

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

# **CIRP Construct Technical Report**

# 2016-17 Appendix

# **Construct Parameters**



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# Habits of Mind

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

		TFS*	
	А	B1	B2
Habits of Mind: Seek solutions to problems and explain them to others	2.17	-2.41	-0.23
Habits of Mind: Support your opinions with a logical argument	1.81	-2.45	-0.39
Habits of Mind: Look up scientific research articles and resources	1.71	-2.85	0.03
Habits of Mind: Take a risk because you felt you had more to gain	1.68	-2.46	0.15
Habits of Mind: Accept mistakes as part of the learning process	1.24	-1.86	0.49
Habits of Mind: Take on a challenge that scares you	1.20	-2.80	-0.06
Habits of Mind: Ask questions in class	1.26	-3.17	-0.27
Habits of Mind: Explore topics on your own, even though it was not required for a class	1.09	-1.59	0.90
Habits of Mind: Evaluate the quality or reliability of information you received	1.13	-2.90	-0.12
Habits of Mind: Seek alternative solutions to a problem	1.14	-2.70	0.45
Habits of Mind: Analyze multiple sources of information before coming to a conclusion	0.98	-4.37	-0.39

TFS - How often in the past year did you:			
(Response options: Frequently, Occasionally, Not at all)			
Habits of Mind: Seek solutions to problems and explain them to others			
Habits of Mind: Support your opinions with a logical argument			
Habits of Mind: Look up scientific research articles and resources			
Habits of Mind: Take a risk because you felt you had more to gain			
Habits of Mind: Accept mistakes as part of the learning process			
Habits of Mind: Take on a challenge that scares you			
Habits of Mind: Ask questions in class			
Habits of Mind: Explore topics on your own, even though it was not required for a class			
Habits of Mind: Evaluate the quality or reliability of information you received			
Habits of Mind: Seek alternative solutions to a problem			
Habits of Mind: Analyze multiple sources of information before coming to a conclusion			



# Academic Self-Concept

A unified measure of students' beliefs about their abilities and confidence in academic environments.

			TFS*		
	А	B1	B2	B3	B4
Self Rating: Academic ability	3.08	-3.64	-2.61	-0.65	0.94
Self Rating: Mathematical ability	1.37	-3.00	-1.43	0.11	1.72
Self Rating: Self-confidence (intellectual)	1.24	-4.25	-2.43	-0.37	1.47
Self Rating: Drive to achieve	0.91	-6.96	-4.41	-1.60	0.67

TFS - Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself.
(Response options: Highest 10%, Above Average, Average, Below Average, Lowest 10%)
Self Rating: Academic ability
Self Rating: Mathematical ability
Self Rating: Self-confidence (intellectual)
Self Rating: Drive to achieve



# Social Self-Concept

A unified measure of students' beliefs about their abilities and confidence in social situations.

	TFS*				
	Α	B1	B2	<b>B3</b>	B4
Self Rating: Self-confidence (social)	1.55	-3.01	-1.38	0.13	1.53
Self Rating: Leadership ability	2.43	-2.93	-1.70	-0.40	0.85
Self Rating: Public speaking ability	1.90	-2.16	-0.89	0.36	1.56

TFS - Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself. (Response options: Highest 10%, Above Average, Average, Below Average, Lowest 10%)
Self Rating: Self-confidence (social)
Self Rating: Leadership ability
Self Rating: Public speaking ability





# **Pluralistic Orientation**

Measures skills and dispositions appropriate for living and working in a diverse society.

			TFS*		
	Α	B1	B2	B3	B4
Diversity Rating: Ability to see the world from someone else's perspective	1.4	-4.89	-3.31	-1.19	0.68
Diversity Rating: Tolerance of others with different beliefs	1.64	-4.21	-2.84	-1.29	0.14
Diversity Rating: Openness to having my own views challenged	1.57	-3.58	-2.12	-0.53	0.89
Diversity Rating: Ability to discuss and negotiate controversial issues	1.53	-3.79	-2.33	-0.82	0.54
Diversity Rating: Ability to work cooperatively with diverse people	1.68	-4.36	-3.12	-1.53	-0.15

<b>TFS - How would you rate yourself in the following areas:</b> (Response options: A Major Weakness, Somewhat Weak, Average, Somewhat Strong, A Major Strength)				
Diversity Rating: Ability to see the world from someone else's perspective				
Diversity Rating: Tolerance of others with different beliefs				
Diversity Rating: Openness to having my own views challenged				
Diversity Rating: Ability to discuss and negotiate controversial issues				
Diversity Rating: Ability to work cooperatively with diverse people				





# Social Agency

Measures the extent to which students value political and social involvement as a personal goal.

	TFS*			
	Α	B1	B2	B3
Keeping up to date with political affairs	1.48	-1.04	0.50	1.81
Participating in a community action program	2.41	-0.83	0.54	1.64
Influencing social values	1.64	-1.45	0.15	1.59
Becoming a community leader	2.09	-0.88	0.37	1.46
Helping others who are in difficulty	1.17	-3.66	-1.09	0.82
Helping to promote racial understanding	2.15	-1.01	0.34	1.45

<b>TFS - Please indicate the importance to you personally of each of the following:</b> (Response options: Essential, Very Important, Somewhat Important, Not Important)	
Keeping up to date with political affairs	
Participating in a community action program	
Influencing social values	
Becoming a community leader	
Helping others who are in difficulty	
Helping to promote racial understanding	



Measures the extent to which students are motivated and involved in civic, electoral, and political activities

		TFS*			
	А	B1	B2	B3	
Act in Past Year: Demonstrated for a cause (e.g., boycott, rally, protest)	1.46	0.93	2.80		
Act in Past Year: Performed volunteer work	0.80	-2.82	0.73		
Act in Past Year: Helped raise money for a cause or campaign	1.42	2.09	3.38		
Act in Past Year: Publicly communicated my opinion about a cause (e.g., blog, email, petition)	1.11	-0.31	1.92		
Influencing social values	0.97	-1.96	0.37	2.42	
Keeping up to date with political affairs	0.86	-1.50	0.74	2.67	

\*These parameters are for use with TFS-only data files

<b>TFS - In the past year, how often have you:</b> (Response options: Frequently, Occasionally, Not at all)
Demonstrated for a cause (e.g., boycott, rally, protest)
Performed volunteer work
Publicly communicated my opinion about a cause (e.g., blog, email, petition)
Helped raise money for a cause or campaign

TFS - Please indicate the importance to you personally of each of the following:

(Response options: Essential, Very Important, Somewhat Important, Not Important)

Influencing social values

Keeping up to date with political affairs



#### **College Reputation Orientation**

Measures the degree to which students value academic reputation and future career potential as a reason for choosing this college.

		TFS*	
	Α	B1	B2
Choose to Attend: This college's graduates get good jobs	4.90	-1.27	-0.15
Choose to Attend: This college's graduates gain admission to top graduate/professional schools	2.10	-0.87	0.48
Choose to Attend: This college has a very good academic reputation	1.48	-2.70	-0.65

TFS - Below are some reasons that might have influenced your decision to attend this particular college. How important was each reason in your decision to come here?
(Response options: Very Important, Somewhat Important, Not Important)
This college has a very good academic reputation
This college's graduates gain admission to top graduate/professional schools
This college's graduates get good jobs

# Likelihood of College Involvement

A unified measure of students' expectations about their involvement in college life generally.

		TFS*			
	А	B1	B2	B3	
Future Act: Participate in a study abroad program	1.28	-2.14	-0.85	0.53	
Future Act: Participate in volunteer or community service work	1.51	-2.50	-1.13	0.48	
Future Act: Participate in student government	0.79	-1.40	0.93	3.51	
Future Act: Participate in student clubs/groups	3.39	-2.06	-1.20	-0.08	

TFS - What is your best guess as to the chances that you will:	
(Response options: Very Good Chance, Some Chance, Very Little Chance, No Chance)	
Participate in a study abroad program	
Participate in a volunteer or community service work	
Participate in student government	
Participate in student clubs/groups	





# Science Self-Efficacy

Measure of students' confidence in their ability to conduct scientific research

			TFS*		
	Α	B1	B2	B3	B4
Science Skill: Use technical science skills (use of tools, instruments, and/or techniques)	1.49	-2.89	-1.56	0.01	1.24
Science Skill: Generate an answerable research question	2.33	-2.45	-1.18	0.18	1.32
Science Skill: Determine how to collect appropriate data	2.82	-2.51	-1.31	-0.02	1.19
Science Skill: Explain the results of a study	2.87	-2.54	-1.40	-0.20	0.97
Science Skill: Use scientific literature to guide research	2.7	-1.95	-0.88	0.30	1.33
Science Skill: Integrate results from multiple studies	2.79	-2.27	-1.17	0.00	1.11
Science Skill: Ask relevant questions	1.73	-3.73	-2.27	-0.79	0.66
Science Skill: Identify what is known and not known about a problem	1.95	-3.38	-1.94	-0.47	0.83
Science Skill: Understand scientific concepts	2.40	-2.53	-1.29	-0.08	1.03
Science Skill: See connections between different areas of science and mathematics	1.90	-2.52	-1.28	-0.09	1.02

TFS - How confident are you that you can:
(Response options: Absolutely, Very, Moderately, Somewhat, Not at all)
Use technical science skills (use of tools, instruments, and/or techniques)
Generate a research question
Determine how to collect appropriate data
Explain the results of a study
Use scientific literature to guide research
Integrate results from multiple studies
Ask relevant questions
Identify what is known and not known about a problem
Understand scientific concepts
See connections between different areas of science and mathematics



# Science Identity

# A measure describing the extent to which students conceive of themselves as scientists

			TFS*		
	Α	B1	B2	B3	B4
Science Assoc: I have a strong sense of belonging to a community of scientists	3.52	-0.72	-0.2	0.71	1.50
Science Assoc: I derive great personal satisfaction from working on a team that is doing important research	1.78	-1.82	-1.11	0.09	1.30
Science Assoc: I think of myself as a scientist	5.54	-0.43	0.1	0.85	1.53
Science Assoc: I feel like I belong in the field of science	4.43	-0.54	-0.11	0.47	1.06

<b>TFS - To what extent are the following statements true of you:</b> (Response options: Strongly Agree, Somewhat Agree, Neutral, Somewhat Disagree, Strongly Disagree)
I have a strong sense of belonging to a community of scientists
I derive great personal satisfaction from working on a team that is doing important research
I think of myself as a scientist
I feel like I belong in the field of science



# Habits of Mind

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

	TFS/YFCY Longitudinal*		
	А	C1	C2
Habits of Mind: Ask questions in class	1.51	4.50	-0.03
Habits of Mind: Support your opinions with a logical argument	2.28	6.41	0.72
Habits of Mind: Seek solutions to problems and explain them to others	2.20	5.94	0.36
Habits of Mind: Take a risk because you felt you had more to gain	1.12	4.23	0.31
Habits of Mind: Seek alternative solutions to a problem	1.61	4.67	-0.41
Habits of Mind: Look up scientific research articles and resources	1.48	4.06	-1.07
Habits of Mind: Explore topics on your own, even though it was not required for a class	1.81	5.61	-0.38
Habits of Mind: Accept mistakes as part of the learning process	0.89	2.06	-1.22
Habits of Mind: Take on a challenge that scares you	1.42	3.20	-1.18
Change in mean from TFS to YFCY is -0.28			

TFS,YFCY - How often in the past year did you:
(Response options: Frequently, Occasionally, Not at all)
Habits of Mind: Ask questions in class
Habits of Mind: Support your opinions with a logical argument
Habits of Mind: Seek solutions to problems and explain them to others
Habits of Mind: Take a risk because you felt you had more to gain
Habits of Mind: Seek alternative solutions to a problem
Habits of Mind: Look up scientific research articles and resources
Habits of Mind: Explore topics on your own, even though it was not required for a class
Habits of Mind: Accept mistakes as part of the learning process
Habits of Mind: Take on a challenge that scares you



Measures the extent to which students engage in behaviors that are inconsistent with academic success.

	YFCY*		
	Α	B1	B2
Act: Been late to class	1.47	-0.33	2.31
Act in College: Skipped class	1.71	0.03	2.81
Act in College: Turned in course assignment(s) late	1.33	0.04	2.64
Act in College: Turned in course assignments that did not reflect your best work	1.22	-1.14	2.52
Act in College: Fell asleep in class	0.89	1.18	4.48

YFCY - Since entering this college, how often have you: (Response options: Frequently, Occasionally, Not at all)
Been late to class
Fell asleep in class
Turned in course assignment(s) late
Skipped class
Turned in course assignments that did not reflect your best work



# Academic Adjustment to College

Measures the ease with which students adjust to the academic demands of college.

		YFCY*				
	Α	B1	B2	B3		
Ease: Adjust to the academic demands of college	3.40	-1.66	-0.36	0.91		
Ease: Develop effective study skills	3.26	-1.75	-0.37	1.08		
Ease: Manage your time effectively	2.70	-1.46	-0.04	1.26		
Ease: Understand what your professors expect of you academically	1.30	-4.81	-1.46	1.07		

<b>YFCY - Since entering this college, how has it been to:</b> (Response options: Very Easy, Somewhat Easy, Somewhat Difficult, Very Difficult)
Understand what your professors expect of you academically
Develop effective study skills
Adjust to the academic demands of college
Manage your time effectively





#### **Faculty Interaction: Contact and Communication**

Measures the amount and type of contact students have with faculty that is appropriate for the first year of college, as well as satisfaction with these issues.

		YFCY*					
	А	B1	<b>B2</b>	<b>B3</b>	B4	B5	
Interact: Faculty outside of class or office hours	1.19	-0.82	0.43	1.56	2.61	4.04	
Act: Asked a professor for advice after class	1.83	-1.05	1.29				
Act in College: Communicated regularly with your professors	2.79	-0.85	1.11				
Campus Satisfaction: Amount of contact with faculty	1.12	-3.01	-0.79	1.65			
Interact: Faculty during office hours	1.38	-1.90					

\*These parameters are for use with YFCY data files

YFCY - Since entering this college, how often have you interacted with the following people (e.g., by phone, e-mail, text, or in person):

(Response options: Daily, 2 or 3 times per week, Once a week, 1 or 2 times per month, 1 or 2 times per term, Never)

Interact: Faculty during office hours

YFCY – Since entering this college, indicate how often have you:

(Response options: Frequently, Occassionally, Not at all)

Asked a professor for advice after class

Communicated regularly with your professors

**YFCY – Please rate your satisfaction with your college in each area: (Mark one in each row)** (*Response options: Very Satisfied, Satisfied, Neutral, Dissatisfied, Very Dissatisfied)* Amount of contact with faculty 17



#### Satisfaction with Coursework

Measures the extent to which students see their coursework as relevant, useful, and applicable to their academic success and future plans.

	YFCY*				
	Α	<b>B1</b>	B2	B3	B4
Campus Satisfaction: Relevance of coursework to future career plans	3.17	-1.43	-0.36	1.06	
Campus Satisfaction: Relevance of coursework to everyday life	3.77	-1.3	-0.24	1.21	
Satisfaction: General education and core curriculum courses *	1.27	-3.36	-2.29	-0.97	1.34
Satisfaction: First-year programs (e.g., first-year seminar, learning community, linked courses, common book) **	0.91	-3.82	-2.45	-0.44	1.76

\*These parameters are for use with YFCY data files; \*\*"Can't rate" option coded as missing

**YFCY - Please rate your satisfaction with your college in each area: (Mark one in each row)** (Response options: Very Satisfied, Satisfied, Neutral, Dissatisfied, Very Dissatisfied, Can't Rate/No Experience)

General education and core curriculum courses

First-year programs (e.g., first-year seminar, learning community, linked courses, common book)

**YFCY - Please rate your satisfaction with your college in each area: (Mark one in each row)** (Response options: Very Satisfied, Satisfied, Neutral, Dissatisfied, Very Dissatisfied)

Relevance of coursework to everyday life

Relevance of coursework to future career plans



#### **Overall Satisfaction**

A unified measure of students' satisfaction with the college experience.

		YFCY*				
	А	B1	B2	B3	B4	
Campus Satisfaction: Overall college experience	2.97	-2.23	-1.61	-0.67	0.78	
If given the choice, would you still choose to enroll at your current (or most) recent college? ***	1.57	-2.51	-1.46	-1.05	0.48	
Satisfaction: Your overall academic experience **	2.21	-2.83	-1.94	-0.92	0.88	
Campus Satisfaction: Overall quality of instruction	1.99	-3.28	-2.19	-0.85	1.10	

\*These parameters are for use with YFCY data files; \*\*"Can't rate" option coded as missing; \*\*\*Additional response option of "not sure yet" coded as middle (neutral) category

**YFCY - Please rate your satisfaction with your college in each area: (Mark one in each row)** (Response options: Very Satisfied, Satisfied, Neutral, Dissatisfied, Very Dissatisfied, Can't Rate/No Experience)

Your overall academic experience

**YFCY - Please rate your satisfaction with your college in each area: (Mark one in each row)** (Response options: Very Satisfied, Satisfied, Neutral, Dissatisfied, Very Dissatisfied)

Overall quality of instruction

Overall college experience

YFCY - If you could make your college choice over, would you still choose to enroll at your current (or most recent) college?

(Response options: Definitely yes, Probably yes, Probably no, Definitely no, Not sure yet)

If given the choice, would you still choose to enroll at your current (or most) recent college?



# Sense of Belonging

Measures the extent to which students feel a sense of academic and social integration on campus.

		YFCY*			
	Α	B1	B2	B3	B4
Opinion: I feel I am a member of this college	8.00	-1.17	-0.88	-0.44	0.76
Opinion: I feel a sense of belonging to this campus	7.11	-1.16	-0.83	-0.28	0.93
Opinion: I see myself as part of the campus community	4.65	-1.25	-0.92	-0.39	0.95
Opinion: If asked, I would recommend this college to others	3.99	-1.25	-0.97	-0.59	0.51

YFCY - Please indicate the extent to which you agree or disagree with the following statements:
(Response options: Strongly Agree, Agree, Disagree, Strongly Disagree) Opinion: I feel I am a member of this college
Opinion: I feel a sense of belonging to this campus
Opinion: I see myself as part of the campus community
Opinion: If asked, I would recommend this college to others





# Academic Self-Concept

A unified measure of students' beliefs about their abilities and confidence in academic environments.

		TFS/YFCY Longitudinal*					
	A	C1	C2	С3	C4		
Self Rating: Academic ability	4.02	14.1	10.41	3.62	-2.81		
Self Rating: Drive to achieve	1.72	9.20	6.30	2.47	-1.23		
Self Rating: Mathematical ability	2.69	9.30	4.76	0.11	-4.76		
Self Rating: Self-confidence (intellectual)	1.90	8.33	5.05	1.09	-2.71		
Change in mean from TFS to YFCY is -0.13							

<b>TFS,YFCY</b> - Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself. ( <i>Response options: Highest 10%, Above Average, Average, Below Average, Lowest 10%</i> )
Academic ability
Drive to achieve
Mathematical ability
Self-confidence (intellectual)



# Social Self-Concept

A unified measure of students' beliefs about their abilities and confidence in social situations.

		TFS/YFCY Longitudinal*					
	A	C1	C2	C3	C4		
Self Rating: Leadership ability	2.67	5.74	3.40	0.46	-2.26		
Self Rating: Public speaking ability	3.07	5.67	2.64	-0.94	-4.00		
Self Rating: Self-confidence (social)	12.37	11.01	4.46	-1.27	-6.63		
Change in mean from TFS to YFCY is 0.05							

<b>TFS, YFCY</b> - Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself. ( <i>Response options: Highest 10%, Above Average, Average, Below Average, Lowest 10%</i> )
Leadership ability
Public speaking ability
Self-confidence (social)



# **Pluralistic Orientation**

Measures skills and dispositions appropriate for living and working in a diverse society.

	TFS/YFCY Longitudinal*				
	Α	C1	C2	C3	C4
Diversity Rating: Ability to see the world from someone else's perspective	2.43	10.13	6.88	1.70	-2.84
Diversity Rating: Tolerance of others with different beliefs	3.01	10.51	7.47	2.69	-2.08
Diversity Rating: Openness to having my own views challenged	2.44	8.05	4.90	0.83	-3.01
Diversity Rating: Ability to discuss and negotiate controversial issues	2.57	9.28	5.66	1.18	-3.01
Diversity Rating: Ability to work cooperatively with diverse people	2.74	10.32	7.82	2.69	-1.94
Change in mean from TFS to YFCY is 0.06					

<b>TFS,YFCY - How would you rate yourself in the following areas:</b> (Response options: A Major Weakness, Somewhat Weak, Average, Somewhat Strong, A Major Strength)
Ability to see the world from someone else's perspective
Tolerance of others with different beliefs
Openness to having my own views challenged
Ability to discuss and negotiate controversial issues
Ability to work cooperatively with diverse people



A unified measure of students' level of positive interaction with diverse peers.

YFCY*				
Α	B1	B2	B3	B4
8.19	-1.53	-0.93	-0.05	0.85
8.08	-1.47	-0.85	0.03	0.91
2.60	-1.80	-1.18	-0.30	0.51
2.59	-1.43	-0.72	0.14	1.00
2.10	-1.80	-1.15	-0.19	0.73
2.05	-1.81	-1.12	-0.18	0.79
; ; ; ;	.19 .08 .60 .59 .10	.19 -1.53   .08 -1.47   .60 -1.80   .59 -1.43   .10 -1.80	.19 -1.53 -0.93   .08 -1.47 -0.85   .60 -1.80 -1.18   .59 -1.43 -0.72   .10 -1.80 -1.15	.19 -1.53 -0.93 -0.05   .08 -1.47 -0.85 0.03   .60 -1.80 -1.18 -0.30   .59 -1.43 -0.72 0.14   .10 -1.80 -1.15 -0.19

<b>YFCY</b> - <b>To</b> what extent have you experienced the following with students from a racial/ethnic group <u>other than your own</u> ? (Response options: Very Often, Often, Sometimes, Seldom, Never)
Ethnic Experience: Had intellectual discussions outside of class
Ethnic Experience: Shared personal feelings and problems
Ethnic Experience: Dined or shared a meal
Ethnic Experience: Had meaningful and honest discussions about race/ethnic relations outside of
class
Ethnic Experience: Studied or prepared for class
Ethnic Experience: Socialized or partied



**Negative Cross-Racial Interaction** 

A unified measure of students' level of negative interaction with diverse peers.

	YFCY*				
А	B1	B2	B3	B4	B5
2.23	0.12	0.87	1.67	2.39	
8.30	0.40	0.88	1.45	2.06	
1.49	-0.82	0.26	1.44	2.45	
3.96	0.41	0.87	1.47	2.02	4.25
	8.30 1.49	2.23   0.12     8.30   0.40     1.49   -0.82	A   B1   B2     2.23   0.12   0.87     8.30   0.40   0.88     1.49   -0.82   0.26	A   B1   B2   B3     2.23   0.12   0.87   1.67     8.30   0.40   0.88   1.45     1.49   -0.82   0.26   1.44	A   B1   B2   B3   B4     2.23   0.12   0.87   1.67   2.39     8.30   0.40   0.88   1.45   2.06     1.49   -0.82   0.26   1.44   2.45

YFCY - To what extent have you experienced the following with students from a racial/ethnic group <u>other than your own</u> ?
(Response options: Very Often, Often, Sometimes, Seldom, Never)
Ethnic Experience: Had tense, somewhat hostile interactions
Ethnic Experience: Felt insulted or threatened because of your race/ethnicity
Ethnic Experience: Had guarded, cautious interactions
Ethnic Experience: Felt ignored or invisible because of your race/ethnicity



# Social Agency

Measures the extent to which students value political and social involvement as a personal goal.

	ТТ	TFS/YFCY Longitudinal*				
	Α	<b>C1</b>	C2	С3		
Goal: Influencing social values	1.78	2.93	-0.39	-3.56		
Goal: Helping others who are in difficulty	1.71	5.78	1.77	-1.72		
Goal: Participating in a community action program	2.86	2.80	-1.59	-5.13		
Goal: Helping to promote racial understanding	2.77	3.04	-1.38	-4.98		
Goal: Keeping up to date with political affairs	2.15	3.12	-0.85	-4.39		
Goal: Becoming a community leader	2.65	2.58	-1.41	-4.96		
Change in mean from TFS to YFCY is 0.24						

<b>TFS,YFCY</b> - <b>Please indicate the importance to you personally of each of the following:</b> (Response options: Essential, Very Important, Somewhat Important, Not Important)
Goal: Influencing social values
Goal: Helping others who are in difficulty
Goal: Participating in a community action program
Goal: Helping to promote racial understanding
Goal: Keeping up to date with political affairs
Goal: Becoming a community leader



#### **Civic Awareness**

Measures changes in students' understanding of the issues facing their community, nation, and the world.

		YFCY*					
	Α	<b>B1</b>	B2	<b>B3</b>	B4		
Contribution: Understanding the problems facing my community	2.33	-0.32	-0.11	0.11	0.32		
Contribution: Understanding of national issues	6.51	-0.12	-0.04	0.04	0.12		
Contribution: Understanding of global issues	5.04	-0.15	-0.05	0.05	0.15		

YFCY - Please rate your agreement with the following statements: This institution has contributed to my:
(Response options: Strongly Agree, Agree, Disagree, Strongly Disagree)
Contribution: Understanding the problems facing my community
Contribution: Understanding of national issues
Contribution: Understanding of global issues



#### Leadership

A united measure of students' beliefs about their leadership development, leadership capacity, and experiences as a leader.

			YFCY*		
	Α	B1	B2	B3	B4
Act in College: Participated in: Leadership training	1.52	1.28	-0.84		
Act in College: Been a leader in an organization	2.14	0.96	-0.45		
Opinion: I have effectively led a group to a common purpose	1.53	1.44	0.22	1.65	-1.08
Self Rating: Leadership ability	1.30	3.18	1.82	0.35	-0.97

\*These parameters are for use with YFCY data files

YFCY - Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself. (*Response options: Highest 10%, Above Average, Average, Below Average, Lowest 10%*) Leadership ability

 $\ensuremath{\mathsf{YFCY}}$  - Please indicate the extent to which you agree or disagree with the following

statements: (Response options: Strongly Agree, Agree, Disagree, Strongly Disagree)

I have effectively led a group to a common purpose

YFCY - Since entering this college have you:

(Response options: Yes, No)

Participated in leadership training

Been a leader in an organization



# **Civic Engagement**

Measures the extent to which students are motivated and involved in civic, electoral, and political activities

	YFCY*			
	Α	B1	B2	B3
Act in Past Year: Demonstrated for a cause (e.g., boycott, rally, protest)	1.56	0.72	2.54	
Act in Past Year: Performed volunteer work	0.65	-0.94	3.06	
Act: Worked on a local, state, or national political campaign	1.54	1.74	3.05	
Act in Past Year: Helped raise money for a cause or campaign	0.95	0.70	2.96	
Act in Past Year: Publicly communicated your opinion about a cause (e.g., blog, email, petition)	1.61	0.24	1.73	
Goal: Influencing social values	1.30	-2.04	-0.24	1.48
Goal: Keeping up to date with political affairs	1.70	-1.69	-0.11	1.20

YFCY - In the past year, how often have you:
(Response options: Frequently, Occasionally, Not at all)
Act: Publicly communicated your opinion about a cause (e.g., blog, email, petition)
Act: Demonstrated for a cause (e.g., boycott, rally, protest)
Act: Worked on a local, state, or national political campaign
Act: Helped raise money for a cause or campaign
Act: Performed volunteer work

YFCY - Since entering this college, indicate how often have you:
(Response options: Frequently, Occassionally, Not at all)
Goal: Keeping up to date with political affairs
Goal: Influencing social values



# Science Self-Efficacy

Measure of students' confidence in their ability to conduct scientific research

	YFCY/TFS Longitudinal*				
	А	B1	B2	B3	B4
Science Skill: Use technical science skills (use of tools, instruments, and/or techniques)	1.49	-2.89	-1.56	0.01	1.24
Science Skill: Generate a research question	2.33	-2.45	-1.18	0.18	1.32
Science Skill: Determine how to collect appropriate data	2.82	-2.51	-1.31	-0.02	1.19
Science Skill: Explain the results of a study	2.87	-2.54	-1.40	-0.20	0.97
Science Skill: Use scientific literature to guide research	2.7	-1.95	-0.88	0.30	1.33
Science Skill: Integrate results from multiple studies	2.79	-2.27	-1.17	0.00	1.11
Science Skill: Ask relevant questions	1.73	-3.73	-2.27	-0.79	0.66
Science Skill: Identify what is known and not known about a problem	1.95	-3.38	-1.94	-0.47	0.83
Science Skill: Understand scientific concepts	2.40	-2.53	-1.29	-0.08	1.03
Science Skill: See connections between different areas of science and mathematics	1.90	-2.52	-1.28	-0.09	1.02

TFS,YFCY - How confident are you that you can:
(Response options: Absolutely, Very, Moderately, Somewhat, Not at all)
Use technical science skills (use of tools, instruments, and/or techniques)
Generate a research question
Determine how to collect appropriate data
Explain the results of a study
Use scientific literature to guide research
Integrate results from multiple studies
Ask relevant questions
Identify what is known and not known about a problem
Understand scientific concepts
See connections between different areas of science and mathematics



# Science Identity

A measure describing the extent to which students conceive of themselves as scientists

	YFCY/TFS Longitudinal*				
	Α	B1	B2	B3	B4
Science Assoc: I have a strong sense of belonging to a community of scientists	3.52	-0.72	-0.20	0.71	1.50
Science Assoc: I derive great personal satisfaction from working on a team that is doing important research	1.78	-1.82	-1.11	0.09	1.30
Science Assoc : I think of myself as a scientist	5.54	-0.43	0.10	0.85	1.53
Science Assoc: I feel like I belong in the field of science	4.43	-0.54	-0.11	0.47	1.06

<b>TFS,YFCY - To what extent are the following statements true of you:</b> (Response options: Strongly Agree, Somewhat Agree, Neutral, Somewhat Disagree, Strongly Disagree)
I have a strong sense of belonging to a community of scientists
I derive great personal satisfaction from working on a team that is doing important research
I think of myself as a scientist
I feel like I belong in the field of science



# Habits of Mind

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

	TE	TFS/CSS Longitudinal*		
	А	C1	C2	
Habits of Mind: Seek solutions to problems and explain them to others	2.17	-2.41	-0.23	
Habits of Mind: Support your opinions with a logical argument	1.81	-2.45	-0.39	
Habits of Mind: Look up scientific research articles and resources	1.71	-2.85	0.03	
Habits of Mind: Take a risk because you felt you had more to gain	1.68	-2.46	0.15	
Habits of Mind: Accept mistakes as part of the learning process	1.24	-1.86	0.49	
Habits of Mind: Take on a challenge that scares you	1.20	-2.80	-0.06	
Habits of Mind: Ask questions in class	1.26	-3.17	-0.27	
Habits of Mind: Explore topics on your own, even though it was not required for a class	1.09	-1.59	0.90	
Habits of Mind: Evaluate the quality or reliability of information you received	1.13	-2.90	-0.12	
Habits of Mind: Seek alternative solutions to a problem	1.14	-2.70	0.45	
Habits of Mind: Analyze multiple sources of information before coming to a conclusion	0.98	-4.37	-0.39	
Change in mean from TFS to CSS is 0.17				

TFS,CSS - How often in the past year did you:
(Response options: Frequently, Occasionally, Not at all)
Habits of Mind: Seek solutions to problems and explain them to others
Habits of Mind: Support your opinions with a logical argument
Habits of Mind: Look up scientific research articles and resources
Habits of Mind: Take a risk because you felt you had more to gain
Habits of Mind: Accept mistakes as part of the learning process
Habits of Mind: Take on a challenge that scares you
Habits of Mind: Ask questions in class
Habits of Mind: Explore topics on your own, even though it was not required for a class
Habits of Mind: Evaluate the quality or reliability of information you received
Habits of Mind: Seek alternative solutions to a problem



# Academic Disengagement

Measures the extent to which students engage in behaviors that are inconsistent with academic success.

	Α	B1	B2
Act: Came late to class	1.72	-0.29	2.04
Act: Missed class for other reasons	1.70	-0.43	2.47
Act: Failed to complete homework on time	1.51	0.45	2.77
Act: Fell asleep in class	0.92	0.80	3.79

CSS - Since entering this college, how often have you: (Response options: Frequently, Occasionally, Not at all)
Came late to class
Missed class for other reasons
Failed to complete homework on time
Fell asleep in class





#### Faculty Interaction: Mentorship

Measures the extent to which students and faculty have mentoring relationships that foster support and guidance with respect to both academic and personal domains.

		CSS*	
	А	B1	B2
Faculty Provide: Help in achieving your professional goals	3.85	-1.2	1.27
Faculty Provide: Advice and guidance about your educational program	3.33	-1.44	1.25
Faculty Provide: Emotional support and encouragement	2.64	-1.14	1.47
Faculty Provide: Feedback on your academic work (outside of grades)	2.96	-1.29	1.28
Faculty Provide: Encouragement to discuss coursework outside of class	3.04	-1.74	1.21
Faculty Provide: Encouragement to pursue graduate/professional study	2.47	-1.41	1.28
Faculty Provide: Help to improve your study skills	2.27	-1.04	1.68
Faculty Provide: A letter of recommendation	1.93	-1.14	1.62
Faculty Provide: An opportunity to work on a research project	1.31	-0.80	2.36
•			

CSS - How often have professors at your college provided you with: (Response options: Frequently, Occasionally, Not at all)
Faculty Provide: Help in achieving your professional goals
Faculty Provide: Advice and guidance about your educational program
Faculty Provide: Emotional support and encouragement
Faculty Provide: Feedback on your academic work (outside of grades)
Faculty Provide: Encouragement to discuss coursework outside of class
Faculty Provide: Encouragement to pursue graduate/professional study
Faculty Provide: Help to improve your study skills
Faculty Provide: A letter of recommendation
Faculty Provide: An opportunity to work on a research project



#### Satisfaction with Coursework

Measures the extent to which students see their coursework as relevant, useful, and applicable to their academic success and future plans.

		CSS*					
	Α	B1	B2	B3	B4	B5	
Campus Satisfaction: Relevance of coursework to career plans	3.91	-2.39	-1.52	-0.74	0.52		
Campus Satisfaction: Relevance of coursework to everyday life	3.61	-2.56	-1.6	-0.7	0.7		
Campus Satisfaction: Courses in your major field	1.88	-3.27	-2.14	-1.45	0.25		
Satisfaction: General education or core curriculum courses **	1.08	-3.9	-2.62	-1.25	1.14	4.75	

\*These parameters are for use with CSS data files; \*\*"Can't rate" option coded as missing

**CSS** - Please rate your satisfaction with your college in each area: (Mark one in each row) (Response options: Very Satisfied, Satisfied, Neutral, Dissatisfied, Very Dissatisfied, Can't Rate/No Experience)

General education and core curriculum courses

**CSS-** Please rate your satisfaction with your college in each area: (Mark one in each row) (Response options: Very Satisfied, Satisfied, Neutral, Dissatisfied, Very Dissatisfied)

Courses in your major field

Relevance of coursework to everyday life

Relevance of coursework to career plans



#### **Overall Satisfaction**

A unified measure of students' satisfaction with the college experience.

	CSS*					
	Α	B1	B2	B3	B4	
Campus Satisfaction: Overall quality of instruction	1.99	-3.28	-2.19	-0.85	1.1	
Campus Satisfaction: Overall college experience	2.97	-2.23	-1.61	-0.67	0.78	
If you could make your college choice over, would you still choose to enroll at your current college?	1.57	-2.51	-1.46	-1.05		

\*These parameters are for use with CSS data files

CSS - Please rate your satisfaction with your college in each area: (Mark one in each row) (Response options: Very Satisfied, Satisfied, Neutral, Dissatisfied, Very Dissatisfied) Overall quality of instruction Overall college experience

CSS - If you could make your college choice over, would you still choose to enroll at your current (or most recent) college?

(Response options: Definitely yes, Probably yes, Probably no, Definitely no, Not sure yet)

If you could make your college choice over, would you still choose to enroll at your current college?



## Sense of Belonging

Measures the extent to which students feel a sense of academic and social integration on campus.

	_	CSS*			
		Α	B1	B2	B3
Inst Opinion: If asked, I would recommend this college to others		2.45	-2.25	-1.35	0.24
Inst Opinion: I feel a sense of belonging to this campus		5.07	-1.73	-0.87	0.56
Inst Opinion: I feel I am a member of this college		6.02	-1.98	-1.17	0.29
Inst Opinion: I will give this college money as an alum		1.52	-1.43	-0.18	1.86

<b>CSS</b> - Please indicate the extent to which you agree or disagree with the following statements: (Response options: Strongly Agree, Agree, Disagree, Strongly Disagree)
Inst Opinion: If asked, I would recommend this college to others
Inst Opinion: I feel a sense of belonging to this campus
Inst Opinion: I feel I am a member of this college
Inst Opinion: I will give this college money as an alum



## Academic Self-Concept

A unified measure of students' beliefs about their abilities and confidence in academic environments.

		TFS/CSS Longitudinal*				
	Α	B1	B2	B3	B4	
Self Rating: Academic ability	3.08	-3.64	-2.61	-0.65	0.94	
Self Rating: Mathematical ability	1.37	-3.00	-1.43	0.11	1.72	
Self Rating: Self-confidence (intellectual)	1.24	-4.25	-2.43	-0.37	1.47	
Self Rating: Drive to achieve	0.91	-6.96	-4.41	-1.60	0.67	
Change in mean from TFS to CSS is 0.41						

TFS,CSS - Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself. (Response options: Highest 10%, Above Average, Average, Below Average, Lowest 10%)
Academic ability
Drive to achieve
Mathematical ability
Self-confidence (intellectual)



## Social Self-Concept

A unified measure of students' beliefs about their abilities and confidence in social situations.

		TFS/CSS Longitudinal*			
	A	B1	B2	B3	B4
Self Rating: Self-confidence (social)	1.55	-3.01	-1.38	0.13	1.53
Self Rating: Leadership ability	2.43	-2.93	-1.70	-0.40	0.85
Self Rating: Public speaking ability	1.90	-2.16	-0.89	0.36	1.56
Change in mean from TFS to CSS is 0.26					

TFS,CSS - Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself.
(Response options: Highest 10%, Above Average, Average, Below Average, Lowest 10%) Self Rating: Self-confidence (social)
Self Rating: Leadership ability
Self Rating: Public speaking ability



Measures skills and dispositions appropriate for living and working in a diverse society.

			CSS*		
	Α	B1	B2	B3	B4
Diversity Rating: Ability to see the world from someone else's perspective	1.4	-4.89	-3.31	-1.19	0.68
Diversity Rating: Tolerance of others with different beliefs	1.64	-4.21	-2.84	-1.29	0.14
Diversity Rating: Openness to having my own views challenged	1.57	-3.58	-2.12	-0.53	0.89
Diversity Rating: Ability to discuss and negotiate controversial issues	1.53	-3.79	-2.33	-0.82	0.54
Diversity Rating: Ability to work cooperatively with diverse people	1.68	-4.36	-3.12	-1.53	-0.15

<b>CSS - How would you rate yourself in the following areas:</b> (Response options: A Major Weakness, Somewhat Weak, Average, Somewhat Strong, A Major Strength)
Ability to see the world from someone else's perspective
Tolerance of others with different beliefs
Openness to having my own views challenged
Ability to discuss and negotiate controversial issues
Ability to work cooperatively with diverse people





**Positive Cross-Racial Interaction** 

A unified measure of students' level of positive interaction with diverse peers.

		CSS*		
Α	B1	B2	B3	B4
2.60	-1.8	-1.18	-0.3	0.51
2.59	-1.43	-0.72	0.14	1.00
3.08	-1.47	-0.85	0.03	0.91
3.19	-1.53	-0.93	-0.05	0.85
1.00	-0.75	-0.25	0.25	0.75
2.1	-1.8	-1.15	-0.19	0.73
	2.60 2.59 3.08 3.19 1.00	2.60 -1.8   2.59 -1.43   3.08 -1.47   3.19 -1.53   1.00 -0.75	A   B1   B2     2.60   -1.8   -1.18     2.59   -1.43   -0.72     3.08   -1.47   -0.85     3.19   -1.53   -0.93     1.00   -0.75   -0.25	A   B1   B2   B3     2.60   -1.8   -1.18   -0.3     2.59   -1.43   -0.72   0.14     3.08   -1.47   -0.85   0.03     3.19   -1.53   -0.93   -0.05     1.00   -0.75   -0.25   0.25

<b>CSS</b> - To what extent have you experienced the following with students from a racial/ethnic group <u>other than your own</u> ? (Response options: Very Often, Often, Sometimes, Seldom, Never)
Ethnic Experience: Dined or shared a meal
Ethnic Experience: Had meaningful and honest discussions about race/ethnic relations outside of
class
Ethnic Experience: Shared personal feelings and problems
Ethnic Experience: Had intellectual discussions outside of class
Ethnic Experience: Studied or prepared for class
Ethnic Experience: Socialized or partied



**Negative Cross-Racial Interaction** 

A unified measure of students' level of negative interaction with diverse peers.

			CSS *		
	Α	B1	B2	B3	B4
Ethnic Experience: Had tense, somewhat hostile interactions	2.23	0.12	0.87	1.67	2.39
Ethnic Experience: Felt insulted or threatened because of your race/ethnicity	8.30	0.4	0.88	1.45	2.06
Ethnic Experience: Had guarded, cautious interactions	1.49	-0.82	0.26	1.44	2.45
Ethnic Experience: Studied or prepared for class	3.96	0.41	0.87	1.47	2.02
*Those parameters are for use with CSS data files					

CSS - To what extent have you experienced the following with students from a racial/ethnic group other than your own? (Response options: Very Often, Often, Sometimes, Seldom, Never)
Ethnic Experience: Had tense, somewhat hostile interactions
Ethnic Experience: Felt insulted or threatened because of your race/ethnicity
Ethnic Experience: Had guarded, cautious interactions
Ethnic Experience: Studied or prepared for class



## Social Agency

Measures the extent to which students value political and social involvement as a personal goal.

	(	CSS/TFS Longitudinal*		
	Α	<b>B1</b>	<b>B2</b>	<b>B3</b>
Goal: Keeping up to date with political affairs	1.48	-1.04	0.5	1.81
Goal: Participating in a community action program	2.41	-0.83	0.54	1.64
Goal: Influencing social values	1.64	-1.45	0.15	1.59
Goal: Becoming a community leader	2.09	-0.88	0.37	1.46
Goal: Helping others who are in difficulty	1.17	-3.66	-1.09	0.82
Goal: Helping to promote racial understanding	2.15	-1.01	0.34	1.45
Change in mean from TFS to CSS is 0.28				

TFS,CSS - Please indicate the importance to you personally of each of the following:
(Response options: Essential, Very Important, Somewhat Important, Not Important)
Goal: Keeping up to date with political affairs
Goal: Participating in a community action program
Goal: Influencing social values
Goal: Becoming a community leader
Goal: Helping others who are in difficulty
Goal: Helping to promote racial understanding



## **Civic Awareness**

Measures changes in students' understanding of the issues facing their community, nation, and the world.

			CSS*		
	Α	<b>B1</b>	B2	<b>B3</b>	B4
Contribution: Understanding of national issues	5.50	-2.14	-1.06	0.08	1.12
Contribution: Understanding of the problems facing my community	5.02	-1.94	-0.89	0.16	1.16
Contribution: Understanding of global issues	1.62	-3.65	-2.00	-0.19	1.41

CSS - Please rate your agreement with the following statements: This institution has contributed to my:
(Response options: Strongly Agree, Agree, Disagree, Strongly Disagree)
Understanding of national issues
Understanding of the problems facing my community
Understanding of global issues



#### Leadership

#### A united measure of students' beliefs about their leadership development, leadership capacity, and experiences as a leader.

			CSS*		
	Α	B1	B2	B3	B4
Act in College: Held a leadership position in an organization	1.09	-0.27			
Act in College: Participated in: Leadership training	0.97	0.80			
Self Rating: Leadership ability	3.44	-2.92	-1.93	-0.63	0.61
Inst Opinion: I have effectively led a group to a common purpose	1.33	-2.97	-1.22	0.84	

\*These parameters are for use with CSS data files

CSS - Please indicate the extent to which you agree or disagree with the following statements:. (Response options: Strongly Disagree, Disagree, Agree, Strongly Agree) I have effectively led a group to a common purpose

CSS - Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself.

(Response options: Highest 10%, Above Average, Average, Below Average, Lowest 10%)

Leadership ability

CSS - Since entering this college have you:

(Response options: Yes, No)

Held a leadership position in an organization

Participated in: Leadership training



### **Civic Engagement**

Measures the extent to which students are motivated and involved in civic, electoral, and political activities.

		CSS*		
	Α	B1	B2	B3
Act: Demonstrated for a cause (e.g., boycott, rally, protest)	1.56	0.72	2.54	
Act: Performed community service as part of a class	0.65	-0.94	3.06	
Act in Past Year: Worked on a local, state, or national political campaign	1.54	1.74	3.05	
Act: Helped raise money for a cause or campaign	0.95	0.70	2.96	
Act: Publicly communicated your opinion about a cause (e.g., blog, email, petition)	1.61	0.24	1.73	
Goal: Influencing social values	1.30	-2.04	-0.24	1.48
Goal: Helping to promote racial understanding	1.70	-1.69	-0.11	1.20

\*These parameters are for use with CSS data files

CSS - In the past year, how often have you:	
(Response options: Frequently, Occasionally, Not at all)	
Demonstrated for a cause (e.g., boycott, rally, protest)	
Performed volunteer work	
Helped raise money for a cause or campaign	
Publicly communicated my opinion about a cause (e.g., blog, email, petition)	

CSS - Since entering this college, indicate how often have you:

(Response options: Frequently, Occassionally, Not at all)

Worked on a local, state, or national political campaign

CSS - Please indicate the importance to you personally of each of the following:

(Response options: Essential, Very Important, Somewhat Important, Not Important)

Influencing social values

Keeping up to date with political affairs



# Science Self-Efficacy

Measure of students' confidence in their ability to conduct scientific research

			CSS*		
	А	B1	B2	B3	B4
Use technical science skills (use of tools, instruments, and/or techniques)	1.49	-2.89	-1.56	0.01	1.24
Generate a research question	2.33	-2.45	-1.18	0.18	1.32
Determine how to collect appropriate data	2.82	-2.51	-1.31	-0.02	1.19
Explain the results of a study	2.87	-2.54	-1.40	-0.20	0.97
Use scientific literature to guide research	2.70	-1.95	-0.88	0.30	1.33
Integrate results from multiple studies	2.79	-2.27	-1.17	0.00	1.11

CSS - How confident are you that you can: (Response options: Absolutely, Very, Moderately, Somewhat, Not at all)
Use technical science skills (use of tools, instruments, and/or techniques)
Generate a research question
Determine how to collect appropriate data
Explain the results of a study
Use scientific literature to guide research
Integrate results from multiple studies



## Science Identity

## A measure describing the extent to which students conceive of themselves as scientists

			CSS*		
	Α	B1	B2	B3	B4
I have a strong sense of belonging to a community of scientists	3.52	-0.72	-0.20	0.71	1.50
I derive great personal satisfaction from working on a team that is doing important research	1.78	-1.82	-1.11	0.09	1.30
I think of myself as a scientist	5.54	-0.43	0.10	0.85	1.53
I feel like I belong in the field of science	4.43	-0.54	-0.11	0.47	1.06

<b>CSS - To what extent are the following statements true of you:</b> (Response options: Strongly Agree, Somewhat Agree, Neutral, Somewhat Disagree, Strongly Disagree)
I have a strong sense of belonging to a community of scientists
I derive great personal satisfaction from working on a team that is doing important research
I think of myself as a scientist
I feel like I belong in the field of science

