Fresno State NSSE Engagement Engagement El Value Added: Research Indicators Freshmen vs Seniors Questions

# Engagement, Academic Performance, and Major: Statistical and Visual Analysis

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Fresno State NSSE Engagement Engagement El Value Added: Research Indicators Freshmen vs Seniors Questions





http://www.fresnostate.edu/academics/oie/data/index.html

Fresno State	NSSE	Engagement	Engagement Indicators	EI Value Added: Freshmen vs Seniors	Research Questions

# NSSE Spring 2015

	Freshman (1st year)	Senior (4th year)
Population:	3533	5680
NSSE Participants:	513	1079
Response Rate:	15%	19%

Fresno State	NSSE	Engagement	Engagement	El Value Added:	Research
			Indicators	Freshmen vs Seniors	Questions

Student engagement represents two critical features of collegiate quality. The first is the amount of time and effort students put into their studies and other educationally purposeful activities. The second is how the institution deploys its resources and organizes the curriculum and other learning opportunities to get students to participate in activities that decades of research studies show are linked to student learning. (NSSE)

Theme	Engagement Indicators
Academic Challenge	Higher-Order Learning Reflective & Integrative Learning Learning Strategies Quantitative Reasoning
Learning with Peers	Collaborative Learning Discussions with Diverse Others
Experiences with Faculty	Student-Faculty Interaction Effective Teaching Practices
Campus Environment	Quality of Interactions Supportive Environment

http://nsse.indiana.edu/html/about.cfm

Fresno State NSSE Engagement Engagement El Value Added: Research Questions Descriptives Freshmen vs Seniors

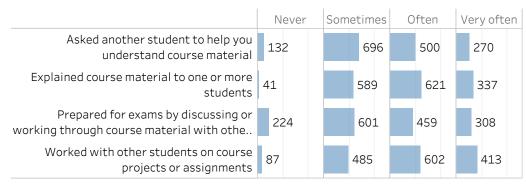
Engagement Indicator
Collaborative Learning

Collaborating with peers in solving problems or mastering difficult material deepens understanding and prepares students to deal with the messy, unscripted problems they encounter during and after college. Working on group projects, asking others for help with difficult material or explaining it to others, and working through course material in preparation for exams all represent collaborative learning activities.

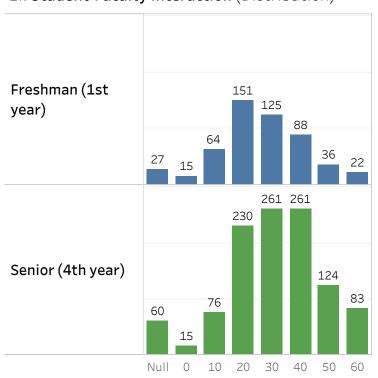
College

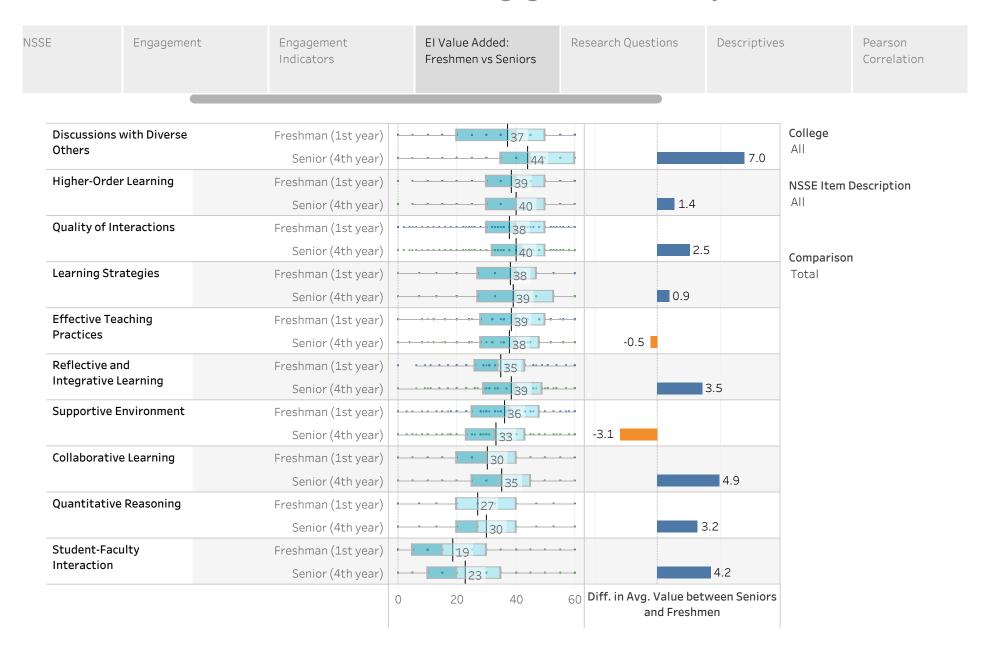
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#### Items (Distribution)



#### EI: Student-Faculty Interaction (Distribution)





Engagement Engagement El Value Added: Research Questions Descriptives Pearson Correlation El and GPA by Major

Research Question 1:

Is there a relationship between the NSSE Engagement Indicators and Student GPA?

Research Question 2:

Is there variation in the Engagement - GPA relationships among colleges?

What engagement indicators are more important for the specific majors?

Engagement Indicators

El Value Added: Freshmen vs Seniors Research Questions

Descriptives

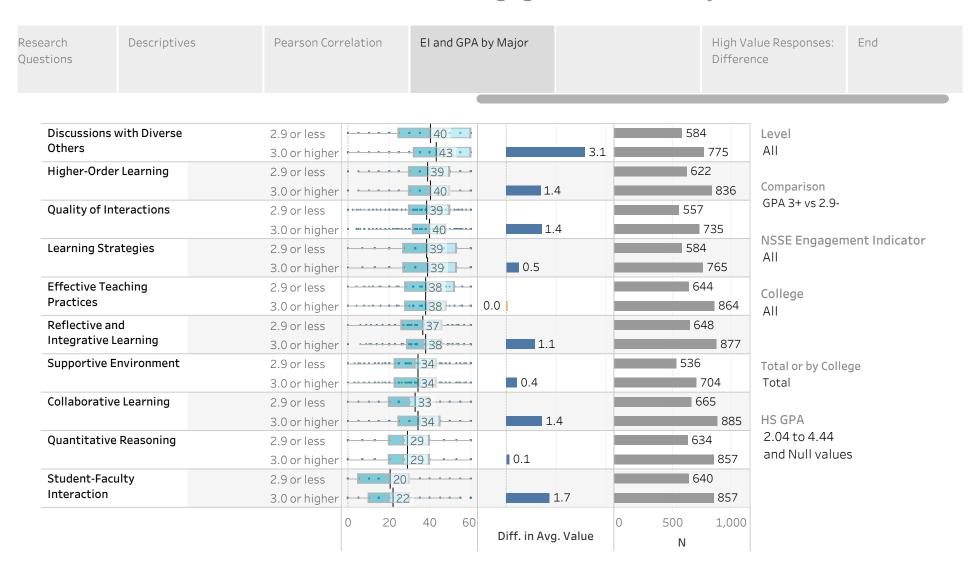
Pearson Correlation

EI and GPA by Major

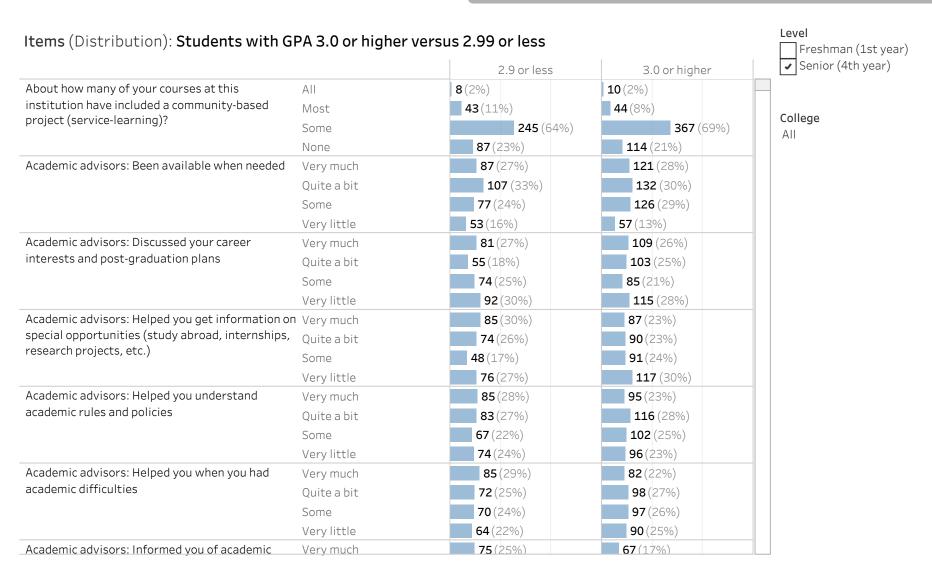
	Cum GPA		Higher- Lear		Reflecti Integr Lean	ative	Learn	-	Quanti		Collabo		Discus with D Oth	iverse	Student- Intera	, ,	Effect Teach Pract	hing	Quali	-	Suppo		
	Count	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Freshman (1st year)										7000									222				
Arts and Humanities	39	2.99	0.94	39	14	33	13	38	14	27	17	26	11	36	17	17	16	36	16	41	13	32	15
Health and Human Services	119	2.87	0.89	41	14	36	12	40	14	27	16	31	14	37	17	17	14	38	14	38	15	35	15
Social Sciences	53	2.68	1.00	39	13	35	12	36	13	27	17	32	14	37	17	20	18	41	13	39	15	43	16
Craig School of Business	63	2.87	0.93	39	15	35	12	42	14	25	14	31	15	38	16	20	16	39	13	38	14	36	15
Science and Mathematics	97	2.92	0.81	39	14	35	13	37	14	27	17	30	13	40	18	19	15	37	14	38	15	37	14
icultural Sciences and Tech	53	2.97	0.85	36	15	35	13	38	14	28	15	32	14	35	15	16	16	38	14	36	16	36	14
nen Sch of Educ & Hum Dev	30	2.80	0.84	32	15	32	14	37	17	25	19	32	12	38	17	22	16	41	16	36	18	36	14
Engineering	37	2.79	0.86	37	13	33	9	34	12	32	14	30	12	34	17	20	14	42	13	37	13	38	18
Undeclared	37	2.83	1.02	41	13	37	12	39	12	26	16	29	14	37	17	19	14	39	12	37	16	32	13
Total	528	2.87	0.89	39	14	35	12	38	14	27	16	30	13	37	17	19	15	39	14	38	15	36	15
Senior (4th year)																							
Arts and Humanities	111	3.17	0.51	41	16	39	14	37	16	22	17	32	14	43	18	23	17	38	16	40	11	32	16
Health and Human Services	237	3.20	0.43	40	14	39	12	39	14	29	16	36	12	43	16	23	16	37	15	39	13	32	14
Social Sciences	120	3.11	0.49	42	16	43	13	41	14	30	18	35	15	46	14	27	18	39	14	41	13	32	14
Craig School of Business	214	3.01	0.53	39	14	37	12	38	14	31	16	35	13	43	17	18	15	39	14	40	13	34	13
Science and Mathematics	178	3.21	0.50	41	14	39	13	40	14	33	16	34	14	45	16	24	17	40	14	41	12	34	15
icultural Sciences and Tech	115	3.02	0.37	40	14	38	13	41	16	31	17	36	13	45	17	26	17	38	14	41	11	35	15
nen Sch of Educ & Hum Dev	62	3.07	0.52	38	12	36	13	40	15	25	18	30	12	41	16	16	12	34	13	40	13	32	14
Engineering	73	2.96	0.47	40	13	34	13	39	13	40	15	44	13	46	17	25	14	35	13	39	12	34	11
Total	1110	3.11	0.49	40	14	39	13	39	14	30	17	35	14	44	16	23	16	38	14	40	12	33	14

El Value Added: Research Questions Descriptives Pearson Correlation El and GPA by Major High Value Responses: Difference

Correlations between Cumulativ	e GPA and	the NSSE Eng	agement Indic	cators					
	Total	Arts and Humanities	Health and Human Services	Social Sciences	Business	Agricultural Sciences and Tech	Sch of Educ & Hum Dev	Science and Mathematics	Engineering
Higher-Order Learning	.076	0.19	0.10	0.09	0.07	-0.16	.343	0.01	-0.03
Reflective and Integrative Learning	.062	0.14	0.08	0.11	-0.01	-0.06	0.15	0.00	-0.01
Learning Strategies	0.05	0.14	.195	0.08	-0.06	-0.11	0.26	-0.02	0.07
Quantitative Reasoning	0.03	0.05	0.06	0.13	0.06	-0.04	0.00	-0.02	0.11
Collaborative Learning	0.03	-0.08	0.06	0.11	0.05	-0.11	.280	-0.03	.272
Discussions with Diverse Others	.105	0.11	.170	0.02	.200	-0.20	0.06	0.15	0.09
Student-Faculty Interaction	.097	0.06	0.07	.218 <sup>*</sup>	0.12	214	0.02	.180	0.12
Effective Teaching Practices	0.02	0.04	-0.01	0.15	0.11	-0.16	-0.19	0.03	-0.10
Quality of Interactions	.082	0.08	-0.01	0.11	.218	-0.16	0.01	0.11	0.09
Supportive Environment	0.04	0.10	0.12	0.15	-0.03	298	0.15	0.05	0.15
Count of Seniors	1109	111	237	119	214	115	62	178	73
*. Pearson Correlation is significant a	t the 0.05 le	evel (2-tailed).				13.			
**. Pearson Correlation is significant	at the 0.01	level (2-tailed).							



Research Descriptives Pearson Correlation EI and GPA by Major High Value Responses: End Difference



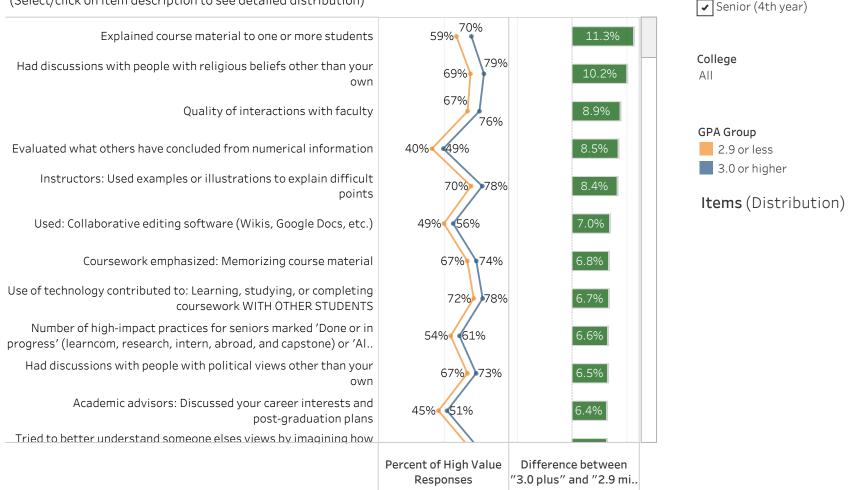
Research Descriptives Pearson Correlation El and GPA by Major High Value Responses: End Difference

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Freshman (1st year)

#### Percent of High Value Repsonses (ex. Very Often, Often, Excellent, etc).

(Select/click on item description to see detailed distribution)



Research Descriptives Pearson Correlation EI and GPA by Major Questions	High Value Responses: End Difference
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Thank you for attending. Questions?