



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

## **CIRP Construct Technical Report**

### **2016-2017 Appendix**

#### **Faculty Construct Parameters**

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## Student-Centered Pedagogy

*Measures the extent to which faculty use student-centered teaching and evaluation methods in their course instruction.*

	FAC			
	A	B1	B2	B3
Evaluation Method: Student presentations	1.00	-0.50	0.00	0.50
Evaluation Method: Student evaluations of each other's work	1.00	-0.50	0.00	0.50
Instructional Method: Class discussions	1.70	-2.67	-1.38	-0.58
Instructional Method: Cooperative learning (small groups)	2.30	-1.43	-0.33	0.40
Instructional Method: Experiential learning/Field studies	1.30	-0.52	0.68	1.57
Instructional Method: Group projects	1.82	-1.34	0.01	0.95
Instructional Method: Reflective writing/journaling	1.21	-1.02	0.93	1.96
Instructional Method: Using student inquiry to drive learning	1.00	-0.50	0.00	0.50

### **Faculty Survey – In how many of the courses that you teach do you use each of the following:**

*(Response options: All, Most, Some, None)*

Student presentations

Student evaluations of each other's work

Class discussions

Cooperative learning (small groups)

Experiential learning/Field studies

Group projects

Reflective writing/journaling

Using student inquiry to drive learning

**Undergraduate Education Goal: Personal Development**

*Measures the extent to which faculty believe that personal development is a central goal for undergraduate education.*

	FAC			
	A	B1	B2	B3
Undergraduate Goal: Develop students' moral character	3.42	-1.85	-0.65	0.34
Undergraduate Goal: Provide for students' emotional development	2.16	-1.91	-0.27	1.03
Undergraduate Goal: Help students develop personal values	4.29	-1.75	-0.60	0.40

<b>Faculty Survey – Please indicate the extent to which you agree it is your role to:</b> <i>(Response options: Strongly Agree, Somewhat Agree, Disagree Somewhat, Disagree Strongly)</i>
Develop students' moral character
Provide for students' emotional development
Help students develop personal values

## Scholarly Productivity

*A unified measure of the scholarly activity of faculty.*

	FAC						
	A	B1	B2	B3	B4	B5	B6
Published: Articles in academic and professional journals	3.09	-0.85	-0.15	0.24	0.78	1.28	1.96
Published: Chapters in edited volumes	2.11	0.06	0.93	1.49	2.20	2.87	3.89
Professional writings published or accepted for publication in the last three years?	2.53	-0.39	0.52	1.16	1.99	2.56	

**Faculty Survey – How many of the following have you published:**

*(Response options: None, 1-2, 3-4, 5-10, 11-20, 21+)*

Articles in academic and professional journals

Chapters in edited volumes

**Faculty Survey – In the past three years, how many of your professional writings have been published or accepted for publication?**

*(Response options: 0, 1, 2, 3..., 21+)*

**Civic Minded Practice**

*A unified measure of faculty involvement in civic activities.*

	A	B1	B2	FAC			
				B3	B4	B5	B6
Act: Advised student groups involved in service/volunteer work	1.44	-0.01					
Act: Collaborated with the local community in research/teaching to address their needs	2.18	0.06					
Instructional Method: Community service as part of coursework	1.54	0.53	1.88	2.67			
Hours Per Week: Community or public service*	1.33	-0.32	1.80	2.85	3.61	4.13	4.62
Past Act: Engaged in public service/professional consulting without pay	1.24	-0.21					

\*Recoded to combine three highest response options into one, 21+

**Faculty Survey – During the past three years, have you:**

*(Response options: Yes, No)*

Advised student groups involved in service/volunteer work

Collaborated with the local community on research/teaching to address their needs

**Faculty Survey – In how many of the courses that you teach do you use each of the following?**

*(Response options: All, Most, Some, None)*

Community service as part of coursework

**Faculty Survey – During the present term, how many hours per week on average do you spend on each of the following?**

*(Response options: None, 1-4, 5-8, 9-12, 13-16, 17-20, 21+)*

Community or public service

**Faculty Survey – In the past year, have you:**

*(Response options: Yes, No)*

Engaged in public service/professional consulting without pay

**Civic Minded Values**

*A unified measure of the extent to which faculty believe civic engagement is a central part of the college mission.*

	FAC			
	A	B1	B2	B3
Faculty Role: Enhance students' knowledge of and appreciation for other racial/ethnic groups	2.77	-1.44	-0.31	0.67
Faculty Role: Encourage students to become agents of social change	2.69	-1.46	-0.15	0.97
View: Colleges have a responsibility to work with their surrounding communities to address local issues	1.25	-4.00	-2.28	0.38

<b>Faculty Survey – Please indicate the extent to which you agree it is your role to:</b> <i>(Response options: Strongly Agree, Somewhat Agree, Disagree Somewhat, Disagree Strongly)</i>
Enhance students' knowledge of and appreciation for other racial/ethnic groups
Encourage students to become agents of social change

<b>Faculty Survey – Please indicate your agreement with each of the following statements:</b> <i>(Response options: Strongly Agree, Somewhat Agree, Disagree Somewhat, Disagree Strongly)</i>
Colleges have a responsibility to work with their surrounding communities to address local issues

**Job Satisfaction: Workplace**

***A unified measure of the extent to which faculty are satisfied with their working environment.***

	FAC			
	A	B1	B2	B3
Satisfaction: Autonomy and independence	1.46	-2.89	-1.71	0.19
Satisfaction: Departmental leadership	1.09	-2.27	-1.17	0.61
Satisfaction: Relative equity of salary and job benefits	1.29	-1.09	0.07	1.98
Satisfaction: Flexibility in relation to family matters or emergencies	3.05	-2.13	-1.22	0.27
Satisfaction: Leave policies	2.40	-1.65	-0.82	0.79

<b>Faculty Survey – How satisfied are you with the following aspects of your job?</b> <i>(Response options: Very Satisfied, Satisfied, Marginally Satisfied, Not Satisfied)</i>
Autonomy and independence
Departmental leadership
Relative equity of salary and job benefits
Flexibility in relation to family matters or emergencies
Leave policies (e.g., paternity/maternity leave, caring for a family member, stopping the tenure clock)



**Job Satisfaction: Compensation**

*A unified measure of the extent to which faculty are satisfied with their compensation packages.*

	FAC			
	A	B1	B2	B3
Satisfaction: Salary	1.75	-1.21	-0.14	1.54
Satisfaction: Health benefits	2.04	-1.31	-0.50	0.99
Satisfaction: Retirement benefits	2.36	-1.31	-0.49	0.93
Satisfaction: Opportunity for scholarly pursuits	2.17	-1.24	-0.24	1.23
Satisfaction: Teaching load	1.42	-1.67	-0.52	1.51
Satisfaction: Prospects for career advancement	1.69	-1.24	-0.20	1.57

<b>Faculty Survey – How satisfied are you with the following aspects of your job?</b> <i>(Response options: Very Satisfied, Satisfied, Marginally Satisfied, Not Satisfied)</i>
Salary
Health benefits
Retirement benefits
Opportunity for scholarly pursuits
Teaching load
Prospects for career advancement

## Career-Related Stress

*Measures the amount of stress faculty experience related to their career.*

	FAC			
	A	B1	B2	B3
Source of Stress: Committee work	1.38	-2.29	-0.24	1.83
Source of Stress: Students	1.08	-4.64	-0.40	2.84
Source of Stress: Research or publishing demands	1.06	-2.41	-0.62	1.57
Source of Stress: Institutional procedures/red tape	1.08	-3.47	-0.94	1.46
Source of Stress: Teaching load	1.51	-3.12	-0.32	1.48
Source of Stress: Lack of personal time	1.96	-3.25	-0.74	0.85
Source of Stress: Self-imposed high expectations	1.03	-5.07	-1.83	0.91

**Faculty Survey – Please indicate the extent to which each of the following has been a source of stress for you during the past year:**

*(Response options: Extensive, Somewhat, Not at All, Not Applicable)*

Committee work

Students

Research or publishing demands

Institutional procedures and “red tape”

Teaching load

Lack of personal time

Self-imposed high expectations

**Institutional Priority: Commitment to Diversity**

*Measures the extent to which faculty believe their institution is committed to creating a diverse multicultural campus environment.*

	FAC			
	A	B1	B2	B3
Institutional Priority: To recruit more traditionally underrepresented students	1.77	-1.54	0.09	1.77
Institutional Priority: To promote gender diversity in the faculty and administration	3.34	-1.09	0.08	1.30
Institutional Priority: To promote racial and ethnic diversity in the faculty and administration	5.72	-0.96	0.12	1.21
Institutional Priority: Develop an appreciation for multiculturalism	2.37	-1.51	-0.13	1.22

<b>Faculty Survey – Indicate how important you believe each priority listed below is at your college or university:</b> <i>(Response options: Highest Priority, High Priority, Medium Priority, Low Priority)</i>
Recruit more traditionally underrepresented students
Promote gender diversity in the faculty and administration
Promote racial and ethnic diversity in the faculty and administration
Develop an appreciation for multiculturalism

**Institutional Priority: Civic Engagement**

*Measures the extent to which faculty believe their institution is committed to facilitating civic engagement among students and faculty.*

	FAC			
	A	B1	B2	B3
Institutional Priority: To facilitate student involvement in community service	1.56	-1.98	-0.26	1.46
Institutional Priority: To provide resources for faculty to engage in community-based teaching or research	2.08	-0.83	0.53	1.86
Institutional Priority: To create and sustain partnerships with surrounding communities	2.84	-1.35	0.01	1.38

<b>Faculty Survey – Indicate how important you believe each priority listed below is at your college or university:</b> <i>(Response options: Highest Priority, High Priority, Medium Priority, Low Priority)</i>
Facilitate students involvement in community service
Provide resources for faculty to engage in community-based teaching or research
Create and sustain partnerships with surrounding communities

**Institutional Priority: Increasing Prestige**

*Measures the extent to which faculty believe their institution is committed to increasing its prestige.*

	FAC			
	A	B1	B2	B3
Institutional Priority: To increase or maintain institutional prestige	3.54	-1.75	-0.69	0.59
Institutional Priority: To hire faculty "stars"	1.47	-0.47	0.88	2.20
Institutional Priority: To increase the selectivity of the student body through more competitive admissions criteria	3.43	-1.57	-0.62	0.52

**Faculty Survey – Indicate how important you believe each priority listed below is at your college or university:**

*(Response options: Highest Priority, High Priority, Medium Priority, Low Priority)*

Increase or maintain institutional prestige

Hire faculty "stars"

Increase the selectivity of the student body through more competitive admissions criteria

## Diversity Climate

*A measure representing faculty's perspectives about the climate for faculty members from diverse backgrounds.*

	FAC			
	A	B1	B2	B3
Inst Opinion: This institution has effective hiring practices and policies that increase faculty diversity	1.45	-2.12	-0.86	1.09
Inst Opinion: This institution takes responsibility for educating underprepared students	0.88	-3.37	-1.23	1.60
Inst Opinion: Faculty of color are treated fairly here	5.13	-1.74	-0.93	0.29
Inst Opinion: Women faculty are treated fairly here	4.67	-1.70	-0.90	0.24
Inst Opinion: LGBTQ faculty are treated fairly here	3.17	-1.63	-0.93	0.39

**Faculty Survey – Below are some statements about your college or university. Indicate the extent to which you agree or disagree with each of the following:**

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

This institution has effective hiring practices and policies that increase faculty diversity

This institution takes responsibility for educating underprepared students

Faculty of color are treated fairly here

Women faculty are treated fairly here

LGBTQ faculty are treated fairly here

**Respect**

*A composite measure representing the extent to which faculty feel their contributions are respected or appreciated by their colleagues.*

	FAC			
	A	B1	B2	B3
Inst Opinion: My research is valued by faculty in my department	2.32	-1.86	-0.92	0.53
Inst Opinion: My teaching is valued by faculty in my department	5.73	-1.98	-1.28	-0.17
Inst Opinion: My service is valued by faculty in my department	3.71	-1.90	-1.13	0.06
Inst Opinion: Faculty here respect each other	1.14	-3.68	-2.13	0.56

<b>Faculty Survey – Below are some statements about your college or university. Indicate the extent to which you agree or disagree with each of the following:</b> <i>(Response options: Strongly Agree, Somewhat Agree, Disagree Somewhat, Disagree Strongly)</i>
My research is valued by faculty in my department
My teaching is valued by faculty in my department
My service is valued by faculty in my department
Faculty here respect each other

## Science Self-Efficacy

*A measure of faculty members' efforts to increase students' science self-efficacy.*

	A	B1	B2	B3	B4
Science Skill: Use technical science skills (use of tools, instruments, and/or techniques)	1.61	-1.65	-1.33	-0.68	0.33
Science Skill: Generate a research question	3.76	-1.23	-0.78	-0.12	0.70
Science Skill: Determine how to collect appropriate data	4.02	-1.14	-0.81	-0.24	0.60
Science Skill: Explain the results of a study	5.27	-1.15	-0.91	-0.35	0.40
Science Skill: Use scientific literature to guide research	4.32	-1.17	-0.86	-0.29	0.43
Science Skill: Integrate results from multiple studies	3.72	-1.10	-0.72	-0.10	0.68
Science Skill: Ask relevant questions	2.47	-2.15	-1.98	-1.10	0.00
Science Skill: Identify what is known and not known about a problem	2.20	-2.13	-1.79	-0.87	0.21
Science Skill: Understand scientific concepts	2.54	-1.93	-1.71	-1.11	-0.16
Science Skill: See connections between different areas of science and mathematics	1.55	-2.14	-1.62	-0.68	0.45

**Faculty Survey – In the STEM courses you have taught in the past year, how often do you encourage students to:**

*(Response options: Always, Frequently, Occasionally, Rarely, Never)*

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 faculty conceive of themselves as scientists*

	A	B1	B2	B3	B4
Science Assoc: I have a strong sense of belonging to a community of scientists	2.32	-2.19	-1.18	0.30	4.58
Science Assoc: I derive great personal satisfaction from working on a team that is doing important research	1.88	-2.20	-1.26	0.08	5.12
Science Assoc: I think of myself as a scientist	5.00	-1.68	-1.06	-0.23	3.37
Science Assoc: I feel like I belong in the field of science	4.82	-1.95	-1.29	-0.31	3.56

<b>Faculty Survey - To what extent are the following statements true of you:</b> <i>(Response options: Strongly Agree, Somewhat Agree, Neutral, Somewhat Disagree, Strongly Disagree)</i>
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

## Mentor Self-Efficacy

*A measure representing faculty members' confidence in their ability to effectively mentor students*

	A	B1	B2	B3	B4
Mentorship Rating: Providing constructive feedback to your mentees	2.19	-4.07	-2.81	-1.19	0.16
Mentorship Rating: Taking into account the biases and prejudices you bring into the mentor/mentee relationship	1.91	-4.07	-2.57	-0.68	0.92
Mentorship Rating: Working effectively with mentees whose personal background is different from your own	2.61	-3.71	-2.43	-0.93	0.37
Mentorship Rating: Being an advocate for our mentees	3.16	-3.47	-2.40	-1.13	-0.00
Mentorship Rating: Helping your mentees network effectively	1.81	-3.25	-1.82	-0.50	0.82
Mentorship Rating: Helping your mentees acquire financial resources	1.10	-2.98	-1.35	0.29	1.86

### **Faculty Survey – How would you rate yourself as a mentor in the following areas:**

*(Response options: A Major Strength, Somewhat Strong, Average, Somewhat Weak, A Major Weakness)*

Providing constructive feedback to your mentees

Taking into account the biases and prejudices you bring into the mentor/mentee relationship

Working effectively with mentees whose personal background is different from your own (age, race, gender, class, religion, sexual orientation, etc.)

Being an advocate for our mentees

Helping your mentees network effectively

Helping your mentees acquire financial resources