CIRP CONSTRUCTS

The CIRP Constructs are new in both the dataset and reports. Each CIRP Construct represents sets of related survey items that measure an underlying trait or aspect of a student's life. We provide one score for that trait. We use Item Response Theory (IRT) to create the constructs, a modern psychometric method that has several advantages over methods used in more traditional factor analysis. Included in the CIRP Construct Reports are definitions of the CIRP Constructs, weighted scores, means, statistical tests and effect sizes allowing you to compare your institution with comparison groups.

2010–11 CIRP CONSTRUCTS

TFS	YFCY	CSS
Habits of Mind	Habits of Mind	Habits of Mind
	Academic Disengagement	Academic Disengagement
	Academic Adjustment	
	Faculty Interaction	Faculty Interaction
	Satisfaction with Coursework	Satisfaction with Coursework
	Overall Satisfaction	Overall Satisfaction
	Sense of Belonging	Sense of Belonging
Academic Self-Concept	Academic Self-Concept	Academic Self-Concept
Social Self-Concept	Social Self-Concept	Social Self-Concept
Pluralistic Orientation	Pluralistic Orientation	Pluralistic Orientation
	Positive Cross-Racial Interaction	Positive Cross-Racial Interaction
	Negative Cross-Racial Interaction	Negative Cross-Racial Interaction
Social Agency	Social Agency	Social Agency
	Civic Awareness	Civic Awareness
	Leadership	Leadership
College Reputation Orientation		
Likelihood of College Involvement		
Liberal Education Orientation (UD)		
Civic Engagement (UD)	*Civic Engagement (UD)*	*Civic Engagement (UD)*
Job/Career Orientation (UD)		

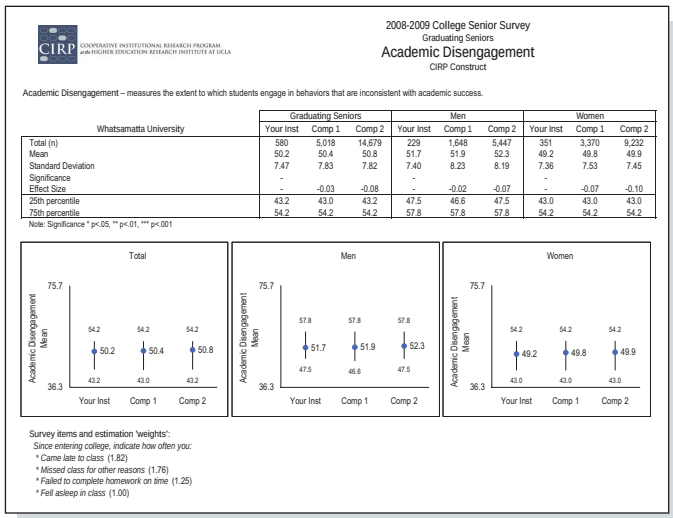
Note: Constructs under development (UD) for 2010–2011 are in italic type

WHY CREATE CONSTRUCTS?

When examining the college experience, we are often interested in understanding something about an aspect of that experience that is fairly complicated. For instance, we know that faculty and student interactions are important to foster since they often lead towards greater gains in a number of areas in college. But if we are trying to measure this using a survey, we don't simply ask students to tell us if they interacted with faculty. We ask about many different types of student and faculty interaction because there are many different ways that students and faculty can interact.

We then create sets of questions that we think encompass the types of interactions we think are important to measure. For faculty-student interaction, we ask if faculty provided students with advice and guidance about their academic programs, feedback on their academic work, and opportunities to work on research, to name a few. Although we are interested in those specific interactions in and of themselves, we are really interested in the broad concept of faculty-student interaction. In order to get at this broad concept, we combine individual survey items into one global measure of student-faculty interaction. We call this one measure a construct.

A construct can only be created when our analysis of the combination of items tells us that they actually are measuring a single trait or aspect of a student's life. In building the CIRP constructs, we are not just adding together responses from items that are not really related. The CIRP Constructs are based upon decades of research on college students, but also on state-of-the-art rigorous statistical methods.



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

2008-2009 College Senior Survey
Graduating Seniors
Academic Disengagement
CIRP Construct

Academic Disengagement – measures the extent to which students engage in behaviors that are inconsistent with academic success.

Whatsamatta University	Graduating Seniors			Men			Women		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	580	5,018	14,679	229	1,648	5,447	351	3,370	9,232
Mean	50.2	50.4	50.8	51.7	51.9	52.3	49.2	49.8	49.9
Standard Deviation	7.47	7.83	7.82	7.40	8.23	8.19	7.36	7.53	7.45
Significance	-			-			-		
Effect Size	-	-0.03	-0.08	-	-0.02	-0.07	-	-0.07	-0.10
25th percentile	43.2	43.0	43.2	47.5	46.6	47.5	43.0	43.0	43.0
75th percentile	54.2	54.2	54.2	57.8	57.8	57.8	54.2	54.2	54.2

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

Survey items and estimation 'weights':
Since entering college, indicate how often you:
* *Came late to class* (1.82)
* *Missed class for other reasons* (1.76)
* *Failed to complete homework on time* (1.25)
* *Fell asleep in class* (1.00)

HOW CAN I USE THE CONSTRUCTS?

In IRT, a construct and its meaning are independent of the items. This means that CIRP Constructs offer more flexibility to institutions in interpretation. A high score on student-faculty interaction Construct indicates a high level of student-faculty interaction. The CIRP Construct Report that comes with your survey results compares your institution's construct scores with scores for your institutional comparison groups. This allows you to determine if the traits and experiences of your students differ in a statistically significant and meaningful way from the average student at other institutions like yours. You can also use the CIRP Constructs to compare different groups of students at your institution. For instance, you might expect that students with high scores in student-faculty interaction would show greater gains in educational goals. Lastly, CIRP Constructs can be entered into statistical analyses.

TFS	YFCY	CSS
College Choice	Transition to College	
Academic Preparation	Academic Outcomes	Academic Outcomes
Interaction with Teachers	Interaction with Faculty	Interaction with Faculty
Academic Enhancement Experiences	Academic Enhancement Experiences	Academic Enhancement Experiences
Active & Collaborative Learning	Active & Collaborative Learning	Active & Collaborative Learning
	Satisfaction-Academic Support & Courses	Satisfaction-Academic Support & Courses
	Satisfaction-Services & Community	Satisfaction-Services & Community
Written & Oral Communication	Written & Oral Communication	Written & Oral Communication
Civic Engagement	Civic Engagement	Civic Engagement
Diversity	Diversity	Diversity
Health & Wellness	Health & Wellness	Health & Wellness
Religiosity/Spirituality	Religiosity/Spirituality	Religiosity/Spirituality
Career Planning	Career Planning	Career Planning
Financing College		Voluntary System of Accountability

CIRP THEMES

The CIRP Theme reports combine relevant items together for easy access. The themes are more loosely structured than the CIRP Constructs and in some cases include together survey items that just would not be appropriate to combine in a construct. By examining items together (e.g. Active and Collaborative Learning, Health and Wellness) the theme reports can be used to illustrate what contributes to a specific area of interest and facilitate discussion on campus.

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

2009 Your First College Year Survey
First-Year, Full-time Freshmen
Active and Collaborative Learning
CIRP Theme

Active and Collaborative Learning - These items illustrate the extent to which students are furthering their knowledge of course material through interaction with faculty and other students.

	Total			Men			Women		
Whatsamatta University	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Studied with other students									
Frequently / Occasionally	93.8%	90.9%	91.8%	92.1%	90.0%	90.6%	94.7%	91.2%	92.3%
Mean	2.29	2.20	2.24	2.25	2.17	2.21	2.31	2.22	2.26
Standard Deviation	0.58	0.68	0.59	0.59	0.58	0.59	0.57	0.59	0.59
Significance	--	***	***	--	**		--	***	**
Effect Size	--	0.15	0.08	--	0.14	0.07	--	0.15	0.08
Discussed course content with students outside of class									
Frequently / Occasionally	96.2%	95.6%	96.2%	95.0%	94.5%	95.1%	96.9%	96.2%	96.7%
Mean	2.39	2.38	2.42	2.32	2.35	2.39	2.43	2.39	2.43
Standard Deviation	0.56	0.57	0.57	0.56	0.58	0.58	0.55	0.56	0.56
Significance	--		*	--		**	--	*	
Effect Size	--	0.02	-0.05	--	-0.05	-0.12	--	0.07	0.00
Tutored another student									
Frequently / Occasionally	47.5%	42.8%	46.3%	53.3%	48.0%	51.9%	44.3%	40.3%	43.4%
Mean	1.55	1.49	1.53	1.61	1.55	1.60	1.51	1.46	1.49
Standard Deviation	0.62	0.61	0.62	0.63	0.62	0.63	0.62	0.61	0.61
Significance	--	***		--	*		--	*	
Effect Size	--	0.10	0.03	--	0.10	0.02	--	0.08	0.03
Performed community service as part of class									
Frequently / Occasionally	19.9%	29.5%	28.4%	22.4%	28.4%	27.6%	18.5%	30.1%	28.8%
Mean	1.23	1.35	1.33	1.26	1.32	1.31	1.21	1.37	1.35
Standard Deviation	0.48	0.58	0.57	0.51	0.54	0.53	0.46	0.60	0.58
Significance	--	***	***	--	*	*	--	***	***
Effect Size	--	-0.21	-0.18	--	-0.11	-0.09	--	-0.27	-0.24
Had meaningful and honest discussions about race/ethnic relations outside of class with students from another racial/ethnic group									
Very often / Often	39.9%	28.8%	31.1%	36.9%	29.5%	31.4%	41.6%	28.5%	30.8%
Mean	3.15	2.80	2.87	3.07	2.85	2.90	3.19	2.77	2.86
Standard Deviation	1.31	1.28	1.28	1.28	1.24	1.26	1.32	1.29	1.29
Significance	--	***	***	--	***	***	--	***	***
Effect Size	--	0.27	0.22	--	0.18	0.13	--	0.33	0.26

The new CIRP Constructs make it much easier to have a high level conversation about how your institution compares with others around key concepts such as "habits of mind," "student-faculty interaction," and "academic engagement."

—Jim Fergerson, Director of Institutional Research and Assessment, Carleton College

To read the CIRP Constructs Technical Report:
www.heri.ucla.edu/PDFs/technicalreport.pdf