Marrying Student Survey Data with Institutional Data for a Stronger Assessment Analysis

A GE Assessment Collaboration between Faculty & Institutional Research

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*Part of this presentation is excerpted from one previously presented with Dr. Wayne Tikkanen, former Faculty Director of GE Assessment Cal State LA

Session Learning Outcomes

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- Attendees will be able to describe an example of faculty and administration/staff collaboration and identify at least two ways such collaboration can improve assessment projects.
- Attendees will be able to identify the value that can be added by collaborating with institutional research office staff, who have knowledge of, and access to, institutional data and analysis tools, as well as training in methods and statistics.
- Attendees will be able to identify available institutional data and explain how it can be leveraged to improve data collected from a survey and/or incorporated into other assessment projects.

Context: New GE Program & Conversion to Semesters Implemented Fall 2016

- Many GE outcomes resembled those in the previous program, falling into the categories of our institutional learning outcomes (ILOs)
  - Knowledge: Mastery of Content and Processes of Inquiry
  - Proficiency: Intellectual Skills
  - Engagement: Local and Global Communities
  - Transformation: Integrative Learning
- Several GE areas (e.g., American Government and Critical reasoning) were no longer restricted to the discipline area previously assigned
- Added requirements:
  - Civic learning (2 courses)
  - Refined the diversity requirement
  - Writing intensive courses (2 courses)

Student Perceptions of GE Learning Outcomes Achievement: Survey Design & Administration

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- Population and Sample
  - **2010** – No sampling: ALL students who had enrolled in any lower division GE course (2010 Winter, Spring and Fall quarters)
  - **2015 & 2016** – Students who had taken at least one lower division GE course in Fall and received grade of D or better (36% & 30%, respectively)
- Response Rates: **2010** – 10-12% **2015** – 15% **2016** – 16%
- GE Course selection:
  - Instructions directed student to respond about a GE course she/he had taken: - **2010 & 2015** – Respondent's selection
    - **2016** – Administrative sampled selection
  - **2015 & 2016** – Provided opportunity for respondent to submit answers for a 2nd GE course she/he had taken (optional); Respondent's selection
- Demographic Data
  - **2010** – No demographic data collected
  - **2015** – Demographic questions added to the survey
  - **2016** – Leveraged Institutional data; demographic questions removed

Survey Design & Administration: Leveraging Institutional Data

- Unique link sent to each student enabled us to utilize institutional data
  - Becomes confidential rather than anonymous
  - Shortens the survey – omit demographic questions, class standing, major, etc.
  - Improves consistency of the data – with officially reported data
  - Improves quality of the data – cleaner data, less missing data
  - Provides access to more data – respondents grades, GPA, time-to-degree
  - Assists with the incentive drawing process

Yields

		2015	2016
	Invitations sent	3400	3087
individuals	overall response rate	15% (13% after cleaning)	16% (before & after cleaning)
	responses (cleaned data)	453	498
	total courses submitted	571	579
courses	number of second courses submitted	118	80
	number of courses (cleaned)	545	548

GE Outcomes Survey Questions

5 (strongly agree), 3 (neutral), 1 (strongly disagree)

GENERAL GE OUTCOMES - SURVEY QUESTIONS	
The class I am describing in this survey:	Helped me organize and express ideas in written English
	Helped me organize and express ideas in oral English
	Helped me reason critically across a variety of disciplines
	Helped me apply basic concepts in quantitative reasoning
	Provided me with knowledge necessary for participation in American society and government
	Provided me with knowledge and skills for lifelong understanding and self-development
	Helped me develop my writing skills with useful feedback on one or more writing assignments
Please indication your level of agreement with how this course has helped you understand the distinct perspectives (values and ways of acquiring new knowledge) and major achievements in:	Natural Sciences
	Arts and Humanities
	Social Sciences

Diversity & Civic Learning Outcomes Survey Questions

5 (strongly agree), 3 (neutral), 1 (strongly disagree)

DIVERSITY & CIVIC LEARNING OUTCOMES - SURVEY QUESTIONS	
The class I am describing in this survey:	Helped me understand ways in which gender, race, ethnicity, and class intersect with each other
	Helped me appreciate diversity
	Helped me develop respect for others
	Helped me develop a greater awareness of ethical and social concerns.
Please indicate your level of agreement with the following statements about this course: *(Addressing NEW civic learning outcomes)*	I can explain how research can contribute to solving social problems.
	I can explain how using the steps of the problem solving process can contribute to solving social problems.
	I am committed to making a difference in society more than I was before taking this class.

Faculty Preliminary Results Approach

- Review of mean scores: looking for patterns, changes
- Preliminary exploratory analysis
- Prompt ideas for further direct assessment methods
- Comparisons of:
  - GE Subject Areas with traditional GE outcomes and
  - GE Subject Areas with Diversity & Civic Learning GE Outcomes
- Looking for and asking:
  - What results are surprising? Not so surprising?
  - What do we expect from GE courses?
  - Are the students getting that?
- Specific Questions on GE curriculum design changes
  - American Government and History: courses offered by more disciplines
    - How would this change perceived achievement in the GE outcomes (and perhaps others)?
  - Added requirements
    - Civic learning (2 courses, one in lower division GE)
      - Does the requirement make a significant difference in GELO achievement?
    - Refinement of the diversity requirement
      - What impact does that have on student perceptions of GELO achievement?

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← OTHER OUTCOMES →

All survey takers Fall **2015**

Course Area	Helped me understand ways in which gender, race, ethnicity, and class intersect with each other	Helped me appreciate diversity	Helped me develop respect for others	Helped me develop a greater awareness of ethical and social concerns.	Agreement with: I can explain how research can contribute to solving social problems.	Agreement with: I can explain how using the steps of the problem solving process can contribute to solving social problems.	Agreement with: I am committed to making a difference in society more than I was before taking this class.
Written Comm	4.18	4.3	4.18	4.31	3.87	3.68	3.79
Oral Comm	3.77	4.12	4.42	4.1	3.7	3.56	3.7
Critical Reasoning	4.44	4.61	4.5	4.22	4.18	4.29	4.53
Quant and Math Reasoning							
American & CA Gov't	3.86	3.86	3.88	4.03	3.83	3.73	3.77
BIOL Sciences							
PHYS Sciences	3.06	3.53	3.88	3.47	3.65	3.76	3.88
Applied Sciences	3.29	3.71	4	4	3.86	3.14	3.29
Arts & Humanities (Literature)	4	4.19	4	3.69	3.44	3.25	3.31
Arts & Humanities (Arts)	3.47	3.63	3.47	3.79	2.89	3	2.95
Arts & Humanities (Philosophy)	3.58	4.17	4.08	3.92	3.17	3.25	3.58
Social Sciences	4	4.18	4.34	4.27	4.05	4	3.93
Social Sciences (B)							
Life Long Learning	4.05	4.32	4.29	4.34	3.83	4.15	4.09

All survey takers F 2016

Course Area	OTHER OUTCOMES				Agreement with:		
	Helped me understand ways in which gender, race, ethnicity, and class intersect with each other	Helped me appreciate diversity	Helped me develop respect for others	Helped me develop a greater awareness of ethical and social concerns.	I can explain how research can contribute to solving social problems.	I can explain how using the steps of the problem solving process can contribute to solving social problems.	I am committed to making a difference in society more than I was before taking this class.
Written Comm	4.23	4.34	4.34	4.40	4.32	4.18	3.97
Oral Comm	3.95	4.28	4.44	4.13	4.23	4.20	3.87
Critical reasoning	4.15	4.30	4.39	4.24	4.05	4.14	4.00
Quant and Math Reasoning							
AM-US GOVT	4.43	4.23	4.37	4.57	4.07	4.14	3.82
AM-US HIST	4.55	4.55	4.52	4.52	3.98	3.98	4.15
Biological Sciences							
Phycial Sciences (PS)	2.57	2.50	3.15	3.00	3.07	3.14	3.21
PS-LAB	3.25	2.75	3.50	3.50	3.25	3.50	3.25
PS-LEC	3.29	3.57	3.71	3.71	3.29	3.50	3.57
Arts	3.84	4.27	4.29	4.09	3.61	3.56	3.83
Humanities	4.00	4.50	4.50	4.39	3.65	3.67	3.77
Social Sciences	4.44	4.46	4.42	4.49	4.01	3.99	4.21
Life Long Learning and Self-Development	3.98	4.39	4.49	4.33	4.02	3.95	4.02

Faculty Preliminary Results

- American government and politics courses are perceived as helping students achieve diversity outcomes more in the new GE program than in the previous program.
- Civic Learning (CL) in this sample does not appear to have strengthened from the student perspective

Results with Statistical Analysis: Confirmatory

American Government & History

Comparison of Select GE Categories on Diversity and Civic Learning Outcomes

GE Categories: American Institutions (2015) and American - US History (2016)

GE Outcome	Year	N	Mean	Std. Deviation	Sig
Understand Gender, Race, Ethnicity & Class Intersections	2015	66	3.86	1.201	***
	2016	56	4.55	0.807	
Appreciate Diversity	2015	66	3.86	1.162	***
	2016	56	4.55	0.807	
Develop Respect for Others	2015	65	3.88	1.206	***
	2016	56	4.52	0.874	
Develop Awareness of Ethical & Social Concerns	2015	65	4.03	1.118	**
	2016	56	4.52	0.809	
Agreement with "I can explain…."					
…how research can contribute to solving social problems	2015	66	3.83	1.061	
	2016	55	3.98	0.991	
…how using the steps of the problem solving process can contribute to solving social problems	2015	66	3.73	1.016	
	2016	55	3.98	0.952	
I am comitted to making a difference in society more than I was before taking this class	2015	66	3.77	1.120	
	2016	55	4.15	0.970	

*p<.05 **p<.01 ***p≤.001

- The differences in mean scores on the Diversity Outcomes between these 2015 and 2016 GE course categories are statistically significant
- The Civic Learning Outcomes are not significant

Results with Statistical Analysis: Confirmatory

Lifelong Learning Courses

Comparison of Select GE Categories on Diversity and Civic Learning Outcomes

GE Category: Lifelong Learning (2015 and 2016 - remained the same)

GE Outcome	Year	N	Mean	Std. Deviation	Sig
Understand Gender, Race, Ethnicity & Class Intersections	2015	69	4.06	1.042	
	2016	66	3.98	1.088	
Appreciate Diversity	2015	69	4.32	0.849	
	2016	66	4.39	0.802	
Develop Respect for Others	2015	69	4.32	0.813	
	2016	67	4.49	0.637	
Develop Awareness of Ethical & Social Concerns	2015	69	4.33	0.852	
	2016	66	4.33	0.791	
Agreement with "I can explain…."					
…how research can contribute to solving social problems	2015	70	3.84	0.895	
	2016	60	4.02	0.854	
…how using the steps of the problem solving process can contribute to solving social problems	2015	70	4.11	0.808	
	2016	60	3.95	0.891	
I am comitted to making a difference in society more than I was before taking this class	2015	70	4.07	0.873	
	2016	61	4.02	0.904	

*p<.05 **p<.01 ***p≤.001

- Statistical analysis confirms that none of the differences in mean scores on Diversity and Civic Learning Outcomes are significant for the Lifelong Learning courses

Results with Statistical Analysis: A different picture

Diversity & Civic Learning Outcomes - Overall Comparison of 2015 and 2016

GE Outcome	Year	N	Mean	Std. Deviation	Std. Error Mean	Sig
Understand Gender, Race, Ethnicity & Class Intersections	2015	542	3.90	1.161	0.050	*
	2016	546	4.06	1.074	0.046	
Appreciate Diversity	2015	542	4.11	1.013	0.044	*
	2016	546	4.24	0.992	0.042	
Develop Respect for Others	2015	538	4.14	0.981	0.042	**
	2016	542	4.31	0.869	0.037	
Develop Awareness of Ethical & Social Concerns	2015	540	4.10	1.021	0.044	*
	2016	544	4.23	0.941	0.040	
Agreement with "I can explain…."						
…how research can contribute to solving social problems	2015	534	3.76	1.038	0.045	**
	2016	522	3.95	0.925	0.040	
…how using the steps of the problem solving process can contribute to solving social problems	2015	534	3.75	1.028	0.044	**
	2016	521	3.94	0.911	0.040	
I am comitted to making a difference in society more than I was before taking this class	2015	534	3.78	1.055	0.046	*
	2016	521	3.93	0.969	0.042	

*p<.05 **p<.01

There is a statistically significant change between the 2015 and 2016 surveys on Diversity and Civic Learning (CL) Outcomes

Analysis with Institutional Data: Potential Variables

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	COURSE GRADES		
Course Grade	Frequency	Percent	Cumulative Percent
missing	143	13.1	13.1
A	275	25.2	38.2
A-	144	13.2	51.4
B	162	14.8	66.2
B-	81	7.4	73.7
B+	128	11.7	85.4
C	63	5.8	91.1
C-	18	1.6	92.8
C+	52	4.8	97.5
D	12	1.1	98.6
D+	9	0.8	99.5
F	1	0.1	99.5
NC	1	0.1	99.6
RD	3	0.3	99.9
WU	1	0.1	100.0
Total	1093	100.0	

	N	Minimum	Maximum	Mean	Std. Deviation
Valid N	948	0.0	4.0	3.222	0.7714

STUDENT'S COLLEGE OF MAJOR			
	SURVEY_YR		
COLLEGE	2016	2017	Total
Arts & Letters	95	76	171
Business & Economics	53	74	127
Education	11	12	23
Engineering, Computer Science & Technology	45	63	108
Health & Human Services	143	136	279
Natural & Social Sciences	145	150	295
Undeclared/ Undecided	53	37	90
Total	545	548	1093

COLLEGE GROUP	Frequency	Valid Percent
AL_ED	283	25.9
BE_ET	235	21.5
HHS	279	25.5
NSS	295	27.0
Total	1092	100.0
Missing	1	
Total	1093	

Analysis with Institutional Data

Comparison of Select GE Categories on Diversity and Civic Learning Outcomes
Student Grouping by College of Major

GE Outcome	College	N	Mean	Std. Deviation	Sig
Appreciate Diversity	BE_ET	234	4.03	1.100	*
	HHS	278	4.28	0.940	
Develop Respect for Others[1]	**BE_ET**	233	4.06	1.045	
	HHS	275	4.35	0.855	**
	NSS	290	4.29	0.927	*
I am comitted to making a difference in society more than I was before taking this class	BE_ET	226	3.70	1.077	*
	HHS	269	3.98	0.948	
*p<.05 **p<.01 ***p≤.001					

[1]The statistically significant differences in means are between BE_ET and each of the other two colleges listed; thus the significance level indicated for each of these is in reference to BE_ET.

- **There were no statistically significant differences in GELO means found between student groups by College of Major for the rest of the Diversity and Civic Learning Outcomes.**

- Statistical analysis identifies which College of Major groupings have statistically significant different mean scores on some Diversity and Civic Learning Outcomes

What's next?

- Continue more robust analyses of the data, including student course grade data, retention, time-to-degree
- Share the results of these analyses with the academic programs
  - To compare student perceptions with direct evidence of student learning
  - Prompt collection of direct evidence (annual assessment projects & reports)
- Identify partnerships with other units (like Center for Engagement) to combine these data with other available data, direct evidence, etc.
- Develop more direct assessments for the overall GE program assessment (embedded assignments, shared rubrics)

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Questions & Discussion

Session Learning Outcomes Revisited

- Describe one example of faculty and administration/staff collaboration on assessment.
- Identify at least two ways this collaboration can improve assessment projects.
- What value is added to assessment projects by collaborating with your institutional research office?
- Identify what institutional data are available to support assessment efforts.
- How can these data be leveraged to improve data collected from a survey or incorporated into other assessment projects?

Appendices

Challenges in GE instruction and assessment

- Faculty participation
  - Many GE courses are taught by lecturer faculty employed part-time at several campuses
  - Full time faculty sometimes feel more committed to other areas of their discipline and may not regard GE courses as seriously
- Distributed curriculum
  - The GE learning outcomes (GELOs) are addressed by programs spanning many disciplines
  - Can be difficult to gather evidence on a regular basis
  - GE courses span many areas and sub-disciplines
  - Upper and lower division courses (800+ now at Cal State LA)
- Most courses address several GE outcomes

Survey Data Collection & Incentives

ADMINISTRATION WINDOW (~2 weeks)

- Fall 2015 – Launched 3rd week of **Winter Quarter**, after course add/drop period
  Wednesday, January 20 – Wednesday, February 3, 2016
- Fall 2016 – Launched 2nd week of **Spring Semester**, coordinated w/other surveys
  Saturday, January 28 – Monday, February 13, 2017

INCENTIVES

- FIVE $50 Barnes & Noble Gift Cards
  - TWO Drawings – After the first week (two gift cards) & at close of survey
  - Midnight deadline to submit the survey to be entered into drawings
  - Mail-in entry option (without completing the survey)

EMAILS

- 2015 – Invitation & two reminders planned; Revised & sent more reminders (5) as we monitored responses
- 2016 – Invitation & four (4) reminder emails
  - Responses spike after each reminder
  - Mid-Survey Drawing provides opportunity to announce 1st round winners with a reminder = BEST response spike after this email!
  - "Final" (2 days before end) AND a "Last Chance" (last day, midnight deadline)

Population & Sample

- Population: Students who had taken at least one lower-division GE course in Fall and received grade of D or better
- Sample: **2015** – 36% of the population; **2016** – 30% of the population

STUDENT LEVEL		N	Frosh	Soph	Junior	Senior
2015	Pop	9,503	58%	19%	12%	11%
	Sample	3,400	58%	19%	13%	10%
2016	Pop	10,275	58%	18%	12%	12%
	Sample	3,085	57%	19%	12%	13%

RACE / ETHNICITY	2015				2016			
	Pop N	Pop %	Samp N	Samp %	Pop N	Pop %	Samp N	Samp %
NATIVE AMER	8	0.1%	5	0.1%	8	0.1%	1	0.0%
ASIAN	1318	13.9%	484	14.2%	1395	13.6%	407	13.1%
BLACK	350	3.7%	114	3.4%	391	3.8%	110	3.6%
HISPANIC	6381	67.1%	2296	67.5%	7004	68.2%	2092	67.8%
INTERNATIONAL	614	6.5%	217	6.4%	674	6.6%	216	7.0%
TWO+ RACES	172	1.8%	63	1.9%	171	1.7%	64	2.1%
UNKNOWN	232	2.4%	84	2.5%	219	2.1%	71	2.3%
WHITE	428	4.5%	137	4.0%	413	4.0%	126	4.1%
TOTAL	**9503**	100.0%	**3400**	100.0%	**10275**	100.1%	**3087**	100.0%

Respondent Demographics

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Fall 2016							student level		
	F		M		total			N	%
	n	% within Ethnicity	n	% within Ethnicity	n	% total Ethnicty	freshman	300	55%
NATIVE AMER	0		0		0	0%	sophomore	115	21%
ASIAN	56	74%	20	26%	76	15%	junior	66	12%
BLACK	8	50%	8	50%	16	3%	senior	67	12%
HISPANIC	227	71%	91	29%	318	64%	total	498	100%
INTERNATIONAL	27	57%	20	43%	47	9%			
TWO+ RACES	9	75%	3	25%	12	2%			
UNKNOWN	7	70%	3	30%	10	2%			
WHITE	13	68%	6	32%	19	4%			
Grand Total	**347**	70%	**151**	30%	**498**				

Fall 2015							student level		
	female		male		total			N	%
	n	% within Ethnicity	n	% within Ethnicity	n	% total Ethnicty	freshman	264	58%
NATIVE AMER	0		1		1	0%	sophomore	91	20%
ASIAN	52	71%	21	29%	73	16%	junior	55	12%
BLACK	12	80%	3	20%	15	3%	senior	42	10%
HISPANIC	226	76%	72	24%	298	66%	total	452	100%
INTERNATIONAL	19	70%	8	30%	27	6%			
TWO+ RACES	6	100%	0	0%	6	1%			
UNKNOWN	5	45%	6	55%	11	2%			
WHITE	14	64%	8	36%	22	5%			
Grand Total	**334**	74%	**119**	26%	**453**				

Please indication your level of agreement with how this course has helped your understand the distinct perspectives (values and ways of acquiring new knowledge) and major achievements in:

	written English	oral English	reason critically across a variety of disciplines	basic concepts in quantitative reasoning	Participation in American society and government	Natural Sciences	Arts and Humanities	Social Sciences	lifelong under-standing and self developmen t
Written Comm	**4.34**	4.02	4.08	3.89	3.55	3.33	3.79	3.49	4.18
Oral Comm	4.35	**4.44**	4.09	3.86	3.88	3.26	3.65	3.59	4.33
Critical Reasoning	4.61	4.39	**4.67**	4.72	4.39	4.06	3.94	3.82	4.39
Quant and Math Reasoning	3.37	3.37	3.96	**4.41**	3.04	3.81	2.85	3.12	3.67
American & CA Gov't	3.62	3.44	3.68	3.42	**4.06**	3.26	3.58	3.86	3.80
BIOL Sciences	3.45	3.45	3.73	3.95	3.19	**4.05**	3.57	3.76	3.52
PHYS Sciences	3.59	3.53	3.63	4.00	3.19	**4.59**	3.24	3.56	3.88
Applied Sciences	3.86	3.57	3.71	3.86	3.43	**3.57**	3.71	3.43	4.00
Arts & Humanities (Literature)	4.06	4.06	3.94	3.50	3.40	2.88	**4.13**	3.19	3.88
Arts & Humanities (Arts)	3.26	3.05	3.21	3.26	2.95	2.53	**4.05**	2.79	3.42
Arts & Humanities (Philosophy)	3.58	3.42	3.92	3.58	3.42	2.92	**3.75**	3.00	3.92
Social Sciences	3.95	3.91	4.18	4.11	3.89	3.82	3.75	**3.91**	4.30
Social Sciences (D)	3.75	3.70	4.10	3.65	4.10	3.26	3.84	**3.58**	4.15
Life Long Learning	3.91	3.91	4.29	3.97	3.48	3.17	3.53	3.56	**4.50**
ENGL 102 (research written comm)	4.46	4.34	**4.26**	4.23	3.97	3.88	4.24	4.06	4.4

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All survey participants in Fall QUARTER 2015

Course Area	← OUTCOMES → written English	oral English	reason critically across disciplines	quantita-tive and math reasoning	American and CA government	Understand perspectives & achievements in: Natural Sciences	Arts and Humanities	Social Sciences	lifelong under-standing and self-develop-ment	Develop writing skills with useful feedback
Written Comm	4.34	4.02	4.08	3.89	3.55	3.33	3.79	3.49	4.18	4.33
Oral Comm	4.35	4.44	4.09	3.86	3.88	3.26	3.65	3.59	4.33	4.33
Critical Reasoning	4.61	4.39	4.67	4.72	4.39	4.06	3.94	3.82	4.39	4.06
Quant and Math Reasoning	3.37	3.37	3.96	4.41	3.04	3.81	2.85	3.12	3.67	3.3
American & CA Gov't	3.62	3.44	3.68	3.42	4.06	3.26	3.58	3.86	3.8	3.76
BIOL Sciences										
PHYS Sciences	3.59	3.53	3.63	4	3.19	4.59	3.24	3.56	3.88	3.47
Applied Sciences	3.86	3.57	3.71	3.86	3.43	3.57	3.71	3.43	4	3.57
Arts & Humanities (Literature)	4.06	4.06	3.94	3.5	3.4	2.88	4.13	3.19	3.88	4.06
Arts & Humanities (Arts)	3.26	3.05	3.21	3.26	2.95	2.53	4.05	2.79	3.42	2.95
Arts & Humanities (Philosophy)	3.58	3.42	3.92	3.58	3.42	2.92	3.75	3	3.92	3.83
Social Sciences	3.95	3.91	4.18	4.11	3.89	3.82	3.75	3.91	4.3	3.8
Social Sciences (D)	3.75	3.7	4.1	3.65	4.1	3.26	3.84	3.58	4.15	3.85
Life Long Learning	3.91	3.91	4.29	3.97	3.48	3.17	3.53	3.56	4.5	3.89

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All survey participants Fall SEMESTER 2016 ← OUTCOMES → Understand perspectives & achievements in:

Course Area	written English	oral English	reason critically across disciplines	quantita-tive and math reasoning	American and CA governme nt	Natural Sciences	Arts and Humanities	Social Sciences	lifelong under-standing and self-develop-ment	Develop writing skills with useful feedback
Written Comm (41)	4.51	4.37	4.23	4.06	3.77	3.59	4.03	3.91	4.34	4.51
Oral Comm(35)	4.41	4.39	4.20	4.15	3.66	3.50	3.58	3.63	4.29	4.28
Critical reasoning(46)	4.33	4.07	4.37	4.15	3.96	3.65	3.98	3.93	4.37	4.41
Quant and Math Reasoning (30)										
AM-US GOVT(30)	4.10	4.00	4.20	3.90	4.53	3.79	3.64	4.29	4.24	3.93
AM-US HIST(56)	4.27	4.09	4.34	4.18	4.55	3.78	4.11	4.11	4.46	4.16
Biol Sciences (27)										
Phys Sciences (14)	3.00	3.00	3.00	3.14	2.79	3.50	2.86	2.93	3.14	3.14
Arts (45)	4.04	3.86	4.11	3.82	3.60	3.20	4.39	3.24	4.04	3.87
Humanities(44)	3.95	3.89	4.27	4.11	3.89	3.26	4.12	3.65	4.27	3.89
Social Sciences (100)	4.08	4.00	4.24	4.11	4.06	3.62	3.92	4.07	4.36	4.02
Life Long Learning and Self-Development (66)	4.12	4.02	4.08	4.11	3.65	3.77	3.78	3.67	4.27	4.00

Fall 2010 Results

Outcomes

Course areas

Fall 2010: % Agree and Strongly Agree with statements	Helped me to organize and express ideas in written English	Helped me to organize and express ideas in oral English	Helped me to reason critically across a variety of disciplines	Helped me understand and apply basic concepts in quant reasoning	Provided knowledge&values for participation in Am soc/government	Helped me understand distinct perspectives&achievements in natural and physical sciences	Helped me understand distinct perspectives&achievements in social sciences	Helped me understand distinct perspectives&achievements in arts/humanities	Helped me to understand and appreciate diversity and to develop respect for others.	Helped me to develop a greater awareness of ethical and social concerns.	Provided opportunity to develop writing skills with significant writing assgn'mnt (5 - 19 pages)	Provided knowledge & skills for lifelong understanding and self-development
A1 written comm.												
A2 oral comm.												
A3 critical thinking												
A4 quant. Reasoning												
Am Inst												
B1 Biol Sci w/lab												
B2 Phys. Sci w/ lab												
B3 app. Nat. sci.												
C: Arts & Humanities												
D social sciences												

Legend

100-85%	70-84%	55-69%	40-54%	25-39%	10-24%

% Strongly Agree + Agree

indicates content area directly addresses outcome