



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*		
	A	B1	B2
Habits of Mind: Ask questions in class	1.26	-3.17	-0.27
Habits of Mind: Support your opinions with a logical argument	1.81	-2.45	-0.39
Habits of Mind: Seek solutions to problems and explain them to others	2.17	-2.41	-0.23
Habits of Mind: Evaluate the quality or reliability of information you received	1.13	-2.90	-0.12
Habits of Mind: Take a risk because you feel you have more to gain	1.68	-2.46	0.15
Habits of Mind: Seek alternative solutions to a problem	1.14	-2.70	0.45
Habits of Mind: Look up scientific research articles and resources	1.71	-2.85	0.03
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: Accept mistakes as part of the learning process	1.24	-1.86	0.49
Habits of Mind: Analyze multiple sources of information before coming to a conclusion	0.98	-4.37	-0.39
Habits of Mind: Take on a challenge that scares you	1.20	-2.80	-0.06

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

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

### Academic Self-Concept

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

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

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

**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%)*

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

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

**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%)*

Leadership ability

Public speaking ability

Self-confidence (social)

## Pluralistic Orientation

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

	TFS*				
	A	B1	B2	B3	B4
Diversity Rating: Ability to see the world from someone else's perspective	1.40	-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

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

### **TFS - How would you rate yourself in the following areas:**

*(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

## Social Agency

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

	TFS*			
	A	B1	B2	B3
Goal: Keeping up to date with political affairs	1.48	-1.04	0.50	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

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

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

*(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



## Civic Engagement

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

	TFS*			
	A	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: Publicly communicated my opinion about a cause (e.g., blog, email, petition)	1.42	2.09	3.38	
Act in Past Year: Helped raise money for a cause or campaign	1.11	-0.31	1.92	
Goal: Influencing social values	0.97	-1.96	0.37	2.42
Goal: 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

### **TFS - 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

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*		
	A	B1	B2
Choose to Attend: This college has a very good academic reputation	1.48	-2.70	-0.65
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's graduates get good jobs	4.90	-1.27	-0.15

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

**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*			
	A	B1	B2	B3
Future Act: Participate in a study abroad program	1.28	-2.14	-0.85	0.53
Future Act: Participate in a 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

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

**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*				
	A	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	2.70	-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

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

### **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*				
	A	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

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

### **TFS - To what extent are the following statements true of you:**

*(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*		
	A	C1	C2
Habits of Mind: Ask questions in class	1.51	4.5	-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 feel you have 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	3.2	-1.18
<b>Change in mean from TFS to YFCY is -0.28</b>			

\*These parameters are for use with YFCY data files

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

## Academic Disengagement

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

	YFCY*		
	A	B1	B2
Been late to class	1.72	-0.29	2.04
Skipped class	1.70	-0.43	2.47
Turned in course assignment(s) late	1.51	0.45	2.77
Turned in course assignments that did not reflect your best work	1.14	-1.35	2.48
Fell asleep in class	0.92	0.80	3.79

\*These parameters are for use with YFCY data files

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

\*These parameters are for use with YFCY data files

<b>YFCY - Since entering this college, how has it been to:</b> <i>(Response options: Very Easy, Somewhat Easy, Somewhat Difficult, Very Difficult)</i>
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*					
	A	B1	B2	B3	B4	B5
Faculty during office hours	1.19	-0.82	0.43	1.56	2.61	4.04
Asked a professor for advice after class	1.83	-1.05	1.29			
Communicated regularly with your professors	2.79	-0.85	1.11			
Amount of contact with faculty	1.12	-3.01	-0.79	1.65		

\*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)*

Faculty outside of class or 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

### 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*				
	A	B1	B2	B3	B4
Satisfaction: General education or core curriculum courses**	3.17	-1.43	-0.36	1.06	
Satisfaction: Relevance of coursework to everyday life	3.77	-1.3	-0.24	1.21	
Satisfaction: Relevance of coursework to future career plans	1.27	-3.36	-2.29	-0.97	1.34
Satisfaction: First-year programs**	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*				
	A	B1	B2	B3	B4
Satisfaction: Your overall academic experience**	2.21	-2.83	-1.94	-0.92	0.88
Campus Satisfaction: Overall quality of instruction	2.97	-2.23	-1.61	-0.67	0.78
Campus Satisfaction: Overall college experience	1.99	-3.28	-2.19	-0.85	1.1
If you could make your college choice over, would you still choose to enroll at your current (or most recent) college?***	1.57	-2.51	-1.46	-1.05	0.48

\*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 you could make your college choice over, 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*				B4
	A	B1	B2	B3	
Opinion: I see myself as part of the campus community	4.65	-1.25	-0.92	-0.39	0.95
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: If asked, I would recommend this college to others	3.99	-1.25	-0.97	-0.59	0.51

\*These parameters are for use with YFCY data files

**YFCY - Please indicate the extent to which you agree or disagree with the following statements:**

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

I see myself as part of the campus community

I feel I am a member of this college

I feel a sense of belonging to this campus

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	C3	C4
Self Rating: Academic ability	4.02	14.10	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
<b>Change in mean from TFS to YFCY is -0.13</b>					

\*These parameters are for use with YFCY data files

**TFS, 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%)*

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	3.05	6.36	3.75	0.79	-2.11
Self Rating: Public speaking ability	2.78	5.69	2.67	-0.48	-3.64
Self Rating: Self-confidence (social)	6.47	6.65	2.89	-0.49	-3.88
<b>Change in mean from TFS to YFCY is 0.05</b>					

\*These parameters are for use with YFCY data files

**TFS, 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

Public speaking ability

Self-confidence (social)

## Pluralistic Orientation

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

	TFS/YFCY Longitudinal*				
	A	C1	C2	C3	C4
Ability to discuss and negotiate controversial issues	2.43	10.13	6.88	1.70	-2.84
Ability to see the world from someone else's perspective	3.01	10.51	7.47	2.69	-2.08
Ability to work cooperatively with diverse people	2.44	8.05	4.9	0.83	-3.01
Openness to having my own views challenged	2.57	9.28	5.66	1.18	-3.01
Tolerance of others with different beliefs	2.74	10.32	7.82	2.69	-1.94
<b>Change in mean from TFS to YFCY is 0.06</b>					

\*These parameters are for use with YFCY data files

<b>TFS,YFCY - How would you rate yourself in the following areas:</b> <i>(Response options: A Major Weakness, Somewhat Weak, Average, Somewhat Strong, A Major Strength)</i>
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.*

	YFCY*				
	A	B1	B2	B3	B4
Ethnic Experience: Had intellectual discussions outside of class	3.19	-1.53	-0.93	-0.05	0.85
Ethnic Experience: Shared personal feelings and problems	3.08	-1.47	-0.85	0.03	0.91
Ethnic Experience: Dined or shared a meal	2.60	-1.80	-1.18	-0.30	0.51
Ethnic Experience: Had meaningful and honest discussions about race/ethnic relations outside of class	2.59	-1.43	-0.72	0.14	1.00
Ethnic Experience: Studied or prepared for class	2.10	-1.80	-1.15	-0.19	0.73
Ethnic Experience: Socialized or partied	2.05	-1.81	-1.12	-0.18	0.70

\*These parameters are for use with YFCY data files

**YFCY - 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)*

Dined or shared a meal

Had meaningful and honest discussions about race/ethnic relations outside of class

Shared personal feelings and problems

Had intellectual discussions outside of class

Studied or prepared for class

Socialized or partied



### Negative Cross-Racial Interaction

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

	YFCY*					
	A	B1	B2	B3	B4	B5
Ethnic Experience: Had guarded, cautious interactions	1.49	-0.82	0.26	1.44	2.45	
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 race/ethnicity	8.30	0.40	0.88	1.45	2.06	
Ethnic Experience: Felt ignored or invisible because of your race/ethnicity	3.96	0.41	0.87	1.47	2.02	4.25

\*These parameters are for use with YFCY data files

**YFCY - 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)*

Had guarded, cautious interactions

Had tense, somewhat hostile interactions

Felt insulted or threatened because of race/ethnicity

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.*

	TFS/YFCY Longitudinal*			
	A	C1	C2	C3
Goal: Keeping up to date with political affairs	2.15	3.12	-0.85	-4.39
Goal: Participating in a community action program	2.86	2.80	-1.59	-5.13
Goal: Influencing social values	1.78	2.93	-0.39	-3.56
Goal: Becoming a community leader	2.65	2.58	-1.41	-4.96
Goal: Helping others who are in difficulty	1.71	5.78	1.77	-1.72
Goal: Helping to promote racial understanding	2.77	3.04	-1.38	-4.98
<b>Change in mean from TFS to YFCY is 0.24</b>				

\*These parameters are for use with YFCY data files

**TFS,YFCY - Please indicate the importance to you personally of each of the following:**  
*(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

### Civic Awareness

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

	YFCY*				
	A	B1	B2	B3	B4
Contribution: Understanding of national issues	6.60	-0.09	0.35	0.84	9.84
Contribution: Understanding of global issues	6.51	-0.13	0.38	0.85	9.28

\*These parameters are for use with YFCY data files

**YFCY - 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 global issues

## Leadership

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

	YFCY*				
	A	B1	B2	B3	B4
Self Rating: Leadership ability	1.20	-4.15	-2.34	-0.38	1.45
Opinion: I have effectively led a group to a common purpose	1.49	-2.07	-0.19	1.76	
Act in College: Participated in leadership training	1.57	1.22			
Act in College: Been a leader in an organization	2.38	0.94			

\*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

**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*			
	A	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	
Opinion: I am interested in seeking information about current social and political issues	1.49	-2.18	-0.73	1.24
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

\*These parameters are for use with YFCY data files

### YFCY - 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)

### YFCY - Please indicate the extent to which you agree or disagree with the following statements:

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

I am interested in seeking information about current social and political issues

### YFCY - 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

**YFCY - 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*

	YFCY/TFS Longitudinal*				
	A	C1	C2	C3	C4
Science Skill: Use technical science skills (use of tools, instruments, and/or techniques)	1.49	4.30	2.32	-0.02	-1.85
Science Skill: Generate a research question	2.33	5.69	2.74	-0.42	-3.07
Science Skill: Determine how to collect appropriate data	2.82	7.08	3.70	0.04	-3.36
Science Skill: Explain the results of a study	2.87	7.30	4.02	0.58	-2.78
Science Skill: Use scientific literature to guide research	2.70	5.27	2.36	-0.80	-3.58
Science Skill: Integrate results from multiple studies	2.79	6.33	3.26	-0.01	-3.09
Science Skill: Ask relevant questions	1.73	6.45	3.92	1.37	-1.14
Science Skill: Identify what is known and not known about a problem	1.95	6.60	3.78	0.91	-1.63
Science Skill: Understand scientific concepts	2.40	6.06	3.10	0.20	-2.47
Science Skill: See connections between different areas of science and mathematics	1.90	4.78	2.43	0.18	-1.93

\*These parameters are for use with YFCY data files

<b>TFS,YFCY - How confident are you that you can:</b> <i>(Response options: Absolutely, Very, Moderately, Somewhat, Not at all)</i>
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*				
	A	C1	C2	C3	C4
Science Assoc: I have a strong sense of belonging to a community of scientists	3.52	2.55	0.69	-2.51	-5.29
Science Assoc: I derive great personal satisfaction from working on a team that is doing important research	1.78	3.25	1.97	-0.16	-2.31
Science Assoc : I think of myself as a scientist	5.54	2.36	-0.54	-4.70	-8.49
Science Assoc: I feel like I belong in the field of science	4.43	2.39	0.49	-2.09	-4.67

\*These parameters are for use with YFCY data files

**TFS,YFCY - To what extent are the following statements true of you:**

*(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/CSS Longitudinal*		
	A	C1	C2
Habits of Mind: Ask questions in class	1.50	5.24	0.24
Habits of Mind: Support your opinions with a logical argument	2.30	6.31	0.87
Habits of Mind: Seek solutions to problems and explain them to others	2.25	6.13	0.28
Habits of Mind: Analyze multiple sources of information before coming to a conclusion	1.15	3.97	0.07
Habits of Mind: Evaluate the quality or reliability of information you received	1.73	4.84	-0.39
Habits of Mind: Take a risk because you feel you have more to gain	1.39	3.75	-1.22
Habits of Mind: Seek alternative solutions to a problem	1.90	5.49	-0.63
Habits of Mind: Look up scientific research articles and resources	0.73	1.99	-0.68
Habits of Mind: Explore topics on your own, even though it was not required for a class	1.24	3.17	-1.08
Habits of Mind: Accept mistakes as part of the learning process	0.69	2.55	-0.54
Habits of Mind: Take on a challenge that scares you	1.28	4.40	-0.11
<b>Change in mean from TFS to CSS is 0.17</b>			

\*These parameters are for use with CSS data files

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

Seek feedback on your academic work

### Academic Disengagement

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

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

\*These parameters are for use with CSS data files

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

*(Response options: Frequently, Occasionally, Not at all)*

Came late to class

Fell asleep in class

Failed to complete homework on time

Missed class for other reasons

### 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*		
	A	B1	B2
Faculty Provide: Encouragement to pursue graduate/professional study	2.47	-1.41	1.28
Faculty Provide: An opportunity to work on a research project	1.31	-0.80	2.36
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: A letter of recommendation	1.93	-1.14	1.62
Faculty Provide: Help to improve your study skills	2.27	-1.04	1.68
Faculty Provide: Feedback on your academic work (outside of grades)	2.96	-1.29	1.28
Faculty Provide: An opportunity to work on a research project	3.04	-1.74	1.21
Faculty Provide: Help in achieving your professional goals	3.85	-1.20	1.27

\*These parameters are for use with CSS data files

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

### 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*					
	A	B1	B2	B3	B4	B5
Satisfaction: General education or core curriculum courses**	1.08	-3.90	-2.62	-1.25	1.14	4.75
Campus Satisfaction: Courses in your major field	1.88	-3.27	-2.14	-1.45	0.25	
Campus Satisfaction: Relevance of coursework to everyday life	3.61	-2.56	-1.60	-0.70	0.70	
Campus Satisfaction: Relevance of coursework to career plans	3.91	-2.39	-1.52	-0.74	0.52	

\*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*				
	A	B1	B2	B3	B4
Inst Satisfaction: Overall quality of instruction	1.99	-3.28	-2.19	-0.85	1.1
Inst 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*			
	A	B1	B2	B3
Inst Opinion: I will give this college money as an alum	1.52	-1.43	-0.18	1.86
Inst Opinion: I feel I am a member of this college	6.02	-1.98	-1.17	0.29
Inst Opinion: I feel a sense of belonging to this campus	5.07	-1.73	-0.87	0.56
Inst Opinion: If asked, I would recommend this college to others	2.45	-2.25	-1.35	0.24

\*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 Agree, Agree, Disagree, Strongly Disagree)*

I will give this college money as an alum

I feel I am a member of this college

I feel a sense of belonging to this campus

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/CSS Longitudinal*				
	A	C1	C2	C3	C4
Self Rating: Academic ability	3.08	11.21	8.02	2.00	-2.90
Self Rating: Drive to achieve	0.91	6.29	3.99	1.44	-0.61
Self Rating: Mathematical ability	1.37	4.10	1.95	-0.15	-2.35
Self Rating: Self-confidence (intellectual)	1.24	5.27	3.01	0.45	-1.82
<b>Change in mean from TFS to CSS is 0.41</b>					

\*These parameters are for use with CSS data files

**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	C1	C2	C3	C4
Self Rating: Leadership ability	2.43	7.10	4.12	0.96	-2.07
Self Rating: Public speaking ability	1.90	4.12	1.69	-0.69	-2.97
Self Rating: Self-confidence (social)	1.55	4.66	2.13	-0.20	-2.36
<b>Change in mean from TFS to CSS is 0.26</b>					

\*These parameters are for use with CSS data files

**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%)*

Leadership ability

Public speaking ability

Self-confidence (social)



## Pluralistic Orientation

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

	CSS*				
	A	C1	C2	C3	C4
Diversity Rating: Ability to see the world from someone else's perspective	1.40	6.86	4.64	1.67	-0.96
Diversity Rating: Tolerance of others with different beliefs	1.64	6.90	4.66	2.12	-0.22
Diversity Rating: Openness to having my own views challenged	1.57	5.64	3.34	0.84	-1.40
Diversity Rating: Ability to discuss and negotiate controversial issues	1.53	5.79	3.56	1.25	-0.82
Diversity Rating: Ability to work cooperatively with diverse people	1.68	7.33	5.25	2.57	0.25

\*These parameters are for use with CSS data files

### CSS - How would you rate yourself in the following areas:

*(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*				
	A	B1	B2	B3	B4
Ethnic Experience: Dined or shared a meal	2.60	-1.80	-1.18	-0.30	0.51
Ethnic Experience: Had meaningful and honest discussions about race/ethnic relations outside of class	2.59	-1.43	-0.72	0.14	1.00
Ethnic Experience: Shared personal feelings and problems	3.08	-1.47	-0.85	0.03	0.91
Ethnic Experience: Had intellectual discussions outside of class	3.19	-1.53	-0.93	-0.05	0.85
Ethnic Experience: Studied or prepared for class	1.00	-0.75	-0.25	0.25	0.75
Ethnic Experience: Socialized or partied	2.10	-1.80	-1.15	-0.19	0.73

\*These 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)*

Dined or shared a meal

Had meaningful and honest discussions about race/ethnic relations outside of class

Shared personal feelings and problems

Had intellectual discussions outside of class

Studied or prepared for class

Socialized or partied

### Negative Cross-Racial Interaction

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

	CSS *				
	A	B1	B2	B3	B4
Ethnic Experience: Had guarded, cautious interactions	1.49	-0.82	0.26	1.44	2.45
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	0.40	0.88	1.45	2.06

\*These 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)*

Had guarded, cautious interactions

Had tense, somewhat hostile interactions

Felt insulted or threatened because of race/ethnicity

## Social Agency

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

	CSS/TFS Longitudinal*			
	A	C1	C2	C3
Goal: Keeping up to date with political affairs	1.48	1.55	-0.73	-2.67
Goal: Participating in a community action program	2.41	1.99	-1.29	-3.95
Goal: Influencing social values	1.64	2.37	-0.25	-2.61
Goal: Becoming a community leader	2.09	1.84	-0.78	-3.05
Goal: Helping others who are in difficulty	1.17	4.27	1.27	-0.95
Goal: Helping to promote racial understanding	2.15	2.17	-0.74	-3.11
<b>Change in mean from TFS to CSS is 0.28</b>				

\*These parameters are for use with CSS data files

**TFS,CSS - Please indicate the importance to you personally of each of the following:**  
*(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

### Civic Awareness

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

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

\*These parameters are for use with CSS data files

**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 the problems facing your community

Understanding of national issues

Understanding of global issues

## Leadership

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

	CSS*				
	A	B1	B2	B3	B4
Self Rating: Leadership ability	3.44	-2.92	-1.93	-0.63	0.61
Act in College: Held a leadership position in an organization	1.09	-0.27			

\*These parameters are for use with CSS data files

**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

## Civic Engagement

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

	CSS*			
	A	B1	B2	B3
Demonstrated for a cause (e.g., boycott, rally, protest)	1.56	0.72	2.54	
Performed community service as part of a class	0.65	-0.94	3.06	
Worked on a local, state, or national political campaign	1.54	1.74	3.05	
Helped raise money for a cause or campaign	0.95	0.70	2.96	
Publicly communicated your opinion about a cause (e.g., blog, email, petition)	1.61	0.24	1.73	
I have effectively led a group to a common purpose	1.49	-2.18	-0.73	1.24
Influencing social values	1.30	-2.04	-0.24	1.48
Keeping up to date with political affairs	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 - 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

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

*(Response options: Frequently, Occasionally, 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*				
	A	C1	C2	C3	C4
Science Skill: Use technical science skills (use of tools, instruments, and/or techniques)	1.49	4.30	2.32	-0.02	-1.85
Science Skill: Generate a research question	2.33	5.69	2.74	-0.42	-3.07
Science Skill: Determine how to collect appropriate data	2.82	7.08	3.70	0.04	-3.36
Science Skill: Explain the results of a study	2.87	7.30	4.02	0.58	-2.78
Science Skill: Use scientific literature to guide research	2.70	5.27	2.36	-0.80	-3.58
Science Skill: Integrate results from multiple studies	2.79	6.33	3.26	-0.01	-3.09
Science Skill: Ask relevant questions	1.73	6.45	3.92	1.37	-1.14
Science Skill: Identify what is known and not known about a problem	1.95	6.60	3.78	0.91	-1.63
Science Skill: Understand scientific concepts	2.40	6.06	3.10	0.20	-2.47
Science Skill: See connections between different areas of science and mathematics	1.90	4.78	2.43	0.18	-1.93

\*These parameters are for use with CSS data files

#### **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

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*

	CSS*				
	A	C1	C2	C3	C4
Science Assoc: I have a strong sense of belonging to a community of scientists	3.52	2.55	0.69	-2.51	-5.29
Science Assoc: I derive great personal satisfaction from working on a team that is doing important research	1.78	3.25	1.97	-0.16	-2.31
Science Assoc: I think of myself as a scientist	5.54	2.36	-0.54	-4.70	-8.49
Science Assoc: I feel like I belong in the field of science	4.43	2.39	0.49	-2.09	-4.67

\*These parameters are for use with CSS data files

**CSS - To what extent are the following statements true of you:**  
*(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