2010-2011 HERI Faculty Survey (UCLA)

What Goes On in the Classroom

The new study looks at the extent to which men and women were using traditional or more "student-centered" approaches to teaching in 2010-11 and a decade prior, and compares those in science and technology fields to those in other fields. The results show that, over all, there have been gains in the use of student-centered teaching, with women more likely to embrace such approaches. Further, the gap between men and women in teaching techniques is greater in STEM fields than in other disciplines.

One set of questions in the new survey (matched with one 10 years ago) focused on whether faculty members used a traditional approach (lecturing) and student-centered approaches (such as class discussions, cooperative learning and student presentations). Men and women showed slight declines in the use of lecturing, although a majority of men (but not women) rely on it. For the other approaches, women are more likely than men to make use of the technique.

Men, Women and Teaching Methods in Used in All or Most Courses

Method	Men, 2001-2	Women, 2001-2	Men, 2010-11	Women, 2010-11
Extensive lecturing	54.6%	34.1%	52.7%	33.8%
Class discussions	68.3%	78.9%	78.3%	88.0%
Cooperative learning	32.6%	55.8%	48.5%	68.8%
Student presentations	30.4%	45.2%	36.9%	53.8%

Inside Higher Ed While men increased use of all of those techniques (except lecturing) over the decade, they were still behind (at the end of the decade) where women were at the beginning of it.

In science and technology fields in particular, female faculty members appear less likely than men to rely on lecturing and grading on a curve (two approaches that aren't generally considered student-centered), but are more likely than men to embrace a range of other techniques.

Methods Used in All or Most Courses, 2010-11, STEM and Non-STEM Fields

Method	Men in STEM	Women in STEM	Men in Other Fields	Women in Other Fields
Extensive lecturing	69.7%	50.4%	43.7%	27.8%
Grading on a curve	30.6%	16.6%	16.2%	9.8%
Student presentations	25.5%	42.8%	42.9%	57.7%
Student evaluations of each others' work	9.7%	17.5%	20.5%	30.5%
Class discussions	55.9%	72.5%	90.0%	93.7%
Cooperative learning (small groups)	40.7%	60.3%	52.6%	71.8%
Experiential learning/field studies	22.9%	33.1%	21.2%	30.6%
Group projects	27.1%	36.0%	28.7%	38.1%
Student-selected topics for course content	10.8%	13.9%	20.5%	27.0%
Reflective writing/journaling	4.1%	16.7%	17.1%	27.9%
Using student inquiry to drive learning	32.9%	43.3%	46.9%	54.2%

Hurtado said that while gender patterns are clear for teaching techniques, there may be an overlap with age, given that many faculties (particularly in STEM fields) have only relatively recently been bringing on significant numbers of female faculty members. And those who are women are likely to embrace new techniques, she said. "I think students respond to what they see as an ethic of care, and it's common for women to convey this ethic of care."

Read more: http://www.insidehighered.com/news/2012/10/24/new-survey-faculty-activities-and-attitudes#ixzz2Iuv5nRwm
Inside Higher Ed

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http://www.diversityweb.org/diversity_innovations/faculty_staff_development/teaching_strategies_practices/building_creativity.cfm

Hillilgosa,Tonya. 1992. “Demystifying ’Classroom Chemistry’ The Role of the Interactive Model.” Teaching Sociology 20:12-17

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The following findings are based on APU faculty responses to the 2010-11 administration of the CIRP Faculty Survey, and limited to only the faculty who responded to the survey.

APU Faculty Instruction and Evaluation Methods used in Most or All Courses, 2010-11, STEM and NON-STEM Fields

	STEM				NON_STEM			
	Male		Female		Male		Female	
Method	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Extensive lecturing	17	70.8%	8	57.2%	40	39.6%	27	26.5%
Grading on a curve	8	8.0%	4	3.8%	6	25.0%	1	7.1%
Student presentations	60	59.4%	68	65.4%	7	29.1%	2	14.2%
Student evaluations of each others' work	19	18.8%	37	35.5%	15	62.5%	6	42.9%
Class discussions	15	62.5%	11	78.6%	87	86.2%	97	93.3%
Cooperative learning (small groups)	8	33.3%	8	57.2%	69	69.0%	83	80.6%
Experiential learning/Field studies	6	25.0%	5	35.7%	33	32.7%	41	39.8%
Group projects	4	16.7%	2	14.3%	37	36.6%	51	49.0%
Student-selected topics for course content	14	58.3%	10	71.4%	28	28.0%	30	29.2%
Reflective writing/journaling	3	12.5%	4	28.5%	29	28.8%	48	46.2%
Using student inquiry to drive learning	7	29.2%	7	50.0%	51	50.5%	67	64.5%
Teaching assistants	11	45.8%	7	50.0%	3	3.0%	3	2.9%
Recitals/Demonstrations	4	16.6%	2	14.2%	17	16.8%	18	17.5%
Multiple drafts of written work	4	16.7%	2	14.3%	29	28.7%	34	33.1%
Community service as part of coursework	4	16.7%	3	21.4%	6	6.0%	14	13.7%
Electronic quizzes with immediate feedback in class	6	25.0%	4	28.5%	6	6.0%	9	8.7%
Using real-life problems	11	45.9%	11	78.6%	59	58.4%	78	75.0%

Number of APU Faculty by Discipline Field and STEM/NON-STEM Category

Discipline Field	**STEM**	**NON_STEM**	**Total**
Psychology	17	0	17
Biological and biomedical sciences	11	0	11
Mathematics and statistics	4	0	4
Physical sciences	4	0	4
Computer/info sciences/support tech	2	0	2
Area/ethnic/cultural/gender studies	0	1	1
Arts (visual and performing)	0	17	17
Business/management/marketing/related	0	11	11
Communication/journalism/ comm. tech	0	8	8
Education	0	48	48
English language and literature/letters	0	13	13
Foreign languages/literature/linguistics	0	7	7
Health professions/clinical sciences	0	30	30
Library science	0	5	5
Parks/recreation/leisure/fitness studies	0	1	1
Philosophy, religion & theology	0	33	33
Public administration/social services	0	1	1
Social sciences (except psych) and history	0	12	12
Other	0	20	20
Total	38	207	245

APU Faculty by Gender and STEM/NON-STEM Field

Gender	**STEM**	**NON_STEM**	**Total**
Male	24	101	125
Female	14	105	119
Total	38	206	244