)

comparison group 1: comparison group 2:

Private/Nonsectarian 4yr Colleges-high selectivity Private/Nonsectarian 4yr Colleges



2008 CIRP Freshman Survey First-time, Full-time Freshmen Habits of Mind

CIRP Construct Mean Report

Habits of Mind – a unified measure of the behaviors and traits associated with academic success. These learning behaviors are seen as the foundation for lifelong learning.

	Total			Men			Women		
SAMPLE DATA	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	99	4,789	29,391	41	2,029	12,799	58	2,760	16,592
Mean	53.1	49.0	49.4	52.1	47.9	48.6	53.8	49.8	50.0
Standard Deviation	5.70	6.97	7.26	6.85	6.93	7.40	4.66	6.89	7.08
Significance	-	***	***	-	***	**	-	***	***
Effect Size	-	0.59	0.52	-	0.60	0.47	-	0.59	0.54
25th percentile	49.4	43.9	43.9	48.9	43.9	43.9	50.2	43.9	45.8
75th percentile	57.7	57.7	57.7	57.7	51.4	57.7	57.7	57.7	57.7

Note: Significance * p<.05, ** p<.01, *** p<.001



Survey items and estimation 'weights':

How often in the past year did you:

- * Seek solutions to problems and explain them to others(2.29)
- * Support your opinions with a logical argument (1.97)
- * Seek alternative solutions to a problem (1.89)
- * Evaluate the quality or reliability of information you received (1.70)
- * Seek feedback on your academic work (1.38)
- * Ask questions in class (1.32)
- * Take a risk because you felt you had more to gain(1.30)
- * Explore topics on your own, even though it was not required for a class(1.28)
- * Accept mistakes as part of the learning process(1.08)
- * Revise your papers to improve your writing (1.07)
- * Look up scientific research articles and resources (0.96)



2008 CIRP Freshman Survey First-time, Full-time Freshmen Habits of Mind

CIRP Construct Group Report

Habits of Mind - a unified measure of the behaviors and traits associated with academic success. These learning behaviors are seen as the foundation for lifelong learning.

	Total			Men			Women		
SAMPLE DATA	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	99	4,789	29,391	41	2,029	12,799	58	2,760	16,592
High Habits of Mind	56.6%	30.3%	34.9%	48.8%	23.8%	30.6%	62.1%	35.3%	38.5%
Average Habits of Mind	33.3%	32.5%	27.7%	39.0%	32.9%	28.4%	29.3%	32.2%	27.1%
Low Habits of Mind	10.1%	37.2%	37.4%	12.2%	43.3%	41.1%	8.6%	32.6%	34.4%
Significance (based on High score group)	-	***	***	-	**		-	***	**

Note: Significance * p<.05, ** p<.01, *** p<.001



Survey items and estimation 'weights':

How often in the past year did you:

- * Seek solutions to problems and explain them to others (2.29)
- * Support your opinions with a logical argument (1.97)
- * Seek alternative solutions to a problem (1.89)
- * Evaluate the quality or reliability of information you received (1.70)
- * Seek feedback on your academic work (1.38)
- * Ask questions in class (1.32)
- * Take a risk because you felt you had more to gain (1.30)
- * Explore topics on your own, even though it was not required for a class (1.28)
- * Accept mistakes as part of the learning process (1.08)
- * Revise your papers to improve your writing (1.07)
- * Look up scientific research articles and resources (0.96)



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How to Read the CIRP Freshman Survey Report **CIRP Construct Mean Report**

CIRP Constructs are designed to capture the experiences and outcomes institutions are often interested in understanding, but that present a measurement challenge because of their complex and multifaceted nature. To measure these broad underlying areas more precisely, we use Item Response Theory (IRT) to combine individual survey items into global measures that capture these areas. CIRP Constructs are more than a summation of related items; IRT uses response patterns to derive construct score estimates while simultaneously giving greater weight in the estimation process to survey items that tap into the construct more directly. This results in more accurate construct scores. Constructs are particularly useful for benchmarking. They allow you to determine if the experiences and outcomes for your students differ from your comparison groups. Two reports are generated for each CIRP Construct. The Mean Score Report shows comparative information based on the mean score of a construct. The Percentage Report shows comparative information based on the percentage of students who score in the high, average, and low score group of a construct. We suggest you use the report that best fits your needs as an institution. Both CIRP Construct reports are generated for first-time, full-time freshman, defined ad first entered college in 2009 and are currently enrolled full-time.

For more information about IRT and the CIRP Construct development process, see the CIRP Constructs Technical Report at www.heri.ucla.edu

Comp 1 - The first comparison group is based on your institution's type, control, and selectivity.

Comp 2 - The second comparison group is based on your institution's type and control.

Mean - The arithmetic mean is computed for each CIRP Construct based on the construct score. CIRP constructs have been scaled to a population mean of 50 with a standard deviation of 10

Effect Size - Determines the practical significance of the mean difference between your institution and the comparison group. It is calculated by dividing the mean difference by the standard deviation of the comparison group. Generally, an effect size of .2 is considered small, .5 medium, and .8 large. A positive sign indicates that vour institution's mean is greater than the mean of the comparison group; a negative sign indicates your mean is smaller than the mean of the comparison group. Note that a negative effect size is sometimes preferred (e.g. a negative effect size on the "Academic Self-Concept" CIRP Construct suggests your students score lower than comparison schools)



CIRP Construct Definition -

Summarizes the theoretical

rationale for creating the

construct.

Statistical Significance - Uses t-test to examine the difference between the mean construct score for your institution and the comparison group. Constructs with mean differences that are larger than would be expected by chance are noted with one, two, or three stars, which correspond to the three standard levels of significance (*p<.05. **p< .01, and ***p< .001). Statistical significance measures the extent to which a difference is occurring by chance, not the extent to which a difference is practically important. Large sample sizes (like those in the comparison groups) tend to generate statistical significance even though the magnitude of the difference may be small and not practically significant. In order to provide additional context to statistical significance, effect sizes are provided.



Survey Items and Estimation "Weights" - The survey items used in the creation of the CIRP Construct are presented in the order in which they contribute to the construct along with the estimation weights generated in IRT. Items that tap into a trait more effectively are given greater weight in the estimation process.

Charts - Provide a visual display of relevant construct scores for your institution and two comparison groups. The Y axis is defined by the highest and lowest possible construct score. Mean scores are represented by blue circles. The numbers at the top and bottom of the vertical line are values for the 75th and 25th percentile.



COOPERATIVE INSTITUTIONAL RESEARCH PROGRAM at the HIGHER EDUCATION RESEARCH INSTITUTE AT UCLA

How to Read the CIRP Freshman Survey Report CIRP Construct Percentage Report

CIRP Constructs are designed to capture the experiences and outcomes institutions are often interested in understanding, but that present a measurement challenge because of their complex and multifaceted nature. To measure these broad underlying areas more precisely, we use Item Response Theory (IRT) to combine individual survey items into global measures that capture these areas. CIRP Constructs are more than a summation of related items; IRT uses response patterns to derive construct score estimates while simultaneously giving greater weight in the estimation process to survey items that tap into the construct more directly. This results in more accurate construct scores. Constructs are particularly useful for benchmarking. They allow you to determine if the experiences and outcomes for your students differ from your comparison groups. Two reports are generated for each CIRP Construct. The Mean Score Report shows comparative information based on the mean score of a construct. The Percentage Report shows comparative information based on the percentage of students who score in the high, average, and low score group of a construct. We suggest you use the report that best fits your needs as an institution. Both CIRP Construct reports are generated for first-time, full-time freshman, defined as those respondents who first entered college in 2009 and are currently enrolled full-time.

For more information about IRT and the CIRP Construct development process, see the CIRP Constructs Technical Report at www.heri.ucla.edu

CIRP Construct Definition – Summarizes the theoretical rationale for creating the construct.

Comp 1 – The first comparison group is based on your institution's type, control, and selectivity.

Comp 2 – The second comparison group is based on your institution's type and control.

Statistical Significance – uses a proportional difference test to examine the difference between the percentage of students in the high group for your institution and the percentage of students in the high score group in the comparison group. Differences larger than what would be expected by chance are noted with one, two, or three stars, which correspond to the three standard levels of significance (*p<.05, **p<.01, ***p<.001). Statistical significance measures the extent to which a difference is occurring by chance, not the extent to which a difference is practically important. Large sample sizes (like those in the comparison groups) tend to generate statistical significance even though the magnitude of the difference might be small and not practically important. Unlike the means scores report. in this case there are no effect size calculations to guide you in determining practical importance when comparing proportional differences.

Academic Self-Concept - is a unified measure of students' beliefs about their abilities and confidence in academic environments.

	Total			Men			Women			
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	
Total (n)	313	13,401	30,456	153	5,876	13,369	160	7,525	17,087	
High Academic Self-Concept	30.4%	36.8%	22.6%	32.9%	45.9%	26.3%	28.2%	29.7%	19.4%	
Average Academic Self-Concept	46.8%	43.9%	39.5%	49.3%	39.5%	39.2%	44.4%	47.3%	39.7%	
Low Academic Self-Concept	22.7%	19.3%	37.9%	17.8%	14.6%	34.4%	27.6%	22.9%	40.9%	
Significance (based on High score group)	-	*	***	-	**	***			***	

Note: Significance * p<.05, ** p<.01, *** p<.001



Survey Items and Estimation "Weights" – The survey items used in the creation of the CIRP Construct are presented in the order in which they contribute to the construct along with the estimation weights generated in IRT. Items that tap into a trait more effectively are given greater weight in the estimation process. Charts – CIRP Constructs are scored on a z-score metric and rescaled for a mean of approximately fifty and standard deviation of ten. The Low, Average, and High construct score group percentages are reported here. The "Low" score group represents students who are one-half standard deviation below the mean. The "Average" score group represents students whose scores are within one-half standard deviation of the mean. The "High" score group represents students who are one-half standard deviation of the mean.