Statistic For Survey: Service Learning Survey (Pre) Spring 08

The are *6* completed surveys and 1 incomplete surveys

Survey Directions: This survey is intended to gather your perceptions about science and engineering, your thoughts about your current level of skills and abilities, and gather information about your general academic and professional careers. Your individual answers are completely confidential. Please respond to all of the questions as honestly as possible. Pay CLOSE ATTENTION TO THE SCALE BEING USED FOR EACH QUESTION AND ANSWER ACCORDINGLY. Thank you in advance for your time.

1. Your Sex:

	Male 1	Female 2	**Mean**	**Std. Dev.**
Your Sex:	5X	2X	1.29	0.49

2. As of today, how old are you? textual field

3. Is English your native language?

	Yes 1	No 2	**Mean**	**Std. Dev.**
Is English your native language?	6X	1X	1.14	0.38

4. What is your citizenship status?

	U.S. Citizen 1	Permanent Resident 2	Neither 3	**Mean**	**Std. Dev.**
What is your citizenship status?	6X	1X		1.14	0.38

5. Your Ethnicity:

	African-American/Black 1	American Indian/Alaskan Native 2	Chinese/Chinese-American 3	East Indian/Pakistani 4	Filipino/Filipino-American 5	Hmong/Hmong-American 6	Japanese/Japanese-American 7	Korean/Korean-American 8	Mexican/ American /La
Your Ethnicity:			1X				1X		3

6. Your Ethnicity: Other (Please Specify) textual field

7. Do you have a disability, as defined by Rehabilitation Act, 1973, or the Americans with Disabilities Act, ADA, 1990?

	Yes 1	No 2	Decline to State 3	**Mean**	**Std. Dev.**
Do you have a disability, as defined by Rehabilitation Act, 1973, or the Americans with Disabilities Act, ADA, 1990?		7X		2.00	0.00

8. Are you married?

	Yes 1	No 2	**Mean**	**Std. Dev.**
Are you married?		7X	2.00	0.00

9. Do you have any children?

	No 1	1 or more on the way 2	1 3	2 4	3 5	More than 3 6	**Mean**	**Std. Dev.**
Do you have any children?	7X						1.00	0.00

10. How far is your permanent home from UC-Merced?

	In the same town 1	In the same district 2	In the county 3	Same geographic region (i.e. Central California) 4	Within California 5	Within the US 6	**Mean**	**Std. Dev.**

How far is your permanent home from UC-Merced?	1X		1X	1X	4X		4.00	1.53

11. Have you ever participated in the UC Merced service-learning program?

	Yes 1	No 2	**Mean**	**Std. Dev.**
Have you ever participated in the UC Merced service-learning program?	4X	3X	1.43	0.53

12. If so, how long ago were you involved in the UC Merced service-learning program?

	Last term 1	2 terms ago 2	3 terms ago 3	4 terms ago 4	5 terms ago 5	6 terms ago 6	Over 6 terms ago 7	**Mean**	**Std. Dev.**
If so, how long ago were you involved in the UC Merced service-learning program?	6X							1.00	0.00

13. How many units/credits of service-learning credits do you have?

	1 1	2 2	3 3	4 4	More than 4 5	**Mean**	**Std. Dev.**
How many units/credits of service-learning credits do you have?	2X	3X			2X	2.57	1.72

14. Have you ever participated in a service-learning program in high school?

	Yes 1	No 2	**Mean**	**Std. Dev.**
Have you ever participated in a service-learning program in high school?		7X	2.00	0.00

15. Have you participated in a college/university service-learning program, other than UC-Merced?

	Yes 1	No 2	**Mean**	**Std. Dev.**
Have you participated in a college/university service-learning program, other than UC-Merced?		7X	2.00	0.00

16. Did you graduate from high school?

	Yes 1	GED 2	Sate Diploma 3	Other 4	**Mean**	**Std. Dev.**
Did you graduate from high school?	7X				1.00	0.00

17. If so, what type of high school did you graduate from?

	Public School 1	Private School 2	Charter School 3	Religious School 4	Magnet School 5	**Mean**	**Std. Dev.**
If so, what type of high school did you graduate from?	6X	1X				1.14	0.38

18. What was the average letter grade you received in high school? textual field

19. During high school, how many years did you take the following subjects:

	zero 1	.5 2	1 3	1.5 4	2 5	2.5 6	3 7	3.5 8	4 9	More than 4 10	**Mean**	**Std. Dev.**
Biological Science	1X		2X		3X		1X				4.14	1.95
Computer Science	3X	1X	3X								2.00	1.00
English								1X	6X		8.86	0.38
Foreign Language					2X		3X		2X		7.00	1.63
History			2X		2X		3X				5.29	1.80
Math					1X				6X		8.43	1.51
Physical Science		1X			3X		1X		2X		6.00	2.52
Political Science		1X	4X		2X						3.43	1.13
The Arts	1X		4X		1X		1X				3.57	1.90

20. During high school, what was your average grade(s) received for the following subjects:

	A 1	B 2	C 3	D 4	F 5	**Mean**	**Std. Dev.**
Biological Science	3X	3X				1.50	0.55
Computer Science	4X	2X				1.33	0.52
English	1X	6X				1.86	0.38

Foreign Language	4X	3X				1.43	0.53
History	2X	4X	1X			1.86	0.69
Math	6X		1X			1.29	0.76
Physical Science	3X	3X	1X			1.71	0.76
Political Science	3X	3X	1X			1.71	0.76
The Arts	6X	1X				1.14	0.38

21. What is your enrollment status?

	Full-time 1	Part-time 2	Non-degree seeking student 3	**Mean**	**Std. Dev.**
What is your enrollment status?	7X			1.00	0.00

22. Year in school:

	Fr 1	So 2	Jr 3	Sr 4	5th yr 5	**Mean**	**Std. Dev.**
Year in school:	3X	3X	1X			1.71	0.76

23. In terms of college selection, UC-Merced was your:

	First choice 1	Second choice 2	Third choice 3	Less than third choice 4	**Mean**	**Std. Dev.**
In terms of college selection, UC-Merced was your:	2X	2X	2X	1X	2.29	1.11

24. Are you a transfer student?

	Yes 1	No 2	**Mean**	**Std. Dev.**
Are you a transfer student?	1X	6X	1.86	0.38

25. Your Major(s): textual field

26. Overall UC-Merced GPA: textual field

27. Major(s) GPA: textual field

28. SAT Verbal Score: textual field

29. SAT Math Score: textual field

30. ACT Composite Score (If applicable): textual field

31. What is your final degree objective?

	None 1	Vocational certificate 2	Associate of Arts (or equivalent) 3	Bachelors 4	Masters 5	MD 6	JD 7	PhD 8	**Mean**	**Std. Dev.**
What is your final degree objective?	1X			1X	3X			2X	5.14	2.41

32. Other (Please Specify): textual field

33. What is your career objective upon graduation?

	Industry 1	Faculty 2	Academia (other than faculty member) 3	Research 4	Non-profit 5	Government 6	Military 7	K-12 8	**Mean**	**Std. Dev.**
What is your career objective upon graduation?	4X			1X	1X	1X			2.71	2.21

34. Other (Please Specify): textual field

35. What is your parent(s) or legal guardian(s) present income level?

	Less than $15,000 1	$15,000-$30,000 2	$30,001-$45,000 3	$45,001-$60,000 4	$60,001-$75,000 5	$75,001-$90,000 6	$90,001-$100,000 7	Over $100,000 8	Don't Know 9	**Mean**	**Std. Dev.**
What is your parent(s) or legal guardian(s)		1X	1X			1X		1X	3X	6.57	2.99

present income level?											

36. Father's Highest Education Level:

	Did not Graduate High School 1	High School Graduate 2	Some College 3	Associate Arts 4	Bachelors 5	Master's Degree 6	Professional Degree 7	Doctoral Degree 8	Not Applicable/Don't Know 9	**Mean**	**Std. Dev.**
Father's Highest Education Level:		2X	2X		1X				2X	4.71	3.09

37. Mother's Highest Education Level:

	Did not Graduate High School 1	High School Graduate 2	Some College 3	Associate Arts 4	Bachelors 5	Master's Degree 6	Professional Degree 7	Doctoral Degree 8	Not Applicable/Don't Know 9	**Mean**	**Std. Dev.**
Mother's Highest Education Level:	1X	2X			2X	2X				3.86	2.12

38. Currently, my parents are:

	Married/living together 1	Divorced/separated/not living together 2	One or both deceased 3	**Mean**	**Std. Dev.**
Currently, my parents are:	5X	1X	1X	1.43	0.79

39. Do you qualify for federal work-study?

	Yes 1	No 2	Don't Know 3	**Mean**	**Std. Dev.**
Do you qualify for federal work-study?	3X		4X	2.14	1.07

40. Do you receive federal work-study?

	Yes 1	No 2	Don't Know 3	**Mean**	**Std. Dev.**
Do you receive federal work-study?		4X	3X	2.43	0.53

41. Do you receive federal student loans?

	Yes 1	No 2	Don't Know 3	**Mean**	**Std. Dev.**
Do you receive federal student loans?	3X	3X	1X	1.71	0.76

42. Are you concerned with your ability to finance your college education?

	No 1	Somewhat 2	Yes 3	**Mean**	**Std. Dev.**
Are you concerned with your ability to finance your college education?	1X	1X	5X	2.57	0.79

43. Rate yourself on each of the following traits or skills as compared with the average undergraduate science or engineering student:

	Well Below Average 1	Below Average 2	Average 3	Above Average 4	Well Above Average 5	**Mean**	**Std. Dev.**
Overall academic ability			2X	5X		3.71	0.49
Science and mathematics ability			2X	4X	1X	3.86	0.69
Ability to apply skills and concepts to solving problems			1X	5X	1X	4.00	0.58
Ability to work cooperatively with others			1X	5X	1X	4.00	0.58
Familiarity with scientific techniques and instrumentation			2X	5X		3.71	0.49
Ability to make academic presentations			5X	1X	1X	3.43	0.79
Capacity to carry out own investigations and inquires			3X	4X		3.57	0.53
Computer programming skills		2X	4X	1X		2.86	0.69
Confidence in expressing yourself in a small group setting		1X	2X	4X		3.43	0.79
Confidence in speaking with instructors about the sciences		1X	4X	2X		3.14	0.69
Ability to find resources on a scientific topic			4X	3X		3.43	0.53
Ability to explain scientific concepts to others		2X	1X	4X		3.29	0.95

Time Management			3X	4X		3.57	0.53
Public speaking ability		2X	4X		1X	3.00	1.00
Clear career goal(s)		2X	4X	1X		2.86	0.69
Leadership ability		2X	2X	3X		3.14	0.90
Ability to apply what learned in college to real world problems		1X		5X	1X	3.86	0.90
Self-confidence		1X	4X	2X		3.14	0.69
Understanding the importance of others perceptions			1X	2X	4X	4.43	0.79
Writing ability		1X	2X	4X		3.43	0.79

44. Please indicate the importance of each of the following in your decision to pursue science and/or engineering as a career:

	Very Unimportant 1	Unimportant 2	No Effect 3	Important 4	Very Important 5	**Mean**	**Std. Dev.**
Making a contribution to society			1X	3X	3X	4.29	0.76
Making a theoretical contribution to science			2X	3X	2X	4.00	0.82
Securing a financially stable or profitable career			1X	2X	4X	4.43	0.79
Interest in experimental discovery		1X		3X	3X	4.14	1.07
Interest in solving problems		1X		2X	4X	4.29	1.11
Interest in understanding natural phenomena			2X	3X	2X	4.00	0.82
To be a community leader			4X	1X	2X	3.71	0.95
Interest in the subject matter			2X	4X	1X	3.86	0.69
Interest in technology			1X	3X	3X	4.29	0.76
Parent/legal guardian is in the field			6X	1X		3.14	0.38
Sibling is in the field		1X	6X			2.86	0.38
Other family member is in the field			5X	1X	1X	3.43	0.79
Friend is in the field			6X		1X	3.29	0.76

45. Consider your thoughts about science and engineering, and indicate the extent to which you agree or disagree with each of the following statements:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
The way science is taught encourages questioning			3X	3X	1X	3.71	0.76
Sometimes scientists cannot find the answer to their questions		1X		2X	4X	4.29	1.11
Engineers do not have enough time for family, friends, or fun	1X	1X	3X	2X		2.86	1.07
It may be said that scientific ideas evolve in their development			1X	5X	1X	4.00	0.58
Becoming a scientist or engineer takes too many years of education		3X		3X	1X	3.29	1.25
When I think of an engineer, I think of a confident person		1X	2X	2X	2X	3.71	1.11
Science promotes collaboration		1X	1X	2X	3X	4.00	1.15
As an engineer you are given a great deal of opportunity to apply theory				6X	1X	4.14	0.38
Learning science is mostly memorizing facts	1X	3X		1X	2X	3.00	1.63
The work of scientists and engineers benefits society			1X	3X	3X	4.29	0.76
Hands-on learning is important to learning new concepts				1X	6X	4.86	0.38
Learning science is mostly applying theories or concepts to new and/or practical situations				4X	3X	4.43	0.53
Learning science mostly synthesizing of information				6X	1X	4.14	0.38

46. Think about your own learning style and the ways in which you manage your life decisions. Then, indicate the extent to which you agree or disagree with each of the following statements:

	Never 1	Rarely 2	Sometimes 3	Frequently 4	Always 5	**Mean**	**Std. Dev.**
I work hard to do well, even if I don't like a task			1X	5X	1X	4.00	0.58
I try to understand the tasks before I attempt to solve them			1X	4X	2X	4.14	0.69
I am willing to do extra work on tasks to improve my knowledge			5X	1X	1X	3.43	0.79
I try to figure out my goals and what I need to do to accomplish them			3X	2X	2X	3.86	0.90
I check my accuracy as I progress through a task			4X	2X	1X	3.57	0.79
I make my own decisions regarding what to do with my life		1X	1X	4X	1X	3.71	0.95

I can have a positive impact on local social problems			3X	4X		3.57	0.53
The extent of my achievement is often determined by chance		3X	2X	2X		2.86	0.90
I try to learn from my success and failures				4X	3X	4.43	0.53
I plan and manage my time to maximize my effort			3X	3X	1X	3.71	0.76
I have little control over the things that happen to me	1X	3X		2X	1X	2.86	1.46
I believe I can succeed at most things if I apply myself				2X	5X	4.71	0.49

47. Think about your experiences working in a team and indicate the extent to which you agree or disagree with each statement below:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
I help to solve problems by using information provided by the team				4X	3X	4.43	0.53
I focus on completing the team task successfully				3X	4X	4.57	0.53
I attempt to change incorrect information immediately				3X	4X	4.57	0.53
I respect the thoughts and opinions of others in the team				3X	4X	4.57	0.53
I lead when appropriate, mobilizing the group for high performance			1X	3X	3X	4.29	0.76
Working on a team helps me to learn				4X	3X	4.43	0.53
I enjoy working on teams			2X	2X	3X	4.14	0.90

48. Reflect on your past learning experiences and involvement with the community. Then, indicate the extent to which you agree or disagree with each of the following statements:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
I think people should find time to contribute to their community			1X	2X	4X	4.43	0.79
Being involved in a program to improve my community is important			2X	1X	4X	4.29	0.95
I am concerned about local community issues			2X	3X	2X	4.00	0.82
It is important for me to find a career that directly benefits others		1X	3X	1X	2X	3.57	1.13

49. Consider your academic and professional experiences and reflect on the skills you have obtained. Then, rate your skill level in the following areas:

	Well Below Average 1	Below Average 2	Average 3	Above Average 4	Well Above Average 5	**Mean**	**Std. Dev.**
Confidence in speaking with instructors about the sciences			4X	2X	1X	3.57	0.79
Ability to apply knowledge of mathematics, science and engineering			1X	5X	1X	4.00	0.58
Ability to design and conduct experiments, and analyze and interpret data			1X	5X	1X	4.00	0.58
Ability to design a system, process or component to meet desired needs			4X	2X	1X	3.57	0.79
Ability to function on a multi-disciplinary team			1X	5X	1X	4.00	0.58
Ability to identify, formulate and solve engineering problems			2X	5X		3.71	0.49
Understanding of ethical and professional responsibilities			2X	3X	2X	4.00	0.82
Ability to communicate effectively		1X	3X	3X		3.29	0.76
Ability to impact global and societal engineering problems			5X	2X		3.29	0.49
Recognition and ability to engage in life-long learning			4X	3X		3.43	0.53
Knowledge of contemporary issues		1X	5X	1X		3.00	0.58
Ability to use techniques, skills and modern engineering tools			3X	4X		3.57	0.53
Ability to work effectively with a client			2X	5X		3.71	0.49
Ability to manage an engineering project			1X	5X	1X	4.00	0.58
Appreciation of real-world constraints on engineering solutions			2X	3X	2X	4.00	0.82
Ability to understand the relationship between theoretical models and applied field work			4X	2X	1X	3.57	0.79

50. Reflect on your experience with individuals from other cultures and indicate the extent to which you agree or disagree with each of the following statements:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
Hands-on learning is important to learning new concepts				2X	5X	4.71	0.49
I have interacted with people from different cultures				3X	4X	4.57	0.53

I have an appreciation for different cultures			1X	2X	4X	4.43	0.79
I have acquired relationships with people from different cultures				3X	4X	4.57	0.53
I have experienced different social and economic environments				3X	4X	4.57	0.53
My academic and professional experiences have influenced my attitude towards communities that are different than my own			1X	3X	3X	4.29	0.76

51. Last high school attended: textual field

If you have any questions or comments, please send mail to engineering@ucmerced.edu or call (209) 228-4411.

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Statistic For Survey: Service Learning Survey (Post) Spring 08

The are *34* completed surveys and 4 incomplete surveys

Survey Directions: This survey is intended to gather your perceptions about science and engineering, your thoughts about your current level of skills and abilities, and gather information about your general academic and professional careers. Your individual answers are completely confidential. Please respond to all of the questions as honestly as possible. Pay close attention to the scale being used for each question and answer accordingly. Thank you in advance for your time.

1. What is your final degree objective?

	None 1	Vocational certificate 2	Associate of Arts (or equivalent) 3	Bachelors 4	Masters 5	MD 6	JD 7	PhD 8	**Mean**	**Std. Dev.**
What is your final degree objective?	1X			16X	14X			7X	5.03	1.60

2. Continuation of question #1-Other (Please Specify): textual field

3. What is your career objective upon graduation?

	Industry 1	Faculty 2	Academia (other than faculty member) 3	Research 4	Non-profit 5	Government 6	Military 7	K-12 8	**Mean**	**Std. Dev.**
What is your career objective upon graduation?	25X	1X	1X	8X		3X			2.11	1.69

4. Continuation of question #2-Other (Please specify): textual field

5. Rate yourself on each of the following traits or skills as compared with the average undergraduate science or engineering student:

	Well Below Average 1	Below Average 2	Average 3	Above Average 4	Well Above Average 5	**Mean**	**Std. Dev.**
Overall academic ability		1X	16X	17X	4X	3.63	0.71
Science and mathematics ability	1X		15X	14X	8X	3.74	0.89
Ability to apply skills and concepts to solving problems		2X	9X	18X	9X	3.89	0.83
Ability to work cooperatively with others		2X	10X	16X	10X	3.89	0.86
Familiarity with scientific techniques and instrumentation		5X	13X	16X	4X	3.50	0.86
Ability to make academic presentations	1X	3X	17X	9X	8X	3.53	1.01
Capacity to carry out own investigations and inquires		3X	12X	17X	6X	3.68	0.84
Computer programming skills	1X	5X	12X	15X	5X	3.47	0.98
Confidence in expressing yourself in a small group setting	1X	1X	8X	17X	11X	3.95	0.93
Confidence in speaking with instructors about the sciences	1X	7X	13X	13X	4X	3.32	0.99
Ability to find resources on a scientific topic		3X	8X	20X	7X	3.82	0.83
Ability to explain scientific concepts to others	1X	3X	14X	17X	3X	3.47	0.86
Time Management	1X	7X	15X	11X	4X	3.26	0.98
Public speaking ability	1X	9X	16X	5X	7X	3.21	1.09
Clear career goal(s)	4X	5X	16X	9X	4X	3.11	1.11
Ability to apply what learned in college to real world problems		2X	18X	12X	6X	3.58	0.83
Self-confidence		3X	12X	17X	6X	3.68	0.84
Understanding the importance of others perceptions		3X	8X	17X	10X	3.89	0.89

Writing ability	1X	6X	14X	15X	2X	3.29	0.90
Leadership ability	1X	4X	11X	14X	8X	3.63	1.02

6. Please indicate the importance of each of the following in your decision to pursue science and/or engineering as a career:

	Very Unimportant 1	Unimportant 2	No Effect 3	Important 4	Very Important 5	**Mean**	**Std. Dev.**
Making a contribution to society	2X	2X	4X	18X	12X	3.95	1.06
Making a theoretical contribution to science	1X	4X	13X	12X	8X	3.58	1.03
Securing a financially stable or profitable career	1X	1X	2X	10X	24X	4.45	0.92
Interest in experimental discovery	1X	1X	8X	14X	14X	4.03	0.97
Interest in solving problems			7X	15X	16X	4.24	0.75
Interest in understanding natural phenomena	1X	2X	10X	17X	8X	3.76	0.94
To be a community leader	1X	7X	10X	11X	9X	3.53	1.13
Interest in the subject matter	1X		2X	19X	16X	4.29	0.80
Interest in technology	1X		2X	17X	18X	4.34	0.81
Parent/legal guardian is in the field	8X	5X	18X	4X	3X	2.71	1.16
Sibling is in the field	8X	5X	21X	1X	3X	2.63	1.10
Other family member is in the field	7X	5X	18X	4X	4X	2.82	1.18
Friend is in the field	5X	6X	21X	2X	4X	2.84	1.08

7. Consider your thoughts about science and engineering, and indicate the extent to which you agree or disagree with each of the following statements:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
The way science is taught encourages questioning		5X	11X	18X	4X	3.55	0.86
Sometimes scientists cannot find the answer to their questions		2X	4X	24X	8X	4.00	0.74

Engineers do not have enough time for family, friends, or fun	4X	15X	13X	2X	4X	2.66	1.10
It may be said that scientific ideas evolve in their development			5X	23X	10X	4.13	0.62
Becoming a scientist or engineer takes too many years of education		9X	15X	12X	2X	3.18	0.87
When I think of an engineer, I think of a confident person	1X	4X	14X	12X	7X	3.53	1.01
Science promotes collaboration		2X	6X	21X	9X	3.97	0.79
As an engineer you are given a great deal of opportunity to apply theory		1X	8X	24X	5X	3.87	0.66
Learning science is mostly memorizing facts	4X	13X	11X	5X	5X	2.84	1.20
The work of scientists and engineers benefits society		2X	5X	13X	18X	4.24	0.88
Hands-on learning is important to learning new concepts			3X	16X	19X	4.42	0.64
Learning science is mostly applying theories or concepts to new and/or practical situations		1X	10X	20X	7X	3.87	0.74
Learning science mostly synthesizing of information		1X	14X	18X	5X	3.71	0.73

8. Think about your own learning style and the ways in which you manage your life decisions. Then, indicate the extent to which you agree or disagree with each of the following statements:

	Never 1	Rarely 2	Sometimes 3	Frequently 4	Always 5	**Mean**	**Std. Dev.**
I work hard to do well, even if I don't like a task		2X	13X	13X	9X	3.78	0.89
I try to understand the tasks before I attempt to solve them			12X	11X	14X	4.05	0.85
I am willing to do extra work on tasks to improve my knowledge		5X	12X	13X	7X	3.59	0.96
I try to figure out my goals and what I need to do to accomplish them		1X	9X	13X	14X	4.08	0.86
I check my accuracy as I progress through a task		5X	10X	9X	13X	3.81	1.08
I make my own decisions regarding what to do with my life		1X	9X	14X	13X	4.05	0.85

I can have a positive impact on local social problems		7X	11X	13X	6X	3.49	0.99
The extent of my achievement is often determined by chance	3X	6X	19X	7X	2X	2.97	0.96
I try to learn from my success and failures			7X	16X	14X	4.19	0.74
I plan and manage my time to maximize my effort	4X	3X	12X	11X	7X	3.38	1.21
I have little control over the things that happen to me	5X	13X	14X	2X	3X	2.59	1.07
I believe I can succeed at most things if I apply myself			7X	12X	18X	4.30	0.78

9. Think about your experiences working in a team and indicate the extent to which you agree or disagree with each statement below:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
I help to solve problems by using information provided by the team		2X	6X	20X	9X	3.97	0.80
I focus on completing the team task successfully		1X	4X	21X	11X	4.14	0.71
I attempt to change incorrect information immediately		1X	7X	21X	8X	3.97	0.73
I respect the thoughts and opinions of others in the team			5X	19X	13X	4.22	0.67
I lead when appropriate, mobilizing the group for high performance		2X	12X	16X	7X	3.76	0.83
Working on a team helps me to learn	1X	1X	8X	19X	8X	3.86	0.89
I enjoy working on teams	2X	2X	10X	14X	9X	3.70	1.08

10. Reflect on your past learning experiences and involvement with the community. Then, indicate the extent to which you agree or disagree with each of the following statements:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
I think people should find time to contribute to their community		1X	11X	15X	10X	3.92	0.83
Being involved in a program to improve my community is important			13X	12X	12X	3.97	0.83

I am concerned about local community issues			13X	18X	6X	3.81	0.70
It is important for me to find a career that directly benefits others	1X	3X	14X	10X	9X	3.62	1.04

11. As a result of working on the service-learning project, please rate your skill level in the following areas:

	Well Below Average 1	Below Average 2	Average 3	Above Average 4	Well Above Average 5	**Mean**	**Std. Dev.**
Ability to apply knowledge of mathematics, science and engineering	1X		16X	16X	4X	3.59	0.80
Ability to design and conduct experiments, and analyze and interpret data	1X	1X	16X	14X	5X	3.57	0.87
Ability to design a system, process or component to meet desired needs		1X	15X	14X	7X	3.73	0.80
Ability to function on a multi-disciplinary team			10X	18X	9X	3.97	0.73
Ability to identify, formulate and solve engineering problems	1X	2X	10X	19X	5X	3.68	0.88
Understanding of ethical and professional responsibilities			14X	13X	10X	3.89	0.81
Ability to communicate effectively		2X	14X	15X	6X	3.68	0.82
Ability to impact global and societal engineering problems		4X	21X	8X	4X	3.32	0.82
Recognition and ability to engage in life-long learning		3X	12X	14X	8X	3.73	0.90
Knowledge of contemporary issues		3X	12X	16X	6X	3.68	0.85
Ability to use techniques, skills and modern engineering tools	1X	3X	15X	14X	4X	3.46	0.90
Ability to work effectively with a client		1X	15X	15X	6X	3.70	0.78
Ability to manage an engineering project			17X	13X	7X	3.73	0.77

Appreciation of real-world constraints on engineering solutions			14X	14X	8X	3.83	0.77
Ability to understand the relationship between theoretical models and applied field work			17X	13X	7X	3.73	0.77

12. Reflect on your experience with individuals from other cultures and indicate the extent to which you agree or disagree with each of the following statements:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
I have interacted with people from different cultures			2X	20X	15X	4.35	0.59
I have an appreciation for different cultures			1X	22X	14X	4.35	0.54
I have acquired relationships with people from different cultures			3X	19X	15X	4.32	0.63
I have experienced different social and economic environments		1X	3X	18X	15X	4.27	0.73
My academic and professional experiences have influenced my attitude towards communities that are different than my own	1X	2X	11X	15X	8X	3.73	0.96
My service-learning experience has increased my interpersonal skills		4X	8X	17X	8X	3.78	0.92
My service-learning experience has given me an appreciation for what I have		7X	10X	12X	8X	3.57	1.04
My service-learning experience has caused me to view people and communities in a different context		8X	11X	11X	7X	3.46	1.04

13. Think about your service-learning experience and indicate the extent to which you agree or disagree with each of the following statements:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
I was able to apply the concepts I have learned in my classes to the service learning experience		5X	7X	21X	4X	3.65	0.86

The service learning experience helped me better understand some of the concepts presented in the course		4X	10X	18X	5X	3.65	0.86
I would recommend the class to other students		2X	6X	18X	11X	4.03	0.83
The service-learning project has taught me valuable experiences		1X	9X	18X	9X	3.95	0.78
I spent much more time on the service-learning project than expected		6X	11X	10X	10X	3.65	1.06
Enough time was spent in class preparing me for my service- learning experience	1X	3X	12X	18X	3X	3.51	0.87
The time spent on the service-learning project was reasonable	1X	5X	4X	23X	4X	3.65	0.95
Overall, I am satisfied with the service-learning experience		3X	9X	18X	7X	3.78	0.85
The active learning in the project was challenging	1X	5X	11X	16X	4X	3.46	0.96
The service-learning experience incorporated theory into practice		3X	16X	14X	4X	3.51	0.80
Service-learning provided me with connections between the classroom and the real world		3X	9X	17X	8X	3.81	0.88
The service-learning experience made it easier to understand class material	2X	7X	14X	10X	4X	3.19	1.05
The service-learning experience enhanced and expanded the importance of class lectures	2X	6X	13X	11X	5X	3.30	1.08
The service-learning experience provided the opportunity to practice what is learned in class		8X	12X	13X	4X	3.35	0.95
The service learning experience has increased my interest in science/engineering		6X	11X	12X	8X	3.59	1.01

14. Please rate your instructor on the opportunities afforded to you in the course:

	Never 1	Rarely 2	Sometimes 3	Frequently 4	Always 5	**Mean**	**Std. Dev.**
a) The instructor tied together the concepts taught in class with the project	6X	5X	13X	8X	5X	3.03	1.26

b) The instructor provided me with feedback on my performance throughout the project	6X	4X	11X	10X	6X	3.16	1.30
c) The instructor was available for guidance on the project	4X	2X	9X	14X	8X	3.54	1.22
d) The instructor provided opportunities to apply what we learned in class to the project	3X	5X	15X	9X	5X	3.22	1.11
e) The instructor encouraged us to interact with the clients	2X	4X	8X	14X	9X	3.65	1.14
f) The instructor was enthusiastic about the service learning component of the course	3X	2X	8X	13X	11X	3.73	1.19

15. Do you intend to continue to serve in your community in the future?

	Yes 1	No 2	Unsure 3	**Mean**	**Std. Dev.**
Do you intend to continue to serve in your community in the future?	28X	2X	7X	1.43	0.80

16. Discuss how your service-learning project did or did not meet your expectations. textual field

17. What have you learned about yourself or others since becoming involved in the service-learning project? textual field

18. What suggestions, if any, do you have for improving the service-learning program? textual field

19. Describe your overall level of satisfaction with your service-learning experience. textual field

20. What were some of the challenge(s) of your project? textual field

21. What advice would you give to a student who is thinking about participating in a service-learning project? textual field

22. Are there question(s) we should have asked on this survey? We are looking for questions that will help us understand your service learning experience and can be used to improve the program. If you have any suggestions, please list them here. textual field

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If you have any questions or comments, please send mail to engineering@ucmerced.edu or call (209) 228-4411.

Statistic For Survey: Service Learning Survey (Pre) Fall 08

The are *24* completed surveys and 12 incomplete surveys

Survey Directions: This survey is intended to gather your perceptions about science and engineering, your thoughts about your current level of skills and abilities, and gather information about your general academic and professional careers. Your individual answers are completely confidential. Please respond to all of the questions as honestly as possible. Pay CLOSE ATTENTION TO THE SCALE BEING USED FOR EACH QUESTION AND ANSWER ACCORDINGLY. Thank you in advance for your time.

1. Your Sex:

	Male 1	Female 2	**Mean**	**Std. Dev.**
Your Sex:	26X	10X	1.28	0.45

2. As of today, how old are you? textual field

3. Is English your native language?

	Yes 1	No 2	**Mean**	**Std. Dev.**
Is English your native language?	30X	6X	1.17	0.38

4. What is your citizenship status?

	U.S. Citizen 1	Permanent Resident 2	Neither 3	**Mean**	**Std. Dev.**
What is your citizenship status?	33X	2X	1X	1.11	0.40

5. Your Ethnicity:

	African-American/Black 1	American Indian/Alaskan Native 2	Chinese/Chinese-American 3	East Indian/Pakistani 4	Filipino/Filipino-American 5	Hmong/Hmong-American 6	Japanese/Japanese-American 7	Korean/Korean-American 8	Mexican/ American /La
Your Ethnicity:		1X	6X	1X	7X				7

6. Your Ethnicity: Other (Please Specify) textual field

7. Do you have a disability, as defined by Rehabilitation Act, 1973, or the Americans with Disabilities Act, ADA, 1990?

	Yes 1	No 2	Decline to State 3	**Mean**	**Std. Dev.**
Do you have a disability, as defined by Rehabilitation Act, 1973, or the Americans with Disabilities Act, ADA, 1990?		34X	1X	2.03	0.17

8. Are you married?

	Yes 1	No 2	**Mean**	**Std. Dev.**
Are you married?	2X	33X	1.94	0.24

9. Do you have any children?

	No 1	1 or more on the way 2	1 3	2 4	3 5	More than 3 6	**Mean**	**Std. Dev.**
Do you have any children?	33X		1X		1X		1.17	0.75

10. How far is your permanent home from UC-Merced?

	In the same town 1	In the same district 2	In the county 3	Same geographic region (i.e. Central California) 4	Within California 5	Within the US 6	**Mean**	**Std. Dev.**

How far is your permanent home from UC-Merced?	8X		2X	8X	17X		3.74	1.62

11. Have you ever participated in the UC Merced service-learning program?

	Yes 1	No 2	**Mean**	**Std. Dev.**
Have you ever participated in the UC Merced service-learning program?	24X	11X	1.31	0.47

12. If so, how long ago were you involved in the UC Merced service-learning program?

	Last term 1	2 terms ago 2	3 terms ago 3	4 terms ago 4	5 terms ago 5	6 terms ago 6	Over 6 terms ago 7	**Mean**	**Std. Dev.**
If so, how long ago were you involved in the UC Merced service-learning program?	23X	6X	1X			1X		1.42	0.99

13. How many units/credits of service-learning credits do you have?

	1 1	2 2	3 3	4 4	More than 4 5	**Mean**	**Std. Dev.**
How many units/credits of service-learning credits do you have?	9X	13X	4X		7X	2.48	1.46

14. Have you ever participated in a service-learning program in high school?

	Yes 1	No 2	**Mean**	**Std. Dev.**
Have you ever participated in a service-learning program in high school?	2X	33X	1.94	0.24

15. Have you participated in a college/university service-learning program, other than UC-Merced?

	Yes 1	No 2	**Mean**	**Std. Dev.**
Have you participated in a college/university service-learning program, other than UC-Merced?		35X	2.00	0.00

16. Did you graduate from high school?

	Yes 1	GED 2	Sate Diploma 3	Other 4	**Mean**	**Std. Dev.**
Did you graduate from high school?	35X				1.00	0.00

17. If so, what type of high school did you graduate from?

	Public School 1	Private School 2	Charter School 3	Religious School 4	Magnet School 5	**Mean**	**Std. Dev.**
If so, what type of high school did you graduate from?	32X	1X		2X		1.20	0.72

18. What was the average letter grade you received in high school? textual field

19. During high school, how many years did you take the following subjects:

	zero 1	.5 2	1 3	1.5 4	2 5	2.5 6	3 7	3.5 8	4 9	More than 4 10	**Mean**	**Std. Dev.**
Biological Science	2X	1X	16X		10X		4X		1X	1X	4.26	2.05
Computer Science	15X	7X	7X		2X		1X		1X	2X	2.74	2.56
English					1X				33X	1X	8.91	0.70
Foreign Language			1X		10X		16X	1X	6X	1X	6.77	1.61
History			2X		14X	1X	15X		2X	1X	6.14	1.54
Math			1X		2X		1X		28X	3X	8.63	1.44
Physical Science	1X		11X	1X	12X		6X		3X	1X	5.06	2.15
Political Science	7X	1X	17X		5X		2X	1X	1X	1X	3.60	2.29
The Arts	2X	1X	18X	1X	7X	1X	1X		2X	2X	4.23	2.30

20. During high school, what was your average grade(s) received for the following subjects:

	A 1	B 2	C 3	D 4	F 5	**Mean**	**Std. Dev.**
Biological Science	18X	15X	1X			1.50	0.56
Computer Science	24X	1X	3X		1X	1.38	0.94
English	19X	14X	1X			1.47	0.56

Foreign Language	19X	10X	5X			1.59	0.74
History	21X	10X	3X			1.47	0.66
Math	22X	9X	3X			1.44	0.66
Physical Science	19X	14X	1X			1.47	0.56
Political Science	20X	12X	2X			1.47	0.61
The Arts	28X	4X	1X			1.18	0.46

21. What is your enrollment status?

	Full-time 1	Part-time 2	Non-degree seeking student 3	**Mean**	**Std. Dev.**
What is your enrollment status?	35X			1.00	0.00

22. Year in school:

	Fr 1	So 2	Jr 3	Sr 4	5th yr 5	**Mean**	**Std. Dev.**
Year in school:	3X	18X	6X	6X	2X	2.60	1.06

23. In terms of college selection, UC-Merced was your:

	First choice 1	Second choice 2	Third choice 3	Less than third choice 4	**Mean**	**Std. Dev.**
In terms of college selection, UC-Merced was your:	10X	11X	4X	10X	2.40	1.19

24. Are you a transfer student?

	Yes 1	No 2	**Mean**	**Std. Dev.**
Are you a transfer student?	7X	28X	1.80	0.41

25. Your Major(s): textual field

26. Overall UC-Merced GPA: textual field

27. Major(s) GPA: textual field

28. SAT Verbal Score: textual field

29. SAT Math Score: textual field

30. ACT Composite Score (If applicable): textual field

31. What is your final degree objective?

	None 1	Vocational certificate 2	Associate of Arts (or equivalent) 3	Bachelors 4	Masters 5	MD 6	JD 7	PhD 8	**Mean**	**Std. Dev.**
What is your final degree objective?	1X			12X	10X	1X		11X	5.51	1.87

32. Other (Please Specify): textual field

33. What is your career objective upon graduation?

	Industry 1	Faculty 2	Academia (other than faculty member) 3	Research 4	Non-profit 5	Government 6	Military 7	K-12 8	**Mean**	**Std. Dev.**
What is your career objective upon graduation?	23X		1X	6X	1X		2X	2X	2.43	2.25

34. Other (Please Specify): textual field

35. What is your parent(s) or legal guardian(s) present income level?

	Less than $15,000 1	$15,000-$30,000 2	$30,001-$45,000 3	$45,001-$60,000 4	$60,001-$75,000 5	$75,001-$90,000 6	$90,001-$100,000 7	Over $100,000 8	Don't Know 9	**Mean**	**Std. Dev.**
What is your parent(s) or legal guardian(s)		2X	2X	4X	3X	4X	2X	5X	13X	6.74	2.36

present income level?											

36. Father's Highest Education Level:

	Did not Graduate High School 1	High School Graduate 2	Some College 3	Associate Arts 4	Bachelors 5	Master's Degree 6	Professional Degree 7	Doctoral Degree 8	Not Applicable/Don't Know 9	**Mean**	**Std. Dev.**
Father's Highest Education Level:	5X	2X	10X		7X	5X	1X		5X	4.46	2.52

37. Mother's Highest Education Level:

	Did not Graduate High School 1	High School Graduate 2	Some College 3	Associate Arts 4	Bachelors 5	Master's Degree 6	Professional Degree 7	Doctoral Degree 8	Not Applicable/Don't Know 9	**Mean**	**Std. Dev.**
Mother's Highest Education Level:	3X	5X	2X	3X	8X	7X	2X	1X	4X	4.89	2.37

38. Currently, my parents are:

	Married/living together 1	Divorced/separated/not living together 2	One or both deceased 3	**Mean**	**Std. Dev.**
Currently, my parents are:	25X	9X	1X	1.31	0.53

39. Do you qualify for federal work-study?

	Yes 1	No 2	Don't Know 3	**Mean**	**Std. Dev.**
Do you qualify for federal work-study?	9X	6X	20X	2.31	0.87

40. Do you receive federal work-study?

	Yes 1	No 2	Don't Know 3	**Mean**	**Std. Dev.**
Do you receive federal work-study?	2X	16X	17X	2.43	0.61

41. Do you receive federal student loans?

	Yes 1	No 2	Don't Know 3	**Mean**	**Std. Dev.**
Do you receive federal student loans?	14X	17X	4X	1.71	0.67

42. Are you concerned with your ability to finance your college education?

	No 1	Somewhat 2	Yes 3	**Mean**	**Std. Dev.**
Are you concerned with your ability to finance your college education?	7X	12X	16X	2.26	0.78

43. Rate yourself on each of the following traits or skills as compared with the average undergraduate science or engineering student:

	Well Below Average 1	Below Average 2	Average 3	Above Average 4	Well Above Average 5	**Mean**	**Std. Dev.**
Overall academic ability		1X	10X	18X	5X	3.79	0.73
Science and mathematics ability		1X	8X	22X	3X	3.79	0.64
Ability to apply skills and concepts to solving problems		1X	5X	27X	1X	3.82	0.52
Ability to work cooperatively with others	1X		8X	16X	9X	3.94	0.89
Familiarity with scientific techniques and instrumentation		1X	13X	18X	2X	3.62	0.65
Ability to make academic presentations		3X	13X	11X	7X	3.65	0.92
Capacity to carry out own investigations and inquires			9X	22X	3X	3.82	0.58
Computer programming skills	1X	7X	14X	8X	4X	3.21	1.01
Confidence in expressing yourself in a small group setting		1X	11X	12X	10X	3.91	0.87
Confidence in speaking with instructors about the sciences			15X	17X	2X	3.62	0.60
Ability to find resources on a scientific topic			13X	18X	3X	3.71	0.63
Ability to explain scientific concepts to others			14X	17X	3X	3.68	0.64

Time Management	1X	7X	9X	11X	6X	3.41	1.10
Public speaking ability	2X	7X	12X	7X	7X	3.29	1.18
Clear career goal(s)	1X	4X	12X	12X	5X	3.47	0.99
Leadership ability		1X	16X	13X	4X	3.59	0.74
Ability to apply what learned in college to real world problems		1X	11X	19X	3X	3.71	0.68
Self-confidence	1X	1X	10X	16X	6X	3.74	0.90
Understanding the importance of others perceptions		2X	4X	19X	9X	4.03	0.80
Writing ability	1X	6X	6X	17X	4X	3.50	1.02

44. Please indicate the importance of each of the following in your decision to pursue science and/or engineering as a career:

	Very Unimportant 1	Unimportant 2	No Effect 3	Important 4	Very Important 5	**Mean**	**Std. Dev.**
Making a contribution to society		1X	7X	18X	8X	3.97	0.76
Making a theoretical contribution to science	1X	2X	13X	16X	2X	3.47	0.83
Securing a financially stable or profitable career			6X	15X	13X	4.21	0.73
Interest in experimental discovery		1X	11X	19X	3X	3.71	0.68
Interest in solving problems			4X	20X	10X	4.18	0.63
Interest in understanding natural phenomena			10X	18X	6X	3.88	0.69
To be a community leader	1X		17X	12X	4X	3.53	0.83
Interest in the subject matter			9X	14X	11X	4.06	0.78
Interest in technology			7X	15X	12X	4.15	0.74
Parent/legal guardian is in the field	2X		24X	6X	2X	3.18	0.80
Sibling is in the field	3X		28X	2X	1X	2.94	0.74
Other family member is in the field	2X	1X	24X	5X	2X	3.12	0.81
Friend is in the field	1X	2X	23X	6X	2X	3.18	0.76

45. Consider your thoughts about science and engineering, and indicate the extent to which you agree or disagree with each of the following statements:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
The way science is taught encourages questioning		3X	10X	19X	2X	3.59	0.74
Sometimes scientists cannot find the answer to their questions		1X	8X	21X	4X	3.82	0.67
Engineers do not have enough time for family, friends, or fun	4X	9X	15X	4X	2X	2.74	1.02
It may be said that scientific ideas evolve in their development			8X	20X	6X	3.94	0.65
Becoming a scientist or engineer takes too many years of education	2X	10X	12X	9X	1X	2.91	0.97
When I think of an engineer, I think of a confident person		2X	12X	15X	5X	3.68	0.81
Science promotes collaboration		1X	10X	18X	5X	3.79	0.73
As an engineer you are given a great deal of opportunity to apply theory	1X	1X	10X	16X	6X	3.74	0.90
Learning science is mostly memorizing facts	6X	12X	9X	4X	3X	2.59	1.18
The work of scientists and engineers benefits society		2X	8X	11X	13X	4.03	0.94
Hands-on learning is important to learning new concepts			6X	12X	16X	4.29	0.76
Learning science is mostly applying theories or concepts to new and/or practical situations		1X	14X	17X	2X	3.59	0.66
Learning science mostly synthesizing of information		4X	17X	13X		3.26	0.67

46. Think about your own learning style and the ways in which you manage your life decisions. Then, indicate the extent to which you agree or disagree with each of the following statements:

	Never 1	Rarely 2	Sometimes 3	Frequently 4	Always 5	**Mean**	**Std. Dev.**
I work hard to do well, even if I don't like a task		1X	12X	16X	5X	3.74	0.75
I try to understand the tasks before I attempt to solve them			9X	15X	10X	4.03	0.76
I am willing to do extra work on tasks to improve my knowledge		1X	10X	18X	5X	3.79	0.73
I try to figure out my goals and what I need to do to accomplish them			6X	20X	8X	4.06	0.65
I check my accuracy as I progress through a task		1X	12X	18X	3X	3.68	0.68
I make my own decisions regarding what to do with my life			8X	13X	13X	4.15	0.78

I can have a positive impact on local social problems	1X	2X	14X	12X	5X	3.53	0.93
The extent of my achievement is often determined by chance	2X	12X	10X	7X	3X	2.91	1.08
I try to learn from my success and failures		1X	3X	15X	15X	4.29	0.76
I plan and manage my time to maximize my effort		4X	8X	15X	7X	3.74	0.93
I have little control over the things that happen to me	2X	9X	14X	7X	2X	2.94	0.98
I believe I can succeed at most things if I apply myself			3X	15X	16X	4.38	0.65

47. Think about your experiences working in a team and indicate the extent to which you agree or disagree with each statement below:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
I help to solve problems by using information provided by the team			5X	21X	8X	4.09	0.62
I focus on completing the team task successfully			4X	19X	11X	4.21	0.64
I attempt to change incorrect information immediately			7X	19X	8X	4.03	0.67
I respect the thoughts and opinions of others in the team			5X	16X	13X	4.24	0.70
I lead when appropriate, mobilizing the group for high performance		2X	6X	16X	10X	4.00	0.85
Working on a team helps me to learn			10X	15X	9X	3.97	0.76
I enjoy working on teams	1X	1X	10X	10X	12X	3.91	1.03

48. Reflect on your past learning experiences and involvement with the community. Then, indicate the extent to which you agree or disagree with each of the following statements:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
I think people should find time to contribute to their community			10X	19X	5X	3.85	0.66
Being involved in a program to improve my community is important			12X	17X	5X	3.79	0.69
I am concerned about local community issues	1X		15X	13X	5X	3.62	0.85
It is important for me to find a career that directly benefits others	1X	1X	11X	13X	8X	3.76	0.96

49. Consider your academic and professional experiences and reflect on the skills you have obtained. Then, rate your skill level in the following areas:

	Well Below Average 1	Below Average 2	Average 3	Above Average 4	Well Above Average 5	**Mean**	**Std. Dev.**
Confidence in speaking with instructors about the sciences		1X	15X	14X	4X	3.62	0.74
Ability to apply knowledge of mathematics, science and engineering			12X	19X	3X	3.74	0.62
Ability to design and conduct experiments, and analyze and interpret data			13X	16X	5X	3.76	0.70
Ability to design a system, process or component to meet desired needs			14X	17X	3X	3.68	0.64
Ability to function on a multi-disciplinary team			10X	20X	4X	3.82	0.63
Ability to identify, formulate and solve engineering problems		1X	11X	21X	1X	3.65	0.60
Understanding of ethical and professional responsibilities			14X	13X	7X	3.79	0.77
Ability to communicate effectively		2X	12X	16X	4X	3.65	0.77
Ability to impact global and societal engineering problems		3X	17X	12X	2X	3.38	0.74
Recognition and ability to engage in life-long learning			11X	16X	7X	3.88	0.73
Knowledge of contemporary issues		3X	16X	10X	5X	3.50	0.86
Ability to use techniques, skills and modern engineering tools		1X	15X	12X	6X	3.68	0.81
Ability to work effectively with a client	1X	1X	9X	17X	6X	3.76	0.89
Ability to manage an engineering project		2X	13X	13X	6X	3.68	0.84
Appreciation of real-world constraints on engineering solutions			15X	13X	6X	3.74	0.75
Ability to understand the relationship between theoretical models and applied field work		1X	14X	14X	5X	3.68	0.77

50. Reflect on your experience with individuals from other cultures and indicate the extent to which you agree or disagree with each of the following statements:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
Hands-on learning is important to learning new concepts			4X	16X	14X	4.29	0.68
I have interacted with people from different cultures			4X	16X	14X	4.29	0.68

I have an appreciation for different cultures			6X	14X	14X	4.24	0.74
I have acquired relationships with people from different cultures			4X	17X	13X	4.26	0.67
I have experienced different social and economic environments			7X	14X	13X	4.18	0.76
My academic and professional experiences have influenced my attitude towards communities that are different than my own	1X	1X	9X	11X	12X	3.94	1.01

51. Last high school attended: textual field

If you have any questions or comments, please send mail to engineering@ucmerced.edu or call (209) 228-4411.

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Statistic For Survey: Service Learning Survey (Post) Fall 08

The are *64* completed surveys and 4 incomplete surveys

Survey Directions: This survey is intended to gather your perceptions about science and engineering, your thoughts about your current level of skills and abilities, and gather information about your general academic and professional careers. Your individual answers are completely confidential. Please respond to all of the questions as honestly as possible. Pay close attention to the scale being used for each question and answer accordingly. Thank you in advance for your time.

1. What is your final degree objective?

	None 1	Vocational certificate 2	Associate of Arts (or equivalent) 3	Bachelors 4	Masters 5	MD 6	JD 7	PhD 8	**Mean**	**Std. Dev.**
What is your final degree objective?			1X	23X	26X	1X	1X	16X	5.38	1.57

2. Continuation of question #1-Other (Please Specify): textual field

3. What is your career objective upon graduation?

	Industry 1	Faculty 2	Academia (other than faculty member) 3	Research 4	Non-profit 5	Government 6	Military 7	K-12 8	**Mean**	**Std. Dev.**
What is your career objective upon graduation?	40X		4X	12X	2X	7X	2X	1X	2.56	2.07

4. Continuation of question #2-Other (Please specify): textual field

5. Rate yourself on each of the following traits or skills as compared with the average undergraduate science or engineering student:

	Well Below Average 1	Below Average 2	Average 3	Above Average 4	Well Above Average 5	**Mean**	**Std. Dev.**
Overall academic ability		3X	22X	36X	7X	3.69	0.72
Science and mathematics ability		4X	15X	38X	11X	3.82	0.77
Ability to apply skills and concepts to solving problems		2X	17X	41X	8X	3.81	0.67
Ability to work cooperatively with others		3X	16X	31X	18X	3.94	0.83
Familiarity with scientific techniques and instrumentation		1X	34X	20X	13X	3.66	0.80
Ability to make academic presentations		3X	25X	27X	13X	3.74	0.82
Capacity to carry out own investigations and inquires		1X	24X	31X	12X	3.79	0.74
Computer programming skills	1X	13X	33X	16X	5X	3.16	0.87
Confidence in expressing yourself in a small group setting		3X	17X	30X	18X	3.93	0.83
Confidence in speaking with instructors about the sciences		4X	21X	26X	17X	3.82	0.88
Ability to find resources on a scientific topic			21X	35X	12X	3.87	0.69
Ability to explain scientific concepts to others		1X	30X	28X	9X	3.66	0.73
Time Management	2X	14X	23X	22X	7X	3.26	1.00
Public speaking ability	2X	12X	25X	18X	11X	3.35	1.05
Clear career goal(s)	2X	7X	27X	22X	10X	3.46	0.97
Ability to apply what learned in college to real world problems		2X	22X	35X	9X	3.75	0.72
Self-confidence	1X	2X	27X	25X	13X	3.69	0.87
Understanding the importance of others perceptions	1X	3X	18X	30X	16X	3.84	0.89

Writing ability		5X	23X	28X	11X	3.67	0.84
Leadership ability	1X	4X	20X	29X	14X	3.75	0.90

6. Please indicate the importance of each of the following in your decision to pursue science and/or engineering as a career:

	Very Unimportant 1	Unimportant 2	No Effect 3	Important 4	Very Important 5	**Mean**	**Std. Dev.**
Making a contribution to society	2X	3X	10X	33X	20X	3.97	0.95
Making a theoretical contribution to science	2X	5X	22X	30X	9X	3.57	0.92
Securing a financially stable or profitable career	1X	1X	8X	30X	28X	4.22	0.83
Interest in experimental discovery	2X	3X	16X	32X	15X	3.81	0.93
Interest in solving problems	2X	1X	9X	33X	23X	4.09	0.89
Interest in understanding natural phenomena	2X	3X	13X	34X	16X	3.87	0.93
To be a community leader	2X	5X	22X	26X	13X	3.63	0.98
Interest in the subject matter	2X		14X	31X	21X	4.01	0.89
Interest in technology	2X	1X	12X	24X	29X	4.13	0.96
Parent/legal guardian is in the field	7X	11X	30X	14X	6X	3.01	1.07
Sibling is in the field	9X	11X	41X	6X	1X	2.69	0.87
Other family member is in the field	9X	10X	34X	12X	3X	2.85	1.01
Friend is in the field	7X	9X	28X	21X	3X	3.06	1.02

7. Consider your thoughts about science and engineering, and indicate the extent to which you agree or disagree with each of the following statements:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
The way science is taught encourages questioning	2X	8X	15X	33X	10X	3.60	0.98
Sometimes scientists cannot find the answer to their questions	1X	1X	7X	42X	17X	4.07	0.74

Engineers do not have enough time for family, friends, or fun	9X	16X	24X	14X	5X	2.85	1.12
It may be said that scientific ideas evolve in their development		1X	14X	39X	14X	3.97	0.69
Becoming a scientist or engineer takes too many years of education	4X	20X	28X	10X	6X	2.91	1.02
When I think of an engineer, I think of a confident person	1X	6X	19X	32X	10X	3.65	0.89
Science promotes collaboration	2X	2X	14X	35X	15X	3.87	0.90
As an engineer you are given a great deal of opportunity to apply theory	1X	2X	14X	37X	14X	3.90	0.81
Learning science is mostly memorizing facts	9X	24X	23X	10X	2X	2.59	1.00
The work of scientists and engineers benefits society		1X	10X	22X	35X	4.34	0.78
Hands-on learning is important to learning new concepts	1X	2X	7X	27X	31X	4.25	0.87
Learning science is mostly applying theories or concepts to new and/or practical situations	1X	3X	18X	39X	7X	3.71	0.77
Learning science mostly synthesizing of information	1X	9X	29X	25X	4X	3.32	0.84

8. Think about your own learning style and the ways in which you manage your life decisions. Then, indicate the extent to which you agree or disagree with each of the following statements:

	Never 1	Rarely 2	Sometimes 3	Frequently 4	Always 5	**Mean**	**Std. Dev.**
I work hard to do well, even if I don't like a task	1X	1X	22X	32X	11X	3.76	0.80
I try to understand the tasks before I attempt to solve them			12X	39X	16X	4.06	0.65
I am willing to do extra work on tasks to improve my knowledge		2X	25X	27X	13X	3.76	0.80
I try to figure out my goals and what I need to do to accomplish them	1X		17X	27X	22X	4.03	0.85
I check my accuracy as I progress through a task		5X	17X	34X	11X	3.76	0.82
I make my own decisions regarding what to do with my life		1X	15X	24X	27X	4.15	0.82

I can have a positive impact on local social problems		3X	30X	25X	9X	3.60	0.78
The extent of my achievement is often determined by chance	5X	19X	26X	14X	3X	2.87	0.98
I try to learn from my success and failures			10X	31X	26X	4.24	0.70
I plan and manage my time to maximize my effort	1X	8X	26X	18X	14X	3.54	1.00
I have little control over the things that happen to me	9X	20X	23X	13X	2X	2.69	1.03
I believe I can succeed at most things if I apply myself			8X	23X	36X	4.42	0.70

9. Think about your experiences working in a team and indicate the extent to which you agree or disagree with each statement below:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
I help to solve problems by using information provided by the team		1X	7X	43X	16X	4.10	0.63
I focus on completing the team task successfully		1X	10X	36X	20X	4.12	0.71
I attempt to change incorrect information immediately		1X	12X	32X	22X	4.12	0.75
I respect the thoughts and opinions of others in the team		1X	6X	28X	32X	4.36	0.71
I lead when appropriate, mobilizing the group for high performance		4X	12X	31X	20X	4.00	0.85
Working on a team helps me to learn		4X	14X	25X	24X	4.03	0.90
I enjoy working on teams	2X	2X	19X	24X	20X	3.87	0.98

10. Reflect on your past learning experiences and involvement with the community. Then, indicate the extent to which you agree or disagree with each of the following statements:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
I think people should find time to contribute to their community			13X	35X	19X	4.09	0.69
Being involved in a program to improve my community is important		3X	9X	39X	16X	4.01	0.75

I am concerned about local community issues	2X	2X	19X	28X	15X	3.79	0.94
It is important for me to find a career that directly benefits others	2X	5X	16X	28X	16X	3.76	1.00

11. As a result of working on the service-learning project, please rate your skill level in the following areas:

	Well Below Average 1	Below Average 2	Average 3	Above Average 4	Well Above Average 5	**Mean**	**Std. Dev.**
Ability to apply knowledge of mathematics, science and engineering	1X	2X	20X	35X	9X	3.73	0.79
Ability to design and conduct experiments, and analyze and interpret data	1X	2X	21X	34X	9X	3.72	0.79
Ability to design a system, process or component to meet desired needs	1X	2X	21X	33X	10X	3.73	0.81
Ability to function on a multi-disciplinary team	1X		19X	29X	18X	3.94	0.83
Ability to identify, formulate and solve engineering problems	1X	1X	25X	32X	8X	3.67	0.77
Understanding of ethical and professional responsibilities	1X	2X	18X	28X	18X	3.90	0.89
Ability to communicate effectively	1X	3X	20X	25X	17X	3.82	0.93
Ability to impact global and societal engineering problems	1X	5X	26X	27X	8X	3.54	0.86
Recognition and ability to engage in life-long learning	1X	1X	24X	27X	14X	3.78	0.85
Knowledge of contemporary issues	1X	5X	25X	27X	9X	3.57	0.87
Ability to use techniques, skills and modern engineering tools	1X	3X	28X	26X	9X	3.58	0.84
Ability to work effectively with a client	2X	2X	20X	30X	13X	3.75	0.91
Ability to manage an engineering project	2X		24X	27X	14X	3.76	0.89

Appreciation of real-world constraints on engineering solutions	1X	1X	20X	26X	19X	3.91	0.88
Ability to understand the relationship between theoretical models and applied field work	1X	1X	19X	33X	13X	3.84	0.81

12. Reflect on your experience with individuals from other cultures and indicate the extent to which you agree or disagree with each of the following statements:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
I have interacted with people from different cultures			6X	30X	31X	4.37	0.65
I have an appreciation for different cultures			6X	25X	36X	4.45	0.66
I have acquired relationships with people from different cultures			9X	28X	30X	4.31	0.70
I have experienced different social and economic environments			13X	27X	27X	4.21	0.75
My academic and professional experiences have influenced my attitude towards communities that are different than my own		2X	18X	29X	18X	3.94	0.81
My service-learning experience has increased my interpersonal skills		4X	17X	33X	13X	3.82	0.82
My service-learning experience has given me an appreciation for what I have		3X	25X	24X	15X	3.76	0.85
My service-learning experience has caused me to view people and communities in a different context		8X	27X	21X	11X	3.52	0.91

13. Think about your service-learning experience and indicate the extent to which you agree or disagree with each of the following statements:

	Stongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	**Mean**	**Std. Dev.**
I was able to apply the concepts I have learned in my classes to the service learning experience	2X	4X	13X	30X	18X	3.87	0.98

The service learning experience helped me better understand some of the concepts presented in the course	1X	6X	16X	33X	11X	3.70	0.90
I would recommend the class to other students	2X	3X	15X	21X	26X	3.99	1.04
The service-learning project has taught me valuable experiences	2X	2X	14X	25X	24X	4.00	0.98
I spent much more time on the service-learning project than expected		5X	18X	25X	19X	3.87	0.92
Enough time was spent in class preparing me for my service- learning experience	1X	6X	22X	27X	11X	3.61	0.92
The time spent on the service-learning project was reasonable	1X	8X	13X	34X	11X	3.69	0.94
Overall, I am satisfied with the service-learning experience	3X	4X	13X	36X	11X	3.72	0.97
The active learning in the project was challenging	2X	5X	19X	31X	10X	3.63	0.93
The service-learning experience incorporated theory into practice	1X	5X	17X	30X	14X	3.76	0.92
Service-learning provided me with connections between the classroom and the real world	1X	2X	12X	36X	16X	3.96	0.82
The service-learning experience made it easier to understand class material	2X	8X	21X	27X	9X	3.49	0.98
The service-learning experience enhanced and expanded the importance of class lectures	3X	6X	21X	28X	9X	3.51	0.99
The service-learning experience provided the opportunity to practice what is learned in class	4X	6X	18X	29X	10X	3.52	1.05
The service learning experience has increased my interest in science/engineering	1X	5X	16X	27X	18X	3.84	0.96

14. Please rate your instructor on the opportunities afforded to you in the course:

	Never 1	Rarely 2	Sometimes 3	Frequently 4	Always 5	**Mean**	**Std. Dev.**
a) The instructor tied together the concepts taught in class with the project	3X	6X	16X	22X	20X	3.75	1.12

b) The instructor provided me with feedback on my performance throughout the project	2X	6X	14X	25X	20X	3.82	1.06
c) The instructor was available for guidance on the project		2X	15X	24X	26X	4.10	0.86
d) The instructor provided opportunities to apply what we learned in class to the project	2X	2X	19X	21X	23X	3.91	1.01
e) The instructor encouraged us to interact with the clients	1X	2X	12X	22X	30X	4.16	0.93
f) The instructor was enthusiastic about the service learning component of the course			11X	19X	37X	4.39	0.76

15. Do you intend to continue to serve in your community in the future?

	Yes 1	No 2	Unsure 3	**Mean**	**Std. Dev.**
Do you intend to continue to serve in your community in the future?	47X	3X	17X	1.55	0.88

16. Discuss how your service-learning project did or did not meet your expectations. textual field

17. What have you learned about yourself or others since becoming involved in the service-learning project? textual field

18. What suggestions, if any, do you have for improving the service-learning program? textual field

19. Describe your overall level of satisfaction with your service-learning experience. textual field

20. What were some of the challenge(s) of your project? textual field

21. What advice would you give to a student who is thinking about participating in a service-learning project? textual field

22. Are there question(s) we should have asked on this survey? We are looking for questions that will help us understand your service learning experience and can be used to improve the program. If you have any suggestions, please list them here. textual field

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If you have any questions or comments, please send mail to engineering@ucmerced.edu or call (209) 228-4411.