
University of North Dakota

NSSE 2017 Major Field Report, Part II

Comparisons to Other Institutions

Aero and Engineering

*Comparing your students majoring in the fields shown below to those
in the same fields at your comparison group institutions*

The Major Field Report group 'Aero and Engineering' includes the following majors: Aero-, astronautical engineering; Astronomy; Atmospheric science (including meteorology); Bioengineering; Biomedical engineering; Chemical engineering; Civil engineering; Computer engineering and technology; Earth science (including geology); Electrical or electronic engineering; Engineering (general); Industrial engineering; Materials engineering; Mechanical engineering; Other engineering; Petroleum engineering; Software engineering.

Note:

The Major Field Report was formatted for printing. When viewing on screen in Excel, some content may appear truncated or oddly formatted. This is normal. Increasing the zoom level or viewing the report in Print Preview will improve on-screen display.

About Your Major Field Report, Part II

NSSE data serve to identify institutional strengths and weaknesses in reference to selected comparison institutions, yet institution-level comparisons may not capture important variation in student engagement that can be found within key subpopulations such as major. This report displays selected results for students at your institution and at your selected comparison institutions in the major category: Aero and Engineering.

NSSE results included in MFR, Part II

- Engagement Indicators
- High-Impact Practices
- Frequencies and Statistical Comparisons
- Respondent Profile

Related-Major Groups

Self-reported first and second (if applicable) majors were identified from the survey. Your institution had the option to customize how these majors were grouped, using up to ten related-major groups. Institutions choosing not to customize their major categories receive NSSE's ten default groups. The majors used in this report are listed on the cover page of this report.

Sample

This report is based on information from all randomly selected or census-administered students in the indicated group of majors for both your institution and your comparison institutions. Targeted and locally administered oversamples and other non-randomly selected students are not included. Report Sample (if applicable) respondents are also excluded.

Class

Results are presented separately by institution-reported class level. Keep in mind that majors are student-reported. First-year students may report *intended* majors that have not yet been *declared*. Also, much of the first-year experience may take place outside of the major field. For these reasons, first-year results should be interpreted with caution.

Technical Requirements

Related-major groups with fewer than 5 respondents in a given class are not reported (columns are blank). Groups containing at least 5 respondents, but fewer than 20, are reported in frequency distributions only. Comparison groups must contain at least 20 respondents in the major category, or they remain blank. Although 20 is a minimum requirement for all other statistics (Engagement Indicators, means, etc.), keep in mind that any statistical result requires a sufficient number of respondents per group to produce a reliable estimate. Due to the disaggregation of results by student-reported major, *Major Field Report* results are unweighted.

Report Sections (Those marked with an asterisk are included if at least one related-major group includes 20 or more respondents.)

Engagement Indicators*	Results on NSSE's ten Engagement Indicators (EIs) organized into four themes. See your <i>Engagement Indicators</i> report for more details.
High-Impact Practices*	Results on student participation in six High-Impact Practices (HIPs). See your <i>High-Impact Practices</i> report for more details.
Frequencies and Statistical Comparisons*	Response frequencies and statistical comparisons (including tests of significance and effect sizes) for all survey items except the demographics for your institution and your three core comparison groups.
Respondent Profile	Response frequencies for all demographic questions for your institution and your three core comparison groups.

Engagement Indicators: Overview

Engagement Indicators are summary measures based on sets of NSSE questions examining key dimensions of student engagement. The ten indicators are organized within four themes: Academic Challenge, Learning with Peers, Experiences with Faculty, and Campus Environment. The tables below compare average scores^a for your students in this related-major category with students in your comparison groups within the same category.

Use the following key:

- ▲ **Your students' average** was significantly higher ($p < .05$) with an effect size at least .3 in magnitude.
- ▲ **Your students' average** was significantly higher ($p < .05$) with an effect size less than .3 in magnitude.
- No significant difference.
- ▼ **Your students' average** was significantly lower ($p < .05$) with an effect size less than .3 in magnitude.
- ▼ **Your students' average** was significantly lower ($p < .05$) with an effect size at least .3 in magnitude.

		First-Year Students in Aero and Engineering			Seniors in Aero and Engineering		
Theme	Engagement Indicator	Your first-year students compared with Plains Public Plus	Your first-year students compared with Carnegie Class	Your first-year students compared with NSSE 2016 & 2017	Your seniors compared with Plains Public Plus	Your seniors compared with Carnegie Class	Your seniors compared with NSSE 2016 & 2017
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	▼	▼	▼	▼	▼	▼

First-year students^a in Aero and Engineering

	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Academic Challenge												
Higher-Order Learning												
UND (N = 59)	33.5	12.9	1.68	10	25	35	40	55				
Plains Public Plus	36.9	12.7	.37	20	25	35	45	60	1,214	-3.4	*	-.266
Carnegie Class	37.9	12.4	.20	20	30	40	45	60	3,813	-4.4	**	-.355
NSSE 2016 & 2017	38.3	12.6	.10	20	30	40	45	60	16,949	-4.8	**	-.383
Reflective & Integrative Learning												
UND (N = 60)	28.6	10.1	1.30	10	23	31	37	41				
Plains Public Plus	31.3	11.5	.33	14	23	31	40	51	1,228	-2.7		-.239
Carnegie Class	32.6	11.2	.18	14	26	31	40	54	3,873	-3.9	**	-.352
NSSE 2016 & 2017	33.1	11.3	.09	14	26	31	40	54	17,138	-4.5	**	-.397
Learning Strategies												
UND (N = 60)	32.8	12.7	1.64	7	27	33	40	50				
Plains Public Plus	34.9	13.2	.39	13	27	33	40	60	1,220	-2.1		-.161
Carnegie Class	36.1	13.3	.22	13	27	33	47	60	3,835	-3.3		-.251
NSSE 2016 & 2017	36.6	13.3	.10	13	27	40	47	60	17,016	-3.8	*	-.286
Quantitative Reasoning												
UND (N = 59)	30.8	13.5	1.76	7	20	33	40	53				
Plains Public Plus	30.7	14.2	.42	7	20	27	40	60	1,225	.1		.007
Carnegie Class	30.6	14.2	.23	7	20	33	40	60	3,831	.3		.018
NSSE 2016 & 2017	31.2	14.3	.11	7	20	33	40	60	16,977	-.3		-.024
Learning with Peers												
Collaborative Learning												
UND (N = 60)	36.6	13.1	1.69	13	30	35	45	60				
Plains Public Plus	37.4	13.5	.40	15	25	35	50	60	1,222	-.8		-.058
Carnegie Class	37.2	13.6	.22	15	25	40	45	60	3,850	-.6		-.048
NSSE 2016 & 2017	36.9	13.8	.11	15	25	35	45	60	17,049	-.3		-.025
Discussions with Diverse Others												
UND (N = 60)	34.1	14.0	1.80	5	25	35	40	60				
Plains Public Plus	39.5	14.8	.43	15	30	40	50	60	1,224	-5.4	**	-.366
Carnegie Class	40.0	15.1	.25	15	30	40	55	60	3,851	-6.0	**	-.396
NSSE 2016 & 2017	40.5	15.1	.12	15	30	40	55	60	17,049	-6.4	**	-.425

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Engagement Indicators: Aero and Engineering

University of North Dakota

First-year students^a in Aero and Engineering

	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Experiences with Faculty												
Student-Faculty Interaction												
UND (N = 60)	14.8	11.3	1.46	0	5	15	20	40				
Plains Public Plus	17.6	13.2	.39	0	10	15	25	40	1,217	-2.8		-.212
Carnegie Class	18.3	13.5	.22	0	10	15	25	45	62	-3.4	*	-.254
NSSE 2016 & 2017	19.5	13.8	.11	0	10	20	25	45	60	-4.6	**	-.335
Effective Teaching Practices												
UND (N = 60)	33.6	11.4	1.47	14	28	36	40	52				
Plains Public Plus	36.6	12.2	.36	16	28	36	44	60	1,232	-3.0		-.243
Carnegie Class	37.1	12.4	.20	16	28	36	44	60	3,874	-3.5	*	-.284
NSSE 2016 & 2017	37.9	12.5	.10	16	28	40	48	60	17,149	-4.3	**	-.343
Campus Environment												
Quality of Interactions												
UND (N = 59)	39.6	11.9	1.55	20	32	40	48	56				
Plains Public Plus	42.6	10.7	.32	22	36	44	50	60	1,183	-3.0	*	-.277
Carnegie Class	41.6	11.6	.19	20	34	42	50	60	3,737	-2.0		-.175
NSSE 2016 & 2017	42.2	11.6	.09	20	36	44	50	60	16,369	-2.6		-.221
Supportive Environment												
UND (N = 60)	31.3	11.0	1.43	13	23	33	40	49				
Plains Public Plus	36.5	12.7	.37	15	28	35	45	60	1,226	-5.2	**	-.408
Carnegie Class	36.0	12.7	.21	15	28	35	45	60	3,858	-4.6	**	-.365
NSSE 2016 & 2017	36.5	13.0	.10	15	28	38	45	60	17,111	-5.2	**	-.401

Seniors^a in Aero and Engineering

	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Academic Challenge												
Higher-Order Learning												
UND (N = 171)	38.2	12.6	.97	15	30	40	45	60				
Plains Public Plus	36.7	13.3	.34	15	25	40	45	60	1,712	1.4		.107
Carnegie Class	38.0	13.2	.20	15	30	40	45	60	4,699	.2		.011
NSSE 2016 & 2017	38.5	13.2	.09	15	30	40	50	60	21,429	-.3		-.025
Reflective & Integrative Learning												
UND (N = 172)	32.0	11.7	.89	14	23	31	40	51				
Plains Public Plus	31.7	11.4	.29	14	23	31	40	51	1,732	.2		.019
Carnegie Class	32.7	11.3	.17	14	26	31	40	54	4,755	-.7		-.062
NSSE 2016 & 2017	33.1	11.6	.08	14	26	31	40	54	21,620	-1.1		-.096
Learning Strategies												
UND (N = 171)	36.1	14.5	1.11	7	27	40	47	60				
Plains Public Plus	33.1	14.2	.36	13	20	33	40	60	1,704	3.0	**	.210
Carnegie Class	34.8	14.2	.21	13	27	33	47	60	4,720	1.4		.096
NSSE 2016 & 2017	35.2	14.4	.10	13	27	33	47	60	21,447	.9		.064
Quantitative Reasoning												
UND (N = 168)	38.6	14.6	1.13	13	27	40	47	60				
Plains Public Plus	34.3	14.8	.37	13	27	33	47	60	1,719	4.3	***	.294
Carnegie Class	34.9	14.8	.22	13	27	33	47	60	4,713	3.7	**	.251
NSSE 2016 & 2017	35.7	15.0	.10	13	27	33	47	60	21,408	2.9	*	.195
Learning with Peers												
Collaborative Learning												
UND (N = 173)	33.6	16.5	1.26	5	20	35	45	60				
Plains Public Plus	39.2	13.6	.34	15	30	40	50	60	199	-5.6	***	-.401
Carnegie Class	40.1	13.7	.20	15	30	40	50	60	181	-6.5	***	-.468
NSSE 2016 & 2017	39.9	13.8	.09	15	30	40	50	60	174	-6.2	***	-.451
Discussions with Diverse Others												
UND (N = 173)	36.3	17.4	1.32	0	20	35	50	60				
Plains Public Plus	39.3	15.7	.40	15	30	40	55	60	204	-3.0	*	-.187
Carnegie Class	40.4	15.9	.24	15	30	40	55	60	183	-4.1	**	-.258
NSSE 2016 & 2017	40.7	15.9	.11	15	30	40	55	60	174	-4.4	**	-.277

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Engagement Indicators: Aero and Engineering

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Seniors^a in Aero and Engineering

	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Experiences with Faculty												
Student-Faculty Interaction												
UND (N = 172)	20.6	14.7	1.12	0	10	20	30	50				
Plains Public Plus	22.3	14.6	.37	0	10	20	30	50	1,721	-1.8		-.121
Carnegie Class	22.8	14.8	.22	0	10	20	30	50	4,720	-2.3	*	-.154
NSSE 2016 & 2017	23.3	15.2	.10	0	10	20	35	55	21,438	-2.8	*	-.181
Effective Teaching Practices												
UND (N = 172)	35.8	12.4	.95	16	28	36	44	60				
Plains Public Plus	36.3	13.1	.33	16	28	36	44	60	1,736	-.6		-.044
Carnegie Class	36.5	12.8	.19	16	28	36	44	60	4,756	-.8		-.060
NSSE 2016 & 2017	37.0	13.2	.09	16	28	36	48	60	21,646	-1.3		-.096
Campus Environment												
Quality of Interactions												
UND (N = 158)	38.8	11.3	.90	18	32	40	48	54				
Plains Public Plus	41.5	11.3	.29	22	34	42	50	60	1,680	-2.8	**	-.245
Carnegie Class	40.4	11.6	.17	20	34	42	48	60	4,593	-1.6		-.138
NSSE 2016 & 2017	40.8	11.7	.08	20	34	42	50	60	20,683	-2.0	*	-.172
Supportive Environment												
UND (N = 171)	27.3	12.7	.97	5	20	28	35	50				
Plains Public Plus	30.6	13.1	.33	10	20	30	40	53	1,733	-3.2	**	-.248
Carnegie Class	30.1	13.4	.20	8	20	30	40	55	4,738	-2.7	**	-.204
NSSE 2016 & 2017	30.9	13.6	.09	8	20	30	40	55	21,568	-3.6	***	-.262

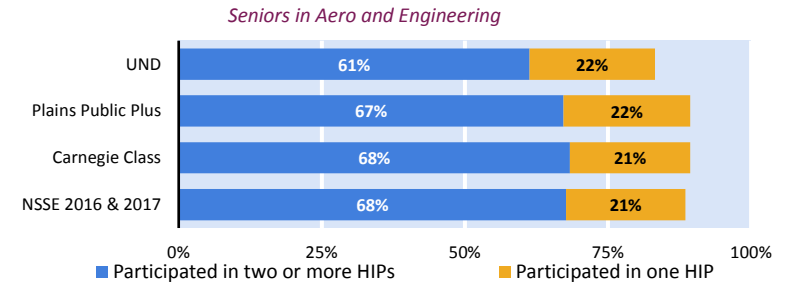
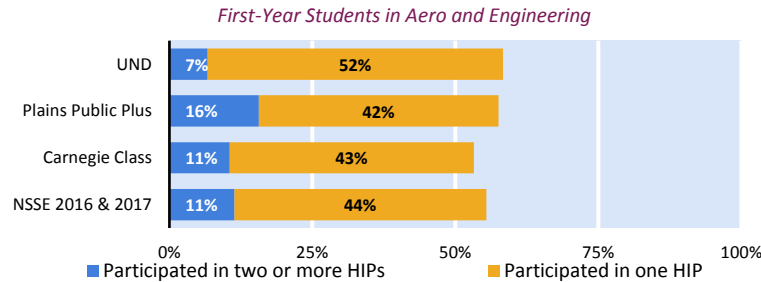
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High-Impact Practices: Aero and Engineering

University of North Dakota

Overall HIP Participation^{a,h}

The figures below display the percentage of students who participated in High-Impact Practices. Both figures include participation in service-learning, a learning community, and research with faculty. The senior figure also includes participation in an internship or field experience, study abroad, and culminating senior experience. The first segment in each bar shows the percentage who participated in at least two HIPs, and the full bar (both colors) represents the percentage who participated in at least one.



Statistical Comparisons

The table below displays the percentage of your students who participated in a given High-Impact Practice, including the percentage who participated overall (at least one, two or more). It also graphs the difference, in percentage points, between your students and those of your comparison groups. Blue bars indicate how much higher your institution's percentage is compared to the comparison group. Dark red bars indicate how much lower your institution's percentage is compared to the comparison group.

	UND	<i>Your students' participation compared with:</i>								
		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017				
	%	Difference ⁱ	ES ^j	Difference ⁱ	ES ^j	Difference ⁱ	ES ^j	Difference ⁱ	ES ^j	
<i>First-Year Students in Aero and Engineering</i>										
12. Service-Learning	47	-1	-.02	+2	.05	-0	-.01			
11c. Learning Community	18	-4	-.10	+3	.09	+2	.06			
11e. Research with Faculty	0	-6	-.49	-6	-.50	-6	-.48			
Participated in at least one	58	+1	.02	+5	.10	+3	.06			
Participated in two or more	7	-9	-.29	-4	-.14	-5	-.17			
<i>Seniors in Aero and Engineering</i>										
12. Service-Learning	37	-6	-.13	-10	** -.21	-10	* -.19			
11c. Learning Community	24	-3	-.07	-1	-.02	-1	-.03			
11e. Research with Faculty	25	-5	-.12	-8	* -.17	-8	* -.18			
11a. Internship or Field Exp.	54	-9	* -.18	-3	-.06	-3	-.07			
11d. Study Abroad	7	-4	-.14	-4	-.16	-6	* -.20			
11f. Culminating Senior Exp.	46	-4	-.09	-10	* -.20	-10	* -.19			
Participated in at least one	83	-6	* -.18	-6	* -.18	-5	* -.15			
Participated in two or more	61	-6	-.12	-7	* -.15	-6	-.13			

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Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

First-Year Students^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k						
				UND				NSSE 2016 & 2017				Your first-year students compared with						
Item wording or description	Variable name ^l	Values ^m	Response options	UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND	Plains Public Plus		Carnegie Class		NSSE 2016 & 2017	
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
1. During the current school year, about how often have you done the following?																		
a. Asked questions or contributed to course discussions in other ways	askquest	1	Never	2	3	51	4	182	5	660	4	2.5	2.6	-.13	2.7 *	-.21	2.7 **	-.30
		2	Sometimes	30	50	555	47	1,615	42	6,780	40							
		3	Often	25	42	400	34	1,355	35	6,171	36							
		4	Very often	3	5	171	15	666	17	3,509	20							
		Total		60	100	1,177	100	3,818	100	17,120	100							
b. Prepared two or more drafts of a paper or assignment before turning it in	drafts	1	Never	9	15	273	23	820	22	3,350	20	2.5	2.3 *	.27	2.3	.23	2.4	.16
		2	Sometimes	22	37	453	39	1,452	38	6,448	38							
		3	Often	16	27	297	25	1,054	28	4,858	28							
		4	Very often	12	20	146	12	473	12	2,403	14							
		Total		59	100	1,169	100	3,799	100	17,059	100							
c. Come to class without completing readings or assignments	unpreparedr <i>(Reverse-coded version of unprepared created by NSSE.)</i>	1	Very often	3	5	61	5	165	4	733	4	2.9	3.0	-.09	3.0	-.14	3.0	-.15
		2	Often	8	13	164	14	507	13	2,171	13							
		3	Sometimes	39	65	656	56	2,147	56	9,760	57							
		4	Never	10	17	290	25	986	26	4,417	26							
		Total		60	100	1,171	100	3,805	100	17,081	100							
d. Attended an art exhibit, play, or other arts performance (dance, music, etc.)	attendart	1	Never	27	46	491	42	1,606	42	7,345	43	1.7	1.8	-.14	1.8	-.11	1.8	-.11
		2	Sometimes	22	37	452	39	1,519	40	6,639	39							
		3	Often	10	17	164	14	509	13	2,279	13							
		4	Very often	0	0	65	6	181	5	838	5							
		Total		59	100	1,172	100	3,815	100	17,101	100							
e. Asked another student to help you understand course material	CLaskhelp	1	Never	2	3	54	5	178	5	911	5	2.9	2.9	-.05	2.9	-.04	2.8	.01
		2	Sometimes	19	32	332	28	1,116	29	5,223	31							
		3	Often	25	42	473	40	1,502	39	6,637	39							
		4	Very often	14	23	317	27	1,023	27	4,340	25							
		Total		60	100	1,176	100	3,819	100	17,111	100							
f. Explained course material to one or more students	CLexplain	1	Never	2	3	24	2	81	2	439	3	2.9	2.9	.04	2.9	.01	2.9	.01
		2	Sometimes	15	25	353	30	1,112	29	4,859	28							
		3	Often	28	47	511	44	1,645	43	7,403	43							
		4	Very often	15	25	286	24	981	26	4,417	26							
		Total		60	100	1,174	100	3,819	100	17,118	100							

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Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

First-Year Students^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k																									
				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017					
				Count				Count				Count				Count				Mean				Mean				Mean				Mean					
				%				%				%				%				Effect size ⁿ				Effect size ⁿ				Effect size ⁿ				Effect size ⁿ					
Item wording or description	Variable name ^l	Values ^m	Response options	UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017			
g. Prepared for exams by discussing or working through course material with other students	CLstudy	1	Never	6	10	99	8	347	9	1,670	10	2.7	2.8	-0.06	2.8	-0.06	2.7	-0.02	2.7	-0.02	2.7	-0.02	2.7	-0.02	2.7	-0.02	2.7	-0.02	2.7	-0.02	2.7	-0.02	2.7	-0.02			
		2	Sometimes	16	27	365	31	1,112	29	5,252	31																										
		3	Often	26	43	395	34	1,346	35	5,893	34																										
		4	Very often	12	20	314	27	1,014	27	4,299	25																										
		Total		60	100	1,173	100	3,819	100	17,114	100																										
h. Worked with other students on course projects or assignments	CLproject	1	Never	3	5	27	2	163	4	692	4	2.8	2.9	-0.10	2.8	-0.06	2.9	-0.09	2.9	-0.09	2.9	-0.09	2.9	-0.09	2.9	-0.09	2.9	-0.09	2.9	-0.09	2.9	-0.09					
		2	Sometimes	16	27	373	32	1,182	31	5,122	30																										
		3	Often	31	52	491	42	1,540	40	6,973	41																										
		4	Very often	10	17	282	24	930	24	4,308	25																										
		Total		60	100	1,173	100	3,815	100	17,095	100																										
i. Given a course presentation	present	1	Never	28	47	325	28	941	25	3,515	21	1.7	2.0 **	-0.41	2.1 ***	-0.50	2.2 ***	-0.59	2.2 ***	-0.59	2.2 ***	-0.59	2.2 ***	-0.59	2.2 ***	-0.59	2.2 ***	-0.59	2.2 ***	-0.59	2.2 ***	-0.59					
		2	Sometimes	24	40	564	48	1,812	47	8,358	49																										
		3	Often	7	12	224	19	777	20	3,914	23																										
		4	Very often	1	2	60	5	290	8	1,332	8																										
		Total		60	100	1,173	100	3,820	100	17,119	100																										
2. During the current school year, about how often have you done the following?																																					
a. Combined ideas from different courses when completing assignments	RIintegrate	1	Never	5	8	77	7	256	7	1,143	7	2.5	2.6	-0.07	2.6	-0.08	2.6	-0.11	2.6	-0.11	2.6	-0.11	2.6	-0.11	2.6	-0.11	2.6	-0.11	2.6	-0.11	2.6	-0.11	2.6	-0.11			
		2	Sometimes	25	42	516	44	1,614	42	7,057	41																										
		3	Often	25	42	425	36	1,476	39	6,590	39																										
		4	Very often	5	8	154	13	468	12	2,300	13																										
		Total		60	100	1,172	100	3,814	100	17,090	100																										
b. Connected your learning to societal problems or issues	RIsocietal	1	Never	12	20	181	16	540	14	2,244	13	2.1	2.3	-0.21	2.3 *	-0.29	2.4 **	-0.34	2.4 **	-0.34	2.4 **	-0.34	2.4 **	-0.34	2.4 **	-0.34	2.4 **	-0.34	2.4 **	-0.34	2.4 **	-0.34					
		2	Sometimes	31	52	599	51	1,837	48	7,971	47																										
		3	Often	17	28	296	25	1,105	29	5,205	30																										
		4	Very often	0	0	91	8	321	8	1,652	10																										
		Total		60	100	1,167	100	3,803	100	17,072	100																										
c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	RIDiverse	1	Never	14	23	255	22	705	18	2,914	17	2.1	2.2	-0.12	2.3 *	-0.25	2.3 *	-0.29	2.3 *	-0.29	2.3 *	-0.29	2.3 *	-0.29	2.3 *	-0.29	2.3 *	-0.29	2.3 *	-0.29	2.3 *	-0.29					
		2	Sometimes	30	50	549	47	1,692	44	7,549	44																										
		3	Often	14	23	281	24	1,043	27	4,835	28																										
		4	Very often	2	3	84	7	375	10	1,785	10																										
		Total		60	100	1,169	100	3,815	100	17,083	100																										

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Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

First-Year Students^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k							
				UND				NSSE 2016 & 2017				Your first-year students compared with							
				UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
d. Examined the strengths and weaknesses of your own views on a topic or issue	RIownview	1	Never	8	13	100	9	269	7	1,039	6	2.5	2.6	-.14	2.7	-.21	2.7 *	-0.26	
		2	Sometimes	18	30	429	37	1,340	35	5,912	35								
		3	Often	31	52	474	41	1,635	43	7,451	44								
		4	Very often	3	5	165	14	563	15	2,678	16								
		Total		60	100	1,168	100	3,807	100	17,080	100								
e. Tried to better understand someone else's views by imagining how an issue looks from their perspective	RIperspect	1	Never	8	13	67	6	176	5	698	4	2.5	2.7	-.24	2.8 *	-.33	2.8 **	-0.36	
		2	Sometimes	17	28	397	34	1,169	31	5,193	30								
		3	Often	30	50	490	42	1,696	44	7,639	45								
		4	Very often	5	8	218	19	772	20	3,550	21								
		Total		60	100	1,172	100	3,813	100	17,080	100								
f. Learned something that changed the way you understand an issue or concept	RInewview	1	Never	4	7	39	3	129	3	571	3	2.4	2.7 **	-.35	2.8 ***	-.45	2.8 ***	-0.46	
		2	Sometimes	32	53	449	38	1,256	33	5,541	32								
		3	Often	18	30	509	43	1,767	46	7,838	46								
		4	Very often	6	10	174	15	658	17	3,106	18								
		Total		60	100	1,171	100	3,810	100	17,056	100								
g. Connected ideas from your courses to your prior experiences and knowledge	RIconnect	1	Never	0	0	17	1	59	2	251	1	2.9	3.0	-.05	3.0	-.10	3.0	-.14	
		2	Sometimes	12	20	307	26	867	23	3,626	21								
		3	Often	41	68	550	47	1,930	51	8,734	51								
		4	Very often	7	12	289	25	954	25	4,429	26								
		Total		60	100	1,163	100	3,810	100	17,040	100								
3. During the current school year, about how often have you done the following?																			
a. Talked about career plans with a faculty member	SFcareer	1	Never	16	27	310	26	1,052	28	4,192	25	2.0	2.0	-.10	2.1	-.13	2.1	-.21	
		2	Sometimes	35	58	580	49	1,749	46	7,887	46								
		3	Often	5	8	215	18	726	19	3,482	20								
		4	Very often	4	7	67	6	282	7	1,509	9								
		Total		60	100	1,172	100	3,809	100	17,070	100								
b. Worked with a faculty member on activities other than coursework (committees, student groups, etc.)	SFotherwork	1	Never	31	52	546	47	1,935	51	8,320	49	1.6	1.7	-.17	1.7	-.14	1.8	-.17	
		2	Sometimes	22	37	432	37	1,200	32	5,567	33								
		3	Often	7	12	143	12	476	13	2,269	13								
		4	Very often	0	0	49	4	193	5	906	5								
		Total		60	100	1,170	100	3,804	100	17,062	100								

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Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

First-Year Students^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k																									
				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017					
				Count				Count				Count				Count				Mean				Mean				Mean				Mean					
				%				%				%				%				Effect size ⁿ				Effect size ⁿ				Effect size ⁿ				Effect size ⁿ					
Item wording or description	Variable name ^l	Values ^m	Response options	UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017			
c. Discussed course topics, ideas, or concepts with a faculty member outside of class	SFdiscuss	1	Never	24	40	461	39	1,338	35	5,340	31	1.7	1.8	-.18	1.9 *	-.28	2.0 **	-.35																			
		2	Sometimes	31	52	496	42	1,628	43	7,672	45																										
		3	Often	5	8	160	14	646	17	2,972	17																										
		4	Very often	0	0	52	4	194	5	1,057	6																										
		Total		60	100	1,169	100	3,806	100	17,041	100																										
d. Discussed your academic performance with a faculty member	SFperform	1	Never	24	40	380	33	1,173	31	4,670	27	1.7	1.9	-.24	2.0 *	-.27	2.0 **	-.35																			
		2	Sometimes	29	48	554	47	1,805	47	8,250	48																										
		3	Often	6	10	179	15	635	17	3,094	18																										
		4	Very often	1	2	56	5	189	5	1,029	6																										
		Total		60	100	1,169	100	3,802	100	17,043	100																										
4. During the current school year, how much has your coursework emphasized the following?																																					
a. Memorizing course material	memorize	1	Very little	2	3	46	4	123	3	653	4	2.9	2.8	.10	2.8	.10	2.8	.12																			
		2	Some	13	22	348	30	1,141	30	5,099	30																										
		3	Quite a bit	33	55	532	45	1,776	47	7,937	46																										
		4	Very much	12	20	250	21	772	20	3,389	20																										
		Total		60	100	1,176	100	3,812	100	17,078	100																										
b. Applying facts, theories, or methods to practical problems or new situations	HOapply	1	Very little	0	0	18	2	74	2	358	2	3.1	3.2	-.14	3.1	-.10	3.1	-.11																			
		2	Some	14	23	189	16	629	17	2,813	16																										
		3	Quite a bit	29	48	563	48	1,854	49	8,105	47																										
		4	Very much	17	28	404	34	1,251	33	5,802	34																										
		Total		60	100	1,174	100	3,808	100	17,078	100																										
c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts	HOanalyze	1	Very little	3	5	40	3	124	3	522	3	2.8	2.9	-.19	3.0	-.24	3.0	-.25																			
		2	Some	17	28	312	27	893	24	4,044	24																										
		3	Quite a bit	30	50	496	42	1,745	46	7,649	45																										
		4	Very much	10	17	324	28	1,031	27	4,826	28																										
		Total		60	100	1,172	100	3,793	100	17,041	100																										
d. Evaluating a point of view, decision, or information source	HOevaluate	1	Very little	12	20	125	11	290	8	1,235	7	2.4	2.6	-.23	2.7 **	-.38	2.7 **	-.43																			
		2	Some	23	39	446	38	1,297	34	5,548	33																										
		3	Quite a bit	15	25	415	35	1,542	41	7,010	41																										
		4	Very much	9	15	184	16	669	18	3,250	19																										
		Total		59	100	1,170	100	3,798	100	17,043	100																										

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Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

First-Year Students^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k																							
				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017			
				Count				Count				Count				Count				Mean				Mean				Mean				Mean			
				%				%				%				%				Effect size ⁿ				Effect size ⁿ				Effect size ⁿ				Effect size ⁿ			
Item wording or description	Variable name ^l	Values ^m	Response options	UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017	
e. Forming a new idea or understanding from various pieces of information	HOform	1	Very little	6	10	75	6	203	5	860	5	2.5	2.7	-0.26	2.8 **	-0.36	2.8 **	-0.39																	
		2	Some	25	42	406	35	1,129	30	4,917	29																								
		3	Quite a bit	22	37	466	40	1,700	45	7,642	45																								
		4	Very much	7	12	224	19	768	20	3,627	21																								
		Total		60	100	1,171	100	3,800	100	17,046	100																								
5. During the current school year, to what extent have your instructors done the following?																																			
a. Clearly explained course goals and requirements	ETgoals	1	Very little	2	3	27	2	104	3	353	2	2.9	3.0	-0.16	3.0	-0.19	3.0	-0.23																	
		2	Some	10	17	270	23	808	21	3,534	21																								
		3	Quite a bit	41	69	569	49	1,858	49	8,354	49																								
		4	Very much	6	10	306	26	1,044	27	4,842	28																								
		Total		59	100	1,172	100	3,814	100	17,083	100																								
b. Taught course sessions in an organized way	ETorganize	1	Very little	2	3	37	3	113	3	475	3	2.9	3.0	-0.18	3.0	-0.18	3.0	-0.21																	
		2	Some	17	28	224	19	771	20	3,419	20																								
		3	Quite a bit	28	47	608	52	1,905	50	8,378	49																								
		4	Very much	13	22	298	26	1,017	27	4,790	28																								
		Total		60	100	1,167	100	3,806	100	17,062	100																								
c. Used examples or illustrations to explain difficult points	ETexample	1	Very little	3	5	26	2	124	3	491	3	2.9	3.1	-0.26	3.0	-0.22	3.1	-0.24																	
		2	Some	13	22	238	20	782	21	3,443	20																								
		3	Quite a bit	32	54	540	46	1,729	45	7,752	45																								
		4	Very much	11	19	365	31	1,177	31	5,385	32																								
		Total		59	100	1,169	100	3,812	100	17,071	100																								
d. Provided feedback on a draft or work in progress	ETdraftfb	1	Very little	5	8	165	14	444	12	1,742	10	2.5	2.5	-0.04	2.6	-0.15	2.7 *	-0.22																	
		2	Some	27	45	444	38	1,325	35	5,628	33																								
		3	Quite a bit	23	38	372	32	1,343	35	6,174	36																								
		4	Very much	5	8	191	16	700	18	3,516	21																								
		Total		60	100	1,172	100	3,812	100	17,060	100																								
e. Provided prompt and detailed feedback on tests or completed assignments	ETfeedback	1	Very little	13	22	122	10	389	10	1,482	9	2.4	2.6	-0.25	2.6 *	-0.29	2.7 **	-0.36																	
		2	Some	16	27	428	37	1,291	34	5,664	33																								
		3	Quite a bit	27	45	434	37	1,502	39	6,737	40																								
		4	Very much	4	7	187	16	621	16	3,147	18																								
		Total		60	100	1,171	100	3,803	100	17,030	100																								

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University of North Dakota

First-Year Students^a in Aero and Engineering

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				UND				NSSE 2016 & 2017				Your first-year students compared with						
Item wording or description	Variable name ^l	Values ^m	Response options	UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND	Plains Public Plus	Carnegie Class	NSSE 2016 & 2017			
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
6. During the current school year, about how often have you done the following?																		
a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	QRconclude	1	Never	2	3	40	3	163	4	748	4	3.0	2.9	.20	2.9	.19	2.9	.18
		2	Sometimes	11	18	365	31	1,077	28	4,698	28							
		3	Often	31	52	493	42	1,697	45	7,663	45							
		4	Very often	16	27	277	24	869	23	3,941	23							
			Total	60	100	1,175	100	3,806	100	17,050	100							
b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	QRproblem	1	Never	15	25	225	19	767	20	3,144	18	2.2	2.3	-.11	2.3	-.10	2.4	-.15
		2	Sometimes	21	36	480	41	1,512	40	6,734	40							
		3	Often	18	31	336	29	1,100	29	5,000	29							
		4	Very often	5	8	134	11	425	11	2,168	13							
			Total	59	100	1,175	100	3,804	100	17,046	100							
c. Evaluated what others have concluded from numerical information	QRevaluate	1	Never	8	13	152	13	525	14	2,199	13	2.4	2.4	-.04	2.4	-.02	2.4	-.05
		2	Sometimes	24	40	486	41	1,596	42	7,052	41							
		3	Often	24	40	405	35	1,262	33	5,818	34							
		4	Very often	4	7	129	11	422	11	1,988	12							
			Total	60	100	1,172	100	3,805	100	17,057	100							
7. During the current school year, about how many papers, reports, or other writing tasks of the following lengths have you been assigned? (Include those not yet completed.)																		
a. Up to 5 pages	wrshortnum	0	None	6	10	126	11	332	9	1,203	7	6.6	5.5	.20	5.8	.14	6.1	.09
	(Recorded version of wrshort created by NSSE. Values are estimated number of papers, reports, etc.)	1.5	1-2	13	22	303	26	865	23	3,816	22							
		4	3-5	17	28	379	32	1,288	34	5,634	33							
		8	6-10	10	17	199	17	731	19	3,610	21							
		13	11-15	8	13	74	6	306	8	1,417	8							
		18	16-20	3	5	34	3	136	4	625	4							
		23	More than 20	3	5	55	5	151	4	716	4							
			Total	60	100	1,170	100	3,809	100	17,021	100							
b. Between 6 and 10 pages	wrmednum	0	None	20	33	603	53	1,562	41	6,426	38	3.0	1.6 **	.45	1.9 *	.37	2.0 *	.33
	(Recorded version of wrmed created by NSSE. Values are estimated number of papers, reports, etc.)	1.5	1-2	11	18	352	31	1,382	37	6,585	39							
		4	3-5	21	35	112	10	554	15	2,548	15							
		8	6-10	6	10	43	4	192	5	943	6							
		13	11-15	1	2	15	1	53	1	250	1							
		18	16-20	1	2	7	1	14	0	57	0							
		23	More than 20	0	0	7	1	16	0	81	0							
			Total	60	100	1,139	100	3,773	100	16,890	100							

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				UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017	
				Count	%	Count	%	Count	%	Count	%	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
c. 11 pages or more	wrlongnum	0	None	47	78	943	84	2,788	74	12,612	75	.5	.7	-.10	.8 **	-.16	.9 **	-.16	
	(Recoded version of wrlong created by NSSE. Values are estimated number of papers, reports, etc.)	1.5	1-2	10	17	114	10	696	19	2,926	17								
		4	3-5	3	5	32	3	142	4	603	4								
		8	6-10	0	0	14	1	75	2	362	2								
		13	11-15	0	0	13	1	33	1	172	1								
		18	16-20	0	0	4	0	12	0	54	0								
		23	More than 20	0	0	7	1	11	0	71	0								
		Total			60	100	1,127	100	3,757	100	16,800	100							
Estimated number of assigned pages of student writing.	wpages											50.4	38.6	.18	44.4	.10	46.5	.06	
8. During the current school year, about how often have you had discussions with people from the following groups?																			
a. People of a race or ethnicity other than your own	DDrace	1	Never	8	13	65	6	168	4	787	5	2.5	2.9 ***	-.45	3.0 ***	-.61	3.1 ***	-.64	
		2	Sometimes	25	42	356	30	974	25	4,111	24								
		3	Often	17	28	404	34	1,252	33	5,606	33								
		4	Very often	10	17	352	30	1,427	37	6,614	39								
			Total	60	100	1,177	100	3,821	100	17,118	100								
b. People from an economic background other than your own	DDeconomic	1	Never	5	8	50	4	152	4	731	4	2.8	3.0 *	-.26	3.0 *	-.33	3.0 **	-.34	
		2	Sometimes	16	27	291	25	899	24	3,820	22								
		3	Often	28	47	472	40	1,430	37	6,421	38								
		4	Very often	11	18	358	31	1,336	35	6,105	36								
			Total	60	100	1,171	100	3,817	100	17,077	100								
c. People with religious beliefs other than your own	DDreligion	1	Never	4	7	62	5	290	8	1,084	6	2.7	3.0 *	-.29	2.9	-.20	3.0 *	-.28	
		2	Sometimes	21	35	298	25	1,009	26	4,201	25								
		3	Often	22	37	402	34	1,212	32	5,630	33								
		4	Very often	13	22	412	35	1,304	34	6,177	36								
			Total	60	100	1,174	100	3,815	100	17,092	100								
d. People with political views other than your own	DDpolitical	1	Never	4	7	55	5	185	5	874	5	2.9	3.0	-.20	3.0	-.19	3.0	-.17	
		2	Sometimes	14	23	277	24	946	25	4,265	25								
		3	Often	29	48	425	36	1,307	34	5,853	34								
		4	Very often	13	22	418	36	1,381	36	6,108	36								
			Total	60	100	1,175	100	3,819	100	17,100	100								

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First-Year Students^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k						
				UND				NSSE 2016 & 2017				Your first-year students compared with						
Item wording or description	Variable name ^l	Values ^m	Response options	UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND Mean	Plains Public Plus Mean	Effect size ⁿ	Carnegie Class Mean	Effect size ⁿ	NSSE 2016 & 2017 Mean	Effect size ⁿ
				Count	%	Count	%	Count	%	Count	%							
9. During the current school year, about how often have you done the following?																		
a. Identified key information from reading assignments	LSreading	1	Never	3	5	38	3	101	3	447	3	2.7	2.8	-.18	2.9 *	-.28	2.9 *	-.31
		2	Sometimes	21	35	360	31	1,038	27	4,405	26							
		3	Often	28	47	551	47	1,814	48	8,307	49							
		4	Very often	8	13	224	19	857	22	3,927	23							
		Total		60	100	1,173	100	3,810	100	17,086	100							
b. Reviewed your notes after class	LSnotes	1	Never	5	8	65	6	194	5	836	5	2.7	2.8	-.14	2.8	-.21	2.8	-.23
		2	Sometimes	21	35	404	35	1,223	32	5,459	32							
		3	Often	24	40	431	37	1,450	38	6,269	37							
		4	Very often	10	17	270	23	950	25	4,528	26							
		Total		60	100	1,170	100	3,817	100	17,092	100							
c. Summarized what you learned in class or from course materials	LSsummary	1	Never	6	10	87	7	274	7	1,143	7	2.6	2.6	-.07	2.7	-.12	2.7	-.16
		2	Sometimes	18	30	447	38	1,359	36	5,911	35							
		3	Often	31	52	430	37	1,431	38	6,566	39							
		4	Very often	5	8	205	18	732	19	3,422	20							
		Total		60	100	1,169	100	3,796	100	17,042	100							
10. During the current school year, to what extent have your courses challenged you to do your best work?																		
challenge		1	Not at all	0	0	3	0	25	1	138	1	5.5	5.6	-.12	5.5	-.05	5.5	-.03
		2		0	0	11	1	41	1	173	1							
		3		3	5	36	3	154	4	680	4							
		4		10	17	95	8	391	10	1,767	10							
		5		17	28	370	32	1,173	31	5,377	31							
		6		16	27	395	34	1,122	29	5,109	30							
		7	Very much	14	23	260	22	904	24	3,838	22							
		Total		60	100	1,170	100	3,810	100	17,082	100							
11. Which of the following have you done or do you plan to do before you graduate?^o																		
a. Participate in an internship, co-op, field experience, student teaching, or clinical placement	intern	Have not decided		7	12	63	5	298	8	1,387	8	5%	7%	-.09	7%	-.07	8%	-.11
		Do not plan to do		0	0	23	2	93	2	567	3							
		Plan to do		50	83	1,006	86	3,173	83	13,848	81							
		Done or in progress		3	5	83	7	256	7	1,305	8							
		Total		60	100	1,175	100	3,820	100	17,107	100							

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			Frequency Distributions								Statistical Comparisons ^k							
			UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Your first-year students compared with					
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
b. Hold a formal leadership role in a student organization or group	leader		Have not decided	18	30	304	26	975	26	4,432	26	10%	15%	-.16	13%	-.10	12%	-.06
			Do not plan to do	15	25	138	12	706	19	3,323	19							
			Plan to do	21	35	548	47	1,634	43	7,312	43							
			Done or in progress	6	10	181	15	497	13	2,015	12							
			Total	60	100	1,171	100	3,812	100	17,082	100							
c. Participate in a learning community or some other formal program where groups of students take two or more classes together	learncom		Have not decided	18	30	313	27	1,236	32	5,295	31	18%	22%	-.10	15%	.09	16%	.06
			Do not plan to do	17	28	339	29	1,046	27	4,683	27							
			Plan to do	14	23	256	22	965	25	4,376	26							
			Done or in progress	11	18	260	22	567	15	2,714	16							
			Total	60	100	1,168	100	3,814	100	17,068	100							
d. Participate in a study abroad program	abroad		Have not decided	16	27	358	31	1,160	30	4,924	29	0%	3%	-.34	3%	-.34	3%	-.35
			Do not plan to do	27	45	416	36	1,263	33	5,546	32							
			Plan to do	17	28	364	31	1,284	34	6,085	36							
			Done or in progress	0	0	33	3	107	3	522	3							
			Total	60	100	1,171	100	3,814	100	17,077	100							
e. Work with a faculty member on a research project	research		Have not decided	31	52	468	40	1,354	36	6,078	36	0%	6%	-.49	6%	-.50	6%	-.48
			Do not plan to do	11	18	163	14	453	12	2,265	13							
			Plan to do	18	30	472	40	1,777	47	7,742	45							
			Done or in progress	0	0	68	6	229	6	980	6							
			Total	60	100	1,171	100	3,813	100	17,065	100							
f. Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.)	capstone		Have not decided	15	25	334	29	948	25	4,190	25	0%	2%	-.28	1%	-.25	2%	-.26
			Do not plan to do	3	5	83	7	193	5	1,023	6							
			Plan to do	42	70	727	62	2,615	69	11,568	68							
			Done or in progress	0	0	22	2	57	1	293	2							
			Total	60	100	1,166	100	3,813	100	17,074	100							

12. About how many of your courses at this institution have included a community-based project (service-learning)?

servcourse	1	2	3	4	Total	Count	%	Count	%	Count	%	Count	%	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
1	None	32	53	614	52	2,124	56	9,044	53	1.5	1.5	-.08	1.5	-.04	1.6	-.09			
2	Some	27	45	482	41	1,410	37	6,702	39										
3	Most	0	0	66	6	225	6	1,065	6										
4	All	1	2	10	1	52	1	238	1										
Total		60	100	1,172	100	3,811	100	17,049	100										

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				UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017	
				Count	%	Count	%	Count	%	Count	%	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
d. Student services staff (career services, student activities, housing, etc.)	QIstaff	1	Poor	1	2	29	2	137	4	564	3	5.1	5.2	-.11	5.1	-.01	5.1	-.02	
		2		2	3	32	3	140	4	593	3								
		3		6	10	72	6	266	7	1,160	7								
		4		7	12	148	13	496	13	2,281	13								
		5		16	27	277	24	890	23	3,889	23								
		6		17	28	285	24	860	23	3,833	22								
		7	Excellent	8	13	237	20	712	19	3,200	19								
		—	Not applicable	3	5	89	8	304	8	1,550	9								
		Total		60	100	1,169	100	3,805	100	17,070	100								
e. Other administrative staff and offices (registrar, financial aid, etc.)	QIadmin	1	Poor	0	0	32	3	154	4	632	4	5.0	5.2	-.11	5.0	.01	5.0	.01	
		2		5	8	36	3	139	4	702	4								
		3		4	7	69	6	294	8	1,222	7								
		4		9	15	158	13	574	15	2,507	15								
		5		19	32	274	23	862	23	3,810	22								
		6		11	18	288	24	840	22	3,735	22								
		7	Excellent	11	18	221	19	666	17	2,989	17								
		—	Not applicable	1	2	98	8	285	7	1,489	9								
		Total		60	100	1,176	100	3,814	100	17,086	100								
14. How much does your institution emphasize the following?																			
a. Spending significant amounts of time studying and on academic work	empstudy	1	Very little	1	2	12	1	44	1	195	1	3.0	3.3 ***	-.52	3.3 ***	-.46	3.2 **	-.41	
		2	Some	15	25	123	11	443	12	2,249	13								
		3	Quite a bit	30	50	516	44	1,731	45	7,815	46								
		4	Very much	14	23	518	44	1,595	42	6,827	40								
				Total		60	100	1,169	100	3,813	100								17,086
b. Providing support to help students succeed academically	SEacademic	1	Very little	3	5	30	3	101	3	462	3	2.8	3.2 ***	-.49	3.1 ***	-.43	3.1 **	-.41	
		2	Some	13	22	172	15	632	17	2,975	17								
		3	Quite a bit	37	62	529	45	1,721	45	7,599	45								
		4	Very much	7	12	433	37	1,346	35	5,995	35								
				Total		60	100	1,164	100	3,800	100								17,031
c. Using learning support services (tutoring services, writing center, etc.)	SElearnsup	1	Very little	1	2	34	3	154	4	727	4	2.9	3.2 ***	-.47	3.2 **	-.37	3.1 **	-.35	
		2	Some	19	32	177	15	604	16	2,819	17								
		3	Quite a bit	28	47	444	38	1,520	40	6,829	40								
		4	Very much	12	20	512	44	1,521	40	6,672	39								
				Total		60	100	1,167	100	3,799	100								17,047

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Item wording or description				Frequency Distributions								Statistical Comparisons ^k						
				UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Your first-year students compared with				
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
d. Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)	SEdiverse	1	Very little	12	20	143	12	428	11	1,782	10	2.3	2.6 **	-0.38	2.7 ***	-0.44	2.8 ***	-0.50
		2	Some	26	43	388	33	1,160	30	4,831	28							
		3	Quite a bit	15	25	377	32	1,341	35	6,241	37							
		4	Very much	7	12	260	22	877	23	4,208	25							
		Total		60	100	1,168	100	3,806	100	17,062	100							
e. Providing opportunities to be involved socially	SEsocial	1	Very little	2	3	43	4	197	5	888	5	2.8	3.0 *	-0.28	3.0	-0.22	3.0	-0.23
		2	Some	20	33	272	23	893	23	3,865	23							
		3	Quite a bit	28	47	490	42	1,608	42	7,222	42							
		4	Very much	10	17	359	31	1,108	29	5,076	30							
		Total		60	100	1,164	100	3,806	100	17,051	100							
f. Providing support for your overall well-being (recreation, health care, counseling, etc.)	SEwellness	1	Very little	3	5	50	4	220	6	960	6	2.8	3.0	-0.22	2.9	-0.12	3.0	-0.16
		2	Some	17	28	259	22	865	23	3,757	22							
		3	Quite a bit	27	45	478	41	1,651	43	7,137	42							
		4	Very much	13	22	378	32	1,060	28	5,179	30							
		Total		60	100	1,165	100	3,796	100	17,033	100							
g. Helping you manage your non-academic responsibilities (work, family, etc.)	SEnonacad	1	Very little	16	27	235	20	771	20	3,369	20	2.0	2.3 **	-0.32	2.3 **	-0.33	2.4 ***	-0.36
		2	Some	27	45	471	40	1,483	39	6,453	38							
		3	Quite a bit	17	28	318	27	1,116	29	5,026	29							
		4	Very much	0	0	142	12	438	12	2,216	13							
		Total		60	100	1,166	100	3,808	100	17,064	100							
h. Attending campus activities and events (performing arts, athletic events, etc.)	SEactivities	1	Very little	5	8	94	8	312	8	1,393	8	2.8	2.8	-0.04	2.8	-0.01	2.8	-0.06
		2	Some	19	32	341	29	1,121	30	4,663	27							
		3	Quite a bit	22	37	450	39	1,520	40	6,908	41							
		4	Very much	14	23	278	24	843	22	4,084	24							
		Total		60	100	1,163	100	3,796	100	17,048	100							
i. Attending events that address important social, economic, or political issues	SEevents	1	Very little	9	15	189	16	643	17	2,510	15	2.2	2.4	-0.23	2.4	-0.21	2.5 **	-0.30
		2	Some	32	54	453	39	1,450	38	6,192	36							
		3	Quite a bit	14	24	353	30	1,199	32	5,686	33							
		4	Very much	4	7	167	14	507	13	2,646	16							
		Total		59	100	1,162	100	3,799	100	17,034	100							

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				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017				Your first-year students compared with					
				UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		Effect size ⁿ		Effect size ⁿ			
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ					
d. Working for pay off campus	tmworkoffhrs	0	0 hrs	55	92	934	80	3,081	81	13,240	78	1.2	3.0 **	-0.25	2.8 **	-0.23	3.5 ***	-0.29							
	(Recoded version of tmworkoff created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	1	2	53	5	129	3	660	4														
	8	6-10 hrs	1	2	34	3	155	4	722	4															
	13	11-15 hrs	1	2	35	3	131	3	683	4															
	18	16-20 hrs	0	0	53	5	118	3	680	4															
	23	21-25 hrs	2	3	28	2	73	2	445	3															
	28	26-30 hrs	0	0	9	1	46	1	221	1															
	33	More than 30 hrs	0	0	22	2	67	2	420	2															
	Total		60	100	1,168	100	3,800	100	17,071	100															
	Estimated number of hours working for pay	tmworkhrs		(Continuous variable created by NSSE)																	3.4	5.0	-0.18	5.1 *	-0.19
e. Doing community service or volunteer work	tmservicehrs	0	0 hrs	34	57	699	60	2,306	61	10,452	61	1.3	2.1 **	-0.19	2.1 ***	-0.19	2.1 ***	-0.19							
	(Recoded version of tmservice created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	26	43	373	32	1,154	30	4,955	29														
	8	6-10 hrs	0	0	40	3	169	4	806	5															
	13	11-15 hrs	0	0	25	2	85	2	392	2															
	18	16-20 hrs	0	0	18	2	52	1	225	1															
	23	21-25 hrs	0	0	8	1	21	1	119	1															
	28	26-30 hrs	0	0	1	0	1	0	25	0															
	33	More than 30 hrs	0	0	3	0	18	0	64	0															
Total		60	100	1,167	100	3,806	100	17,038	100																
f. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)	tmrelaxhrs	0	0 hrs	2	3	14	1	62	2	290	2	11.7	12.9	-0.15	12.4	-0.10	12.3	-0.08							
	(Recoded version of tmrelax created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	14	23	185	16	742	19	3,410	20														
	8	6-10 hrs	15	25	324	28	1,031	27	4,689	27															
	13	11-15 hrs	13	22	289	25	869	23	3,744	22															
	18	16-20 hrs	7	12	175	15	521	14	2,368	14															
	23	21-25 hrs	5	8	83	7	242	6	1,059	6															
	28	26-30 hrs	1	2	31	3	126	3	509	3															
33	More than 30 hrs	3	5	68	6	218	6	1,000	6																
Total		60	100	1,169	100	3,811	100	17,069	100																

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				UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		Your first-year students compared with					
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean
	tmreadinghrscol	1	0 hrs	0	0	4	0	12	0	66	0						
	(Collapsed version of tmreadinghrs created by NSSE.)	2	More than zero, up to 5 hrs	33	57	721	62	2,187	58	9,658	57						
		3	More than 5, up to 10 hrs	21	36	294	25	1,055	28	4,777	28						
		4	More than 10, up to 15 hrs	2	3	78	7	300	8	1,303	8						
		5	More than 15, up to 20 hrs	0	0	42	4	134	4	691	4						
		6	More than 20, up to 25 hrs	1	2	21	2	78	2	388	2						
		7	More than 25 hrs	1	2	10	1	30	1	146	1						
			Total	58	100	1,170	100	3,796	100	17,029	100						

17. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

a. Writing clearly and effectively	pgwrite	1	Very little	10	17	230	20	601	16	2,124	12	2.4	2.3	.08	2.5	-.10	2.6	-.18
		2	Some	21	35	453	39	1,255	33	5,622	33							
		3	Quite a bit	23	38	348	30	1,371	36	6,608	39							
		4	Very much	6	10	144	12	584	15	2,736	16							
			Total	60	100	1,175	100	3,811	100	17,090	100							
b. Speaking clearly and effectively	pgspeak	1	Very little	18	30	229	20	717	19	2,657	16	2.1	2.3	-.23	2.4 *	-.28	2.5 **	-.38
		2	Some	20	33	450	38	1,362	36	5,996	35							
		3	Quite a bit	18	30	358	31	1,205	32	5,903	35							
		4	Very much	4	7	136	12	518	14	2,515	15							
			Total	60	100	1,173	100	3,802	100	17,071	100							
c. Thinking critically and analytically	pgthink	1	Very little	3	5	35	3	135	4	584	3	3.0	3.1	-.14	3.1	-.09	3.1	-.11
		2	Some	7	12	202	17	715	19	3,128	18							
		3	Quite a bit	37	62	533	45	1,706	45	7,582	44							
		4	Very much	13	22	405	34	1,257	33	5,805	34							
			Total	60	100	1,175	100	3,813	100	17,099	100							
d. Analyzing numerical and statistical information	pganalyze	1	Very little	5	8	42	4	178	5	792	5	3.1	3.1	-.05	3.0	.03	3.0	.03
		2	Some	4	7	223	19	816	21	3,601	21							
		3	Quite a bit	34	57	490	42	1,563	41	7,027	41							
		4	Very much	17	28	418	36	1,256	33	5,669	33							
			Total	60	100	1,173	100	3,813	100	17,089	100							

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				UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Your first-year students compared with				
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ		Mean	Effect size ⁿ	
														Mean	Effect size ⁿ		Mean	Effect size ⁿ
e. Acquiring job- or work-related knowledge and skills	pgwork	1	Very little	9	15	105	9	405	11	1,898	11	2.6	2.7	-.15	2.7	-.09	2.7	-.08
		2	Some	20	33	366	31	1,215	32	5,430	32							
		3	Quite a bit	17	28	437	37	1,365	36	6,090	36							
		4	Very much	14	23	269	23	821	22	3,676	22							
		Total		60	100	1,177	100	3,806	100	17,094	100							
f. Working effectively with others	pgothers	1	Very little	6	10	62	5	226	6	969	6	2.7	2.8	-.12	2.8	-.16	2.9	-.20
		2	Some	18	30	351	30	1,088	29	4,618	27							
		3	Quite a bit	24	40	512	44	1,583	42	7,173	42							
		4	Very much	12	20	245	21	914	24	4,337	25							
		Total		60	100	1,170	100	3,811	100	17,097	100							
g. Developing or clarifying a personal code of values and ethics	pgvalues	1	Very little	9	15	210	18	589	15	2,385	14	2.5	2.5	-.01	2.6	-.13	2.6	-.18
		2	Some	19	32	396	34	1,176	31	5,224	31							
		3	Quite a bit	28	47	390	33	1,316	34	5,974	35							
		4	Very much	4	7	178	15	735	19	3,515	21							
		Total		60	100	1,174	100	3,816	100	17,098	100							
h. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)	pgdiverse	1	Very little	13	22	198	17	538	14	2,251	13	2.2	2.4	-.22	2.6 **	-.36	2.6 **	-.41
		2	Some	25	42	434	37	1,265	33	5,401	32							
		3	Quite a bit	15	25	360	31	1,266	33	5,943	35							
		4	Very much	6	10	179	15	745	20	3,486	20							
		Total		59	100	1,171	100	3,814	100	17,081	100							
i. Solving complex real-world problems	pgprobsolve	1	Very little	10	17	114	10	381	10	1,664	10	2.6	2.7	-.16	2.7	-.15	2.7	-.17
		2	Some	18	31	361	31	1,169	31	5,170	30							
		3	Quite a bit	18	31	436	37	1,413	37	6,382	37							
		4	Very much	13	22	265	23	852	22	3,885	23							
		Total		59	100	1,176	100	3,815	100	17,101	100							
j. Being an informed and active citizen	pgcitizen	1	Very little	15	25	205	18	610	16	2,524	15	2.2	2.4	-.23	2.5 *	-.30	2.5 **	-.36
		2	Some	26	43	464	40	1,383	36	5,950	35							
		3	Quite a bit	12	20	338	29	1,239	33	5,734	34							
		4	Very much	7	12	164	14	576	15	2,835	17							
		Total		60	100	1,171	100	3,808	100	17,043	100							

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

First-Year Students^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k															
				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017				UND				Your first-year students compared with			
Item wording or description	Variable name ^l	Values ^m	Response options	Count		%		Count		%		Count		%		Count		%		Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
				Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Mean	Effect size ⁿ	Mean	Effect size ⁿ								
18. How would you evaluate your entire educational experience at this institution?																											
	evalexp	1	Poor	1	2	17	1	65	2	345	2	3.0	▼	3.3 *	-.33	3.2	-.25	3.2	-.25								
		2	Fair	15	25	106	9	477	12	2,048	12																
		3	Good	25	42	609	52	1,843	48	8,264	48																
		4	Excellent	19	32	446	38	1,434	38	6,449	38																
		Total		60	100	1,178	100	3,819	100	17,106	100																
19. If you could start over again, would you go to the same institution you are now attending?																											
	sameinst	1	Definitely no	2	3	23	2	109	3	526	3	3.0	▼	3.4 ***	-.51	3.3 **	-.35	3.3 **	-.34								
		2	Probably no	14	23	91	8	411	11	1,844	11																
		3	Probably yes	26	43	500	42	1,656	43	7,328	43																
		4	Definitely yes	18	30	563	48	1,641	43	7,411	43																
		Total		60	100	1,177	100	3,817	100	17,109	100																

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

Seniors^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k							
				UND				NSSE 2016 & 2017				Your seniors compared with							
Item wording or description	Variable name ^l	Values ^m	Response options	UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND Mean	Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		
				Count	%	Count	%	Count	%	Count	%		Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
1. During the current school year, about how often have you done the following?																			
a. Asked questions or contributed to course discussions in other ways	askquest	1 2 3 4	Never Sometimes Often Very often	10 65 60 38	6 38 35 22	68 618 507 377	4 39 32 24	187 1,720 1,535 1,145	4 37 33 25	875 7,526 7,219 5,851	4 35 34 27	2.7	2.8	-.04	2.8	-.08	2.8	-.13	
Total				173	100	1,570	100	4,587	100	21,471	100								
b. Prepared two or more drafts of a paper or assignment before turning it in	drafts	1 2 3 4	Never Sometimes Often Very often	40 61 52 19	23 35 30 11	421 630 361 152	27 40 23 10	1,205 1,785 1,056 533	26 39 23 12	5,383 8,140 5,182 2,719	25 38 24 13		2.3	2.2	.14	2.2	.09	2.2	.05
Total				172	100	1,564	100	4,579	100	21,424	100								
c. Come to class without completing readings or assignments	unpreparedr <i>(Reverse-coded version of unprepared created by NSSE.)</i>	1 2 3 4	Very often Often Sometimes Never	12 19 98 44	7 11 57 25	85 281 813 385	5 18 52 25	280 760 2,436 1,103	6 17 53 24	1,400 3,523 11,688 4,829	7 16 55 23			3.0	3.0	.06	3.0	.07	2.9
Total				173	100	1,564	100	4,579	100	21,440	100								
d. Attended an art exhibit, play, or other arts performance (dance, music, etc.)	attendart	1 2 3 4	Never Sometimes Often Very often	94 62 13 4	54 36 8 2	770 592 143 54	49 38 9 3	2,253 1,718 441 172	49 37 10 4	10,354 8,192 2,094 813	48 38 10 4	1.6			1.7	-.11	1.7	-.13	1.7
Total				173	100	1,559	100	4,584	100	21,453	100								
e. Asked another student to help you understand course material	CLaskhelp	1 2 3 4	Never Sometimes Often Very often	28 49 56 40	16 28 32 23	88 484 606 382	6 31 39 24	265 1,462 1,625 1,234	6 32 35 27	1,259 6,959 7,629 5,621	6 32 36 26		2.6		2.8 *	-.22	2.8 **	-.24	2.8 *
Total				173	100	1,560	100	4,586	100	21,468	100			▽		▽		▽	
f. Explained course material to one or more students	CLexplain	1 2 3 4	Never Sometimes Often Very often	18 48 66 41	10 28 38 24	26 416 692 432	2 27 44 28	80 1,120 1,976 1,412	2 24 43 31	411 5,347 9,028 6,684	2 25 42 31			2.8	3.0 **	-.28	3.0 ***	-.35	3.0 ***
Total				173	100	1,566	100	4,588	100	21,470	100	▽				▽		▽	

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

Seniors^a in Aero and Engineering

Item wording or description				Frequency Distributions								Statistical Comparisons ^k									
				UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017			
				Count	%	Count	%	Count	%	Count	%	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ		
g. Prepared for exams by discussing or working through course material with other students				CLstudy	1	Never	39	23	155	10	409	9	1,983	9	2.5	2.8 ***	-0.36	2.9 ***	-0.42	2.9 ***	-0.41
				2	Sometimes	49	28	444	28	1,248	27	5,849	27								
				3	Often	50	29	500	32	1,417	31	6,698	31								
				4	Very often	35	20	468	30	1,515	33	6,936	32								
				Total		173	100	1,567	100	4,589	100	21,466	100								
h. Worked with other students on course projects or assignments				CLproject	1	Never	17	10	24	2	99	2	458	2	2.9	3.2 ***	-0.43	3.3 ***	-0.50	3.3 ***	-0.47
				2	Sometimes	36	21	267	17	699	15	3,517	16								
				3	Often	71	41	612	39	1,627	35	7,512	35								
				4	Very often	49	28	663	42	2,161	47	9,984	46								
				Total		173	100	1,566	100	4,586	100	21,471	100								
i. Given a course presentation				present	1	Never	32	18	187	12	514	11	2,170	10	2.6	2.5	.07	2.6	-0.06	2.7	-0.12
				2	Sometimes	49	28	652	42	1,658	36	7,375	34								
				3	Often	54	31	480	31	1,474	32	7,015	33								
				4	Very often	38	22	247	16	947	21	4,907	23								
				Total		173	100	1,566	100	4,593	100	21,467	100								
2. During the current school year, about how often have you done the following?																					
a. Combined ideas from different courses when completing assignments				RIntegrate	1	Never	5	3	40	3	103	2	529	2	3.0	2.9	.02	2.9	.01	3.0	-0.01
				2	Sometimes	45	26	431	28	1,270	28	5,740	27								
				3	Often	76	44	674	43	1,992	43	9,160	43								
				4	Very often	47	27	416	27	1,226	27	6,018	28								
				Total		173	100	1,561	100	4,591	100	21,447	100								
b. Connected your learning to societal problems or issues				RSocietal	1	Never	29	17	241	15	673	15	3,022	14	2.3	2.3	.01	2.4	-0.04	2.4	-0.07
				2	Sometimes	75	44	739	47	2,112	46	9,620	45								
				3	Often	50	29	411	26	1,252	27	6,095	28								
				4	Very often	18	10	170	11	544	12	2,707	13								
				Total		172	100	1,561	100	4,581	100	21,444	100								
c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments				RIdiverse	1	Never	65	38	564	36	1,582	35	6,874	32	1.8	1.9	-0.05	1.9	-0.11	2.0 *	-0.17
				2	Sometimes	75	44	676	43	1,947	43	9,253	43								
				3	Often	23	13	235	15	772	17	3,811	18								
				4	Very often	8	5	82	5	277	6	1,494	7								
				Total		171	100	1,557	100	4,578	100	21,432	100								

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

Seniors^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k											
				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017				Your seniors compared with			
Item wording or description	Variable name ^l	Values ^m	Response options	UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND Mean	Plains Public Plus Mean	Carnegie Class Mean	NSSE 2016 & 2017 Mean	Effect size ⁿ	Effect size ⁿ	Effect size ⁿ	Effect size ⁿ				
				Count	%	Count	%	Count	%	Count	%									Effect size ⁿ	Effect size ⁿ	Effect size ⁿ	Effect size ⁿ
d. Examined the strengths and weaknesses of your own views on a topic or issue	RIownview	1	Never	17	10	160	10	410	9	1,925	9	2.5	2.5	-0.01	2.6	-0.09	2.6	-0.10					
		2	Sometimes	72	42	630	40	1,762	38	8,138	38												
		3	Often	63	37	591	38	1,775	39	8,263	39												
		4	Very often	20	12	179	11	630	14	3,122	15												
		Total		172	100	1,560	100	4,577	100	21,448	100												
e. Tried to better understand someone else's views by imagining how an issue looks from their perspective	RIspect	1	Never	15	9	117	7	295	6	1,375	6	2.6	2.7	-0.06	2.7 *	-0.16	2.7 *	-0.16					
		2	Sometimes	68	40	589	38	1,543	34	7,094	33												
		3	Often	60	35	575	37	1,831	40	8,714	41												
		4	Very often	29	17	280	18	907	20	4,240	20												
		Total		172	100	1,561	100	4,576	100	21,423	100												
f. Learned something that changed the way you understand an issue or concept	RInewview	1	Never	8	5	49	3	144	3	685	3	2.8	2.7	.06	2.8	-0.02	2.8	-0.03					
		2	Sometimes	53	31	571	37	1,487	32	6,909	32												
		3	Often	76	44	664	43	2,040	45	9,469	44												
		4	Very often	34	20	273	18	907	20	4,357	20												
		Total		171	100	1,557	100	4,578	100	21,420	100												
g. Connected ideas from your courses to your prior experiences and knowledge	RIconnect	1	Never	1	1	29	2	69	2	317	1	3.1	3.0	.13	3.1	.11	3.1	.09					
		2	Sometimes	36	21	337	22	941	21	4,321	20												
		3	Often	72	42	726	47	2,195	48	10,171	48												
		4	Very often	63	37	463	30	1,368	30	6,595	31												
		Total		172	100	1,555	100	4,573	100	21,404	100												
3. During the current school year, about how often have you done the following?																							
a. Talked about career plans with a faculty member	SFcareer	1	Never	45	26	356	23	987	22	4,399	21	2.1	2.2	-0.07	2.3	-0.13	2.3 *	-0.17					
		2	Sometimes	73	42	689	44	1,960	43	9,052	42												
		3	Often	38	22	351	22	1,069	23	4,913	23												
		4	Very often	16	9	167	11	565	12	3,060	14												
		Total		172	100	1,563	100	4,581	100	21,424	100												
b. Worked with a faculty member on activities other than coursework (committees, student groups, etc.)	SFotherwork	1	Never	80	47	598	38	1,740	38	8,165	38	1.9	2.0	-0.15	2.0	-0.15	2.0 *	-0.15					
		2	Sometimes	50	29	502	32	1,510	33	7,081	33												
		3	Often	27	16	299	19	846	18	3,804	18												
		4	Very often	15	9	163	10	479	10	2,366	11												
		Total		172	100	1,562	100	4,575	100	21,416	100												

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

Seniors^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k							
				UND				NSSE 2016 & 2017				Your seniors compared with							
				UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
c. Discussed course topics, ideas, or concepts with a faculty member outside of class	SFdiscuss	1	Never	46	27	335	21	974	21	4,488	21	2.1	2.2 *	-0.16	2.2 *	-0.18	2.2 **	-0.20	
		2	Sometimes	79	46	717	46	2,054	45	9,482	44								
		3	Often	37	22	362	23	1,095	24	5,070	24								
		4	Very often	10	6	145	9	449	10	2,355	11								
		Total		172	100	1,559	100	4,572	100	21,395	100								
d. Discussed your academic performance with a faculty member	SFperform	1	Never	48	28	414	27	1,237	27	5,642	26	2.0	2.0	-0.01	2.1	-0.03	2.1	-0.07	
		2	Sometimes	81	47	764	49	2,134	47	9,885	46								
		3	Often	32	19	281	18	875	19	4,075	19								
		4	Very often	11	6	98	6	325	7	1,785	8								
		Total		172	100	1,557	100	4,571	100	21,387	100								
4. During the current school year, how much has your coursework emphasized the following?																			
a. Memorizing course material	memorize	1	Very little	11	6	161	10	443	10	2,009	9	2.6	2.5	.11	2.6	.05	2.6	.05	
		2	Some	67	39	650	41	1,773	39	8,448	39								
		3	Quite a bit	72	42	541	34	1,680	37	7,798	36								
		4	Very much	22	13	217	14	683	15	3,201	15								
		Total		172	100	1,569	100	4,579	100	21,456	100								
b. Applying facts, theories, or methods to practical problems or new situations	HOapply	1	Very little	3	2	28	2	84	2	381	2	3.3	3.2	.12	3.3	.06	3.3	.04	
		2	Some	21	12	235	15	570	12	2,738	13								
		3	Quite a bit	65	38	647	41	1,890	41	8,499	40								
		4	Very much	83	48	658	42	2,032	44	9,812	46								
		Total		172	100	1,568	100	4,576	100	21,430	100								
c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts	HOanalyze	1	Very little	6	3	93	6	202	4	946	4	3.0	3.0	.08	3.0	-0.01	3.1	-0.03	
		2	Some	38	22	365	23	961	21	4,326	20								
		3	Quite a bit	71	41	598	38	1,833	40	8,502	40								
		4	Very much	57	33	506	32	1,573	34	7,642	36								
		Total		172	100	1,562	100	4,569	100	21,416	100								
d. Evaluating a point of view, decision, or information source	HOevaluate	1	Very little	27	16	240	15	679	15	3,105	14	2.5	2.4	.05	2.5	-0.02	2.5	-0.05	
		2	Some	60	35	618	40	1,663	36	7,571	35								
		3	Quite a bit	59	34	474	30	1,459	32	6,922	32								
		4	Very much	26	15	225	14	766	17	3,822	18								
		Total		172	100	1,557	100	4,567	100	21,420	100								

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

Seniors^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k											
				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017				Your seniors compared with			
Item wording or description	Variable name ^l	Values ^m	Response options	UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND	Plains Public Plus	Carnegie Class	NSSE 2016 & 2017	Effect size ⁿ		Effect size ⁿ					
				Count	%	Count	%	Count	%	Count	%					Mean	Mean	Mean	Mean	Mean	Effect size ⁿ	Effect size ⁿ	
e. Forming a new idea or understanding from various pieces of information	HOform	1	Very little	12	7	128	8	348	8	1,538	7	2.8	2.7	.08	2.8	.00	2.8	-.04					
		2	Some	50	29	515	33	1,399	31	6,221	29												
		3	Quite a bit	76	44	631	40	1,819	40	8,703	41												
		4	Very much	33	19	288	18	1,005	22	4,959	23												
		Total		171	100	1,562	100	4,571	100	21,421	100												
5. During the current school year, to what extent have your instructors done the following?																							
a. Clearly explained course goals and requirements	ETgoals	1	Very little	4	2	36	2	119	3	579	3	3.1	3.0	.06	3.0	.07	3.0	.05					
		2	Some	32	19	338	22	978	21	4,481	21												
		3	Quite a bit	84	49	741	47	2,198	48	10,158	47												
		4	Very much	52	30	452	29	1,292	28	6,251	29												
		Total		172	100	1,567	100	4,587	100	21,469	100												
b. Taught course sessions in an organized way	ETorganize	1	Very little	5	3	64	4	163	4	775	4	3.0	3.0	-.03	3.0	.00	3.0	-.02					
		2	Some	36	21	316	20	997	22	4,633	22												
		3	Quite a bit	90	52	741	47	2,228	49	10,147	47												
		4	Very much	41	24	441	28	1,191	26	5,894	27												
		Total		172	100	1,562	100	4,579	100	21,449	100												
c. Used examples or illustrations to explain difficult points	ETexample	1	Very little	3	2	68	4	177	4	746	3	3.0	3.0	-.03	3.1	-.03	3.1	-.06					
		2	Some	38	22	297	19	912	20	4,147	19												
		3	Quite a bit	83	48	685	44	1,986	43	9,336	44												
		4	Very much	48	28	511	33	1,500	33	7,211	34												
		Total		172	100	1,561	100	4,575	100	21,440	100												
d. Provided feedback on a draft or work in progress	ETdraftfb	1	Very little	35	21	286	18	761	17	3,314	15	2.3	2.4	-.04	2.4	-.11	2.5 *	-.17					
		2	Some	70	41	591	38	1,712	37	7,623	36												
		3	Quite a bit	38	22	497	32	1,442	32	6,998	33												
		4	Very much	27	16	187	12	659	14	3,496	16												
		Total		170	100	1,561	100	4,574	100	21,431	100												
e. Provided prompt and detailed feedback on tests or completed assignments	ETfeedback	1	Very little	21	12	165	11	421	9	2,014	9	2.5	2.6	-.11	2.7	-.14	2.7	-.15					
		2	Some	61	35	495	32	1,524	33	6,951	33												
		3	Quite a bit	67	39	647	42	1,830	40	8,548	40												
		4	Very much	23	13	252	16	787	17	3,844	18												
		Total		172	100	1,559	100	4,562	100	21,357	100												

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

Seniors^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k							
				UND				NSSE 2016 & 2017				Your seniors compared with							
				UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
6. During the current school year, about how often have you done the following?																			
a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	QRconclude	1	Never	3	2	34	2	109	2	518	2	3.3	3.1 ** ▲	.26	3.1 ** ▲	.22	3.1 * ▲	.20	
		2	Sometimes	25	15	344	22	856	19	3,980	19								
		3	Often	59	35	627	40	1,926	42	8,712	41								
		4	Very often	83	49	558	36	1,681	37	8,185	38								
			Total	170	100	1,563	100	4,572	100	21,395	100								
b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	QRproblem	1	Never	25	15	285	18	867	19	3,714	17	2.7	2.5 ** ▲	.24	2.5 ** ▲	.23	2.5 * ▲	.17	
		2	Sometimes	47	27	550	35	1,505	33	6,984	33								
		3	Often	51	30	421	27	1,308	29	6,025	28								
		4	Very often	49	28	305	20	890	19	4,671	22								
			Total	172	100	1,561	100	4,570	100	21,394	100								
c. Evaluated what others have concluded from numerical information	QRevaluate	1	Never	14	8	159	10	463	10	2,021	9	2.7	2.6 * ▲	.16	2.6	.10	2.7	.06	
		2	Sometimes	57	34	622	40	1,663	36	7,517	35								
		3	Often	63	37	516	33	1,607	35	7,593	35								
		4	Very often	36	21	266	17	844	18	4,295	20								
			Total	170	100	1,563	100	4,577	100	21,426	100								
7. During the current school year, about how many papers, reports, or other writing tasks of the following lengths have you been assigned? (Include those not yet completed.)																			
a. Up to 5 pages	wrshortnum	0	None	17	10	148	10	469	10	2,026	10	5.7	6.2	-.08	6.2	-.08	6.5 * ▼	-.13	
	(Recorded version of wrshort created by NSSE. Values are estimated number of papers, reports, etc.)	1.5	1-2	39	23	402	26	1,104	24	4,866	23								
		4	3-5	48	28	416	27	1,275	28	5,981	28								
		8	6-10	41	24	271	18	817	18	4,059	19								
		13	11-15	14	8	146	10	383	8	1,895	9								
		18	16-20	5	3	64	4	182	4	959	5								
		23	More than 20	5	3	86	6	284	6	1,424	7								
			Total	169	100	1,533	100	4,514	100	21,210	100								
b. Between 6 and 10 pages	wrmednum	0	None	46	27	449	30	1,287	29	5,634	27	3.0	3.2	-.04	3.4	-.08	3.6 * ▼	-.13	
	(Recorded version of wrmed created by NSSE. Values are estimated number of papers, reports, etc.)	1.5	1-2	59	35	512	34	1,475	33	6,855	33								
		4	3-5	38	22	325	21	920	21	4,522	21								
		8	6-10	16	9	134	9	483	11	2,427	12								
		13	11-15	9	5	53	3	174	4	873	4								
		18	16-20	1	1	29	2	54	1	348	2								
		23	More than 20	0	0	20	1	90	2	433	2								
			Total	169	100	1,522	100	4,483	100	21,092	100								

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Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

Seniors^a in Aero and Engineering

				Frequency Distributions						Statistical Comparisons ^k									
				UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017	
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
Item wording or description	Variable name ^l	Values ^m	Response options	Your seniors compared with															
c. 11 pages or more	wrlongnum	0	None	68	40	655	43	1,818	40	8,364	40	2.2	2.3	-0.03	2.7	-0.11	2.7	-0.11	
	(Recoded version of wrlong created by NSSE. Values are estimated number of papers, reports, etc.)	1.5	1-2	63	37	497	33	1,450	32	7,066	33								
	4	3-5	21	12	205	13	620	14	2,886	14									
	8	6-10	13	8	93	6	343	8	1,540	7									
	13	11-15	4	2	37	2	144	3	655	3									
	18	16-20	1	1	22	1	48	1	265	1									
	23	More than 20	1	1	16	1	87	2	389	2									
	Total			171	100	1,525	100	4,510	100	21,165	100								
Estimated number of assigned pages of student writing.	wpages											72.3	77.0	-0.05	84.4 *	-0.12	87.2 *	-0.14	
			(Continuous variable, recoded and summed by NSSE from wrshort, wrmed, and wrlong. Values are estimated pages of assigned writing.)																
8. During the current school year, about how often have you had discussions with people from the following groups?																			
a. People of a race or ethnicity other than your own	DDrace	1	Never	19	11	111	7	269	6	1,241	6	2.7	2.9	-0.15	3.0 ***	-0.32	3.1 ***	-0.35	
		2	Sometimes	58	34	479	31	1,131	25	4,991	23								
		3	Often	45	26	449	29	1,320	29	6,231	29								
		4	Very often	51	29	526	34	1,863	41	8,976	42								
			Total	173	100	1,565	100	4,583	100	21,439	100								
b. People from an economic background other than your own	DDeconomic	1	Never	13	8	70	4	220	5	1,026	5	2.8	3.0	-0.17	3.1 **	-0.25	3.1 **	-0.25	
		2	Sometimes	55	32	399	25	1,017	22	4,803	22								
		3	Often	52	30	582	37	1,611	35	7,431	35								
		4	Very often	53	31	514	33	1,732	38	8,158	38								
			Total	173	100	1,565	100	4,580	100	21,418	100								
c. People with religious beliefs other than your own	DDreligion	1	Never	13	8	80	5	350	8	1,394	7	2.8	3.0 *	-0.17	3.0 *	-0.16	3.0 **	-0.21	
		2	Sometimes	62	36	441	28	1,133	25	5,151	24								
		3	Often	42	24	481	31	1,420	31	6,642	31								
		4	Very often	56	32	561	36	1,674	37	8,210	38								
			Total	173	100	1,563	100	4,577	100	21,397	100								
d. People with political views other than your own	DDpolitical	1	Never	14	8	76	5	237	5	1,216	6	2.9	3.0	-0.16	3.0	-0.16	3.0	-0.14	
		2	Sometimes	53	31	384	25	1,142	25	5,460	26								
		3	Often	48	28	549	35	1,516	33	6,926	32								
		4	Very often	58	34	549	35	1,676	37	7,804	36								
			Total	173	100	1,558	100	4,571	100	21,406	100								

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University of North Dakota

Seniors^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k															
				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017				Your seniors compared with							
Item wording or description	Variable name ^l	Values ^m	Response options	Count		%		Count		%		Count		%		Count		%		Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
				UND	Plains Public Plus	Carnegie Class	NSSE 2016 & 2017	UND	Plains Public Plus	Carnegie Class	NSSE 2016 & 2017																
9. During the current school year, about how often have you done the following?																											
a. Identified key information from reading assignments	LSreading	1	Never	8	5	92	6	235	5	1,081	5	2.9	2.8	.13	2.9	.03	2.9	.01									
		2	Sometimes	49	28	504	32	1,316	29	5,890	27																
		3	Often	70	41	625	40	1,907	42	9,007	42																
		4	Very often	45	26	340	22	1,126	25	5,456	25																
		Total		172	100	1,561	100	4,584	100	21,434	100																
b. Reviewed your notes after class	LSnotes	1	Never	14	8	136	9	350	8	1,739	8	2.8	2.7 *	.19	2.7	.10	2.7	.09									
		2	Sometimes	48	28	592	38	1,612	35	7,265	34																
		3	Often	64	37	511	33	1,528	33	7,099	33																
		4	Very often	46	27	320	21	1,089	24	5,318	25																
		Total		172	100	1,559	100	4,579	100	21,421	100																
c. Summarized what you learned in class or from course materials	LSsummary	1	Never	19	11	180	12	457	10	2,118	10	2.7	2.5 *	.19	2.6	.10	2.7	.07									
		2	Sometimes	47	27	609	39	1,645	36	7,394	35																
		3	Often	70	40	487	31	1,592	35	7,537	35																
		4	Very often	37	21	271	18	873	19	4,313	20																
		Total		173	100	1,547	100	4,567	100	21,362	100																
10. During the current school year, to what extent have your courses challenged you to do your best work?																											
challenge		1	Not at all	4	2	11	1	40	1	228	1	5.7	5.5	.13	5.6	.07	5.5	.10									
		2		0	0	22	1	70	2	359	2																
		3		3	2	66	4	170	4	930	4																
		4		13	8	149	10	433	9	2,099	10																
		5		49	29	485	31	1,298	28	6,046	28																
		6		56	33	476	30	1,329	29	6,095	28																
		7	Very much	46	27	352	23	1,228	27	5,632	26																
		Total		171	100	1,561	100	4,568	100	21,389	100																
11. Which of the following have you done or do you plan to do before you graduate?^o																											
a. Participate in an internship, co-op, field experience, student teaching, or clinical placement	intern	(Means indicate the percentage who responded "Done or in progress.")	Have not decided	9	5	60	4	229	5	1,114	5	54%	63% *	-.18	57%	-.06	58%	-.07									
			Do not plan to do	33	19	137	9	473	10	2,222	10																
			Plan to do	37	21	378	24	1,260	28	5,756	27																
			Done or in progress	94	54	988	63	2,618	57	12,352	58																
			Total	173	100	1,563	100	4,580	100	21,444	100																

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University of North Dakota

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			Frequency Distributions								Statistical Comparisons ^k							
			UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Your seniors compared with					
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
b. Hold a formal leadership role in a student organization or group	leader		Have not decided	12	7	124	8	384	8	1,953	9	41%	54% **	-0.25	48%	-0.15	45%	-0.08
			Do not plan to do	72	42	477	31	1,537	34	7,782	36							
			Plan to do	18	10	122	8	438	10	2,017	9							
			Done or in progress	71	41	839	54	2,220	48	9,675	45							
			Total	173	100	1,562	100	4,579	100	21,427	100							
c. Participate in a learning community or some other formal program where groups of students take two or more classes together	learncom		Have not decided	24	14	173	11	550	12	2,443	11	24%	28%	-0.07	25%	-0.02	25%	-0.03
			Do not plan to do	99	57	849	54	2,480	54	11,543	54							
			Plan to do	8	5	109	7	393	9	1,975	9							
			Done or in progress	42	24	430	28	1,157	25	5,452	25							
			Total	173	100	1,561	100	4,580	100	21,413	100							
d. Participate in a study abroad program	abroad		Have not decided	15	9	152	10	431	9	2,026	9	7%	11%	-0.14	11%	-0.16	13% *	-0.20
			Do not plan to do	143	83	1,156	74	3,325	73	15,197	71							
			Plan to do	3	2	81	5	297	6	1,462	7							
			Done or in progress	12	7	169	11	521	11	2,727	13							
			Total	173	100	1,558	100	4,574	100	21,412	100							
e. Work with a faculty member on a research project	research		Have not decided	25	14	232	15	626	14	2,944	14	25%	31%	-0.12	33% *	-0.17	33% *	-0.18
			Do not plan to do	76	44	612	39	1,587	35	7,778	36							
			Plan to do	28	16	232	15	839	18	3,515	16							
			Done or in progress	44	25	479	31	1,515	33	7,146	33							
			Total	173	100	1,555	100	4,567	100	21,383	100							
f. Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.)	capstone		Have not decided	6	3	81	5	204	4	978	5	46%	51%	-0.09	56% *	-0.20	56% *	-0.19
			Do not plan to do	10	6	116	7	249	5	1,484	7							
			Plan to do	77	45	574	37	1,561	34	6,969	33							
			Done or in progress	80	46	793	51	2,561	56	11,987	56							
			Total	173	100	1,564	100	4,575	100	21,418	100							

12. About how many of your courses at this institution have included a community-based project (service-learning)?

servcourse	1	2	3	4	Total	Mean	Effect size ⁿ	Mean	Effect size ⁿ
None	109	63	881	57	2,402	1.4	-0.13	1.5	-0.22
Some	58	34	618	40	1,900				
Most	6	3	51	3	217				
All	0	0	9	1	50				
Total	173	100	1,559	100	4,569				

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				Frequency Distributions								Statistical Comparisons ^k											
				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017				Your seniors compared with			
Item wording or description	Variable name ^l	Values ^m	Response options	UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017					
				Count	%	Count	%	Count	%	Count	%	Count	%	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ				
13. Indicate the quality of your interactions with the following people at your institution.																							
a. Students	QIstudent	1	Poor	2	1	10	1	47	1	224	1	5.4	5.7 *	-0.22	5.6	-0.16	5.7	-0.16					
		2		5	3	16	1	60	1	295	1												
		3		10	6	48	3	188	4	810	4												
		4		17	10	134	9	399	9	1,961	9												
		5		40	23	391	25	1,126	25	5,171	24												
		6		44	25	496	32	1,400	31	6,475	30												
	7	Excellent	44	25	464	30	1,351	29	6,410	30													
	—	Not applicable	11	6	5	0	19	0	111	1													
		Total		173	100	1,564	100	4,590	100	21,457	100												
b. Academic advisors	QIadvisor	1	Poor	14	8	91	6	276	6	1,207	6	4.7	5.0 *	-0.19	4.9	-0.10	5.0 *	-0.16					
		2		11	6	86	6	306	7	1,285	6												
		3		19	11	137	9	443	10	1,894	9												
		4		27	16	207	13	662	14	2,989	14												
		5		35	20	295	19	921	20	4,198	20												
		6		34	20	333	21	851	19	4,141	19												
	7	Excellent	33	19	409	26	1,080	24	5,447	25													
	—	Not applicable	0	0	5	0	41	1	277	1													
		Total		173	100	1,563	100	4,580	100	21,438	100												
c. Faculty	QIfaculty	1	Poor	4	2	34	2	91	2	440	2	5.0	5.2 *	-0.19	5.2 *	-0.17	5.2 *	-0.20					
		2		10	6	51	3	158	3	689	3												
		3		13	8	100	6	286	6	1,312	6												
		4		28	16	205	13	667	15	3,044	14												
		5		48	28	400	26	1,193	26	5,561	26												
		6		45	26	467	30	1,294	28	5,854	27												
	7	Excellent	24	14	298	19	862	19	4,373	20													
	—	Not applicable	0	0	4	0	16	0	107	1													
		Total		172	100	1,559	100	4,567	100	21,380	100												

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University of North Dakota

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				Frequency Distributions								Statistical Comparisons ^k											
				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017				Your seniors compared with			
Item wording or description	Variable name ^l	Values ^m	Response options	UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND	Plains Public Plus	Carnegie Class		NSSE 2016 & 2017							
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ					
d. Student services staff (career services, student activities, housing, etc.)	QIstaff	1	Poor	9	5	60	4	256	6	1,085	5	4.8	4.9	-.09	4.7	.03	4.8	.00					
		2		9	5	69	4	251	5	1,079	5												
		3		11	6	126	8	384	8	1,749	8												
		4		22	13	264	17	741	16	3,437	16												
		5		37	22	303	19	963	21	4,382	20												
		6		28	16	332	21	812	18	3,782	18												
		7	Excellent	23	13	255	16	644	14	3,086	14												
		—	Not applicable	33	19	155	10	532	12	2,797	13												
	Total			172	100	1,564	100	4,583	100	21,397	100												
e. Other administrative staff and offices (registrar, financial aid, etc.)	QIadmin	1	Poor	15	9	61	4	277	6	1,222	6	4.6	4.9	-.14	4.7	-.03	4.7	-.05					
		2		13	8	102	7	275	6	1,251	6												
		3		16	9	127	8	450	10	1,907	9												
		4		20	12	244	16	751	16	3,663	17												
		5		37	21	364	23	1,045	23	4,789	22												
		6		31	18	336	21	878	19	3,982	19												
		7	Excellent	30	17	248	16	660	14	3,156	15												
		—	Not applicable	11	6	81	5	248	5	1,467	7												
	Total			173	100	1,563	100	4,584	100	21,437	100												
14. How much does your institution emphasize the following?																							
a. Spending significant amounts of time studying and on academic work	empstudy	1	Very little	4	2	20	1	67	1	325	2	3.1	3.3 *	-.16	3.3 **	-.23	3.3 *	-.17					
		2	Some	26	15	207	13	537	12	2,768	13												
		3	Quite a bit	83	48	678	43	1,852	40	9,064	42												
		4	Very much	59	34	660	42	2,120	46	9,267	43												
			Total			172	100	1,565	100	4,576	100								21,424	100			
b. Providing support to help students succeed academically	SEacademic	1	Very little	11	6	77	5	240	5	1,087	5	2.7	2.9 ***	-.27	2.9 **	-.21	2.9 **	-.23					
		2	Some	54	31	387	25	1,198	26	5,453	26												
		3	Quite a bit	83	48	681	44	2,026	44	9,516	45												
		4	Very much	24	14	417	27	1,104	24	5,317	25												
			Total			172	100	1,562	100	4,568	100								21,373	100			
c. Using learning support services (tutoring services, writing center, etc.)	SElearnsup	1	Very little	28	16	137	9	440	10	2,194	10	2.5	2.8 ***	-.36	2.8 ***	-.28	2.7 ***	-.26					
		2	Some	52	31	412	26	1,329	29	6,159	29												
		3	Quite a bit	68	40	594	38	1,727	38	8,114	38												
		4	Very much	22	13	418	27	1,068	23	4,933	23												
			Total			170	100	1,561	100	4,564	100								21,400	100			

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				Frequency Distributions								Statistical Comparisons ^k						
				UND				NSSE 2016 & 2017				Your seniors compared with						
Item wording or description	Variable name ^l	Values ^m	Response options	UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND Mean	Plains Public Plus		Carnegie Class		NSSE 2016 & 2017	
				Count	%	Count	%	Count	%	Count	%		Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
d. Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)	SEdiverse	1	Very little	46	27	316	20	947	21	3,874	18	2.2	2.4 *	-0.18	2.4 **	-0.22	2.5 ***	-0.30
		2	Some	66	38	586	38	1,590	35	7,181	34							
		3	Quite a bit	43	25	445	29	1,319	29	6,557	31							
		4	Very much	17	10	211	14	706	15	3,774	18							
		Total		172	100	1,558	100	4,562	100	21,386	100							
e. Providing opportunities to be involved socially	SEsocial	1	Very little	20	12	127	8	441	10	1,987	9	2.6	2.8 **	-0.22	2.7 *	-0.17	2.7 *	-0.19
		2	Some	64	37	432	28	1,331	29	6,109	29							
		3	Quite a bit	57	33	675	43	1,814	40	8,605	40							
		4	Very much	31	18	330	21	982	21	4,694	22							
		Total		172	100	1,564	100	4,568	100	21,395	100							
f. Providing support for your overall well-being (recreation, health care, counseling, etc.)	SEwellness	1	Very little	23	14	150	10	531	12	2,539	12	2.6	2.7 *	-0.17	2.7	-0.11	2.7	-0.14
		2	Some	53	31	462	30	1,338	29	6,031	28							
		3	Quite a bit	66	39	616	39	1,803	39	8,069	38							
		4	Very much	27	16	337	22	896	20	4,749	22							
		Total		169	100	1,565	100	4,568	100	21,388	100							
g. Helping you manage your non-academic responsibilities (work, family, etc.)	SEnonacad	1	Very little	66	38	556	36	1,721	38	7,474	35	1.9	2.0	-0.04	2.0	-0.03	2.0	-0.09
		2	Some	67	39	600	38	1,638	36	7,828	37							
		3	Quite a bit	23	13	298	19	875	19	4,295	20							
		4	Very much	16	9	110	7	335	7	1,776	8							
		Total		172	100	1,564	100	4,569	100	21,373	100							
h. Attending campus activities and events (performing arts, athletic events, etc.)	SEactivities	1	Very little	28	16	226	14	677	15	3,218	15	2.4	2.5	-0.11	2.5	-0.09	2.5	-0.13
		2	Some	61	36	524	34	1,647	36	6,977	33							
		3	Quite a bit	64	37	575	37	1,523	33	7,477	35							
		4	Very much	18	11	236	15	722	16	3,718	17							
		Total		171	100	1,561	100	4,569	100	21,390	100							
i. Attending events that address important social, economic, or political issues	SEevents	1	Very little	52	30	412	27	1,204	26	5,062	24	2.1	2.1	-0.06	2.1	-0.08	2.2 *	-0.18
		2	Some	71	42	651	42	1,869	41	8,494	40							
		3	Quite a bit	32	19	377	24	1,086	24	5,550	26							
		4	Very much	16	9	114	7	392	9	2,250	11							
		Total		171	100	1,554	100	4,551	100	21,356	100							

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

Seniors^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k													
				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017				Your seniors compared with					
				UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		Effect size ⁿ		Effect size ⁿ			
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ					
15. About how many hours do you spend in a typical 7-day week doing the following?																									
a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	tmprephrs	0	0 hrs	0	0	2	0	17	0	111	1	18.0	18.9	-0.10	18.4	-0.04	18.5	-0.06							
		3	1-5 hrs	13	8	93	6	354	8	1,575	7														
		8	6-10 hrs	24	14	207	13	707	15	3,261	15														
		13	11-15 hrs	37	22	295	19	822	18	3,789	18														
		18	16-20 hrs	39	23	344	22	898	20	4,144	19														
		23	21-25 hrs	20	12	231	15	605	13	3,002	14														
		28	26-30 hrs	14	8	134	9	416	9	1,927	9														
		33	More than 30 hrs	25	15	259	17	758	17	3,630	17														
			Total	172	100	1,565	100	4,577	100	21,439	100														
b. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)	tmcocurrhrs	0	0 hrs	74	43	346	22	1,311	29	6,657	31	4.1	7.0 ***	-0.39	6.1 ***	-0.28	5.9 ***	-0.26							
		3	1-5 hrs	54	32	534	34	1,517	33	6,954	32														
		8	6-10 hrs	24	14	322	21	822	18	3,555	17														
		13	11-15 hrs	8	5	164	11	412	9	1,927	9														
		18	16-20 hrs	6	4	86	6	228	5	1,114	5														
		23	21-25 hrs	3	2	51	3	135	3	589	3														
		28	26-30 hrs	1	1	16	1	65	1	239	1														
		33	More than 30 hrs	1	1	42	3	73	2	363	2														
			Total	171	100	1,561	100	4,563	100	21,398	100														
c. Working for pay on campus	tmworkonhrs	0	0 hrs	133	78	969	62	2,961	65	14,229	67	2.7	4.4 ***	-0.25	4.1 **	-0.21	3.9 **	-0.18							
		3	1-5 hrs	5	3	99	6	274	6	1,353	6														
		8	6-10 hrs	14	8	201	13	523	11	2,227	10														
		13	11-15 hrs	9	5	133	9	338	7	1,577	7														
		18	16-20 hrs	5	3	115	7	354	8	1,365	6														
		23	21-25 hrs	3	2	28	2	66	1	362	2														
		28	26-30 hrs	2	1	10	1	27	1	116	1														
		33	More than 30 hrs	0	0	7	0	22	0	162	1														
			Total	171	100	1,562	100	4,565	100	21,391	100														

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

Seniors^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k													
				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017				Your seniors compared with					
Item wording or description	Variable name ^l	Values ^m	Response options	UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND	Plains Public Plus	Carnegie Class	NSSE 2016 & 2017	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ			
				Count	%	Count	%	Count	%	Count	%												Mean	Mean	Effect size ⁿ
d. Working for pay off campus	tmworkoffhrs	0	0 hrs	73	42	984	63	2,745	60	12,350	58	14.4	6.4 *** ▲	.75	7.2 *** ▲	.65	8.0 *** ▲	.55							
	(Recoded version of tmworkoff created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	2	1	79	5	249	5	971	5														
	8	6-10 hrs	8	5	83	5	266	6	1,237	6															
	13	11-15 hrs	10	6	108	7	266	6	1,335	6															
	18	16-20 hrs	15	9	89	6	345	8	1,690	8															
	23	21-25 hrs	9	5	82	5	219	5	1,136	5															
	28	26-30 hrs	4	2	33	2	132	3	674	3															
	33	More than 30 hrs	51	30	96	6	348	8	1,999	9															
	Total			172	100	1,554	100	4,570	100	21,392	100														
Estimated number of hours working for pay	tmworkhrs											16.9	10.7 *** ▲	.55	11.2 *** ▲	.48	11.9 *** ▲	.41							
e. Doing community service or volunteer work	tmservicehrs	0	0 hrs	102	59	928	59	2,584	57	12,878	60	2.1	1.9	.04	2.2	-.04	2.2	-.02							
	(Recoded version of tmservice created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	53	31	513	33	1,537	34	6,396	30														
	8	6-10 hrs	10	6	72	5	232	5	1,067	5															
	13	11-15 hrs	5	3	21	1	101	2	490	2															
	18	16-20 hrs	0	0	8	1	56	1	257	1															
	23	21-25 hrs	1	1	11	1	30	1	157	1															
	28	26-30 hrs	0	0	1	0	9	0	47	0															
	33	More than 30 hrs	1	1	6	0	15	0	83	0															
	Total			172	100	1,560	100	4,564	100	21,375	100														
f. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)	tmrelaxhrs	0	0 hrs	4	2	32	2	121	3	648	3	10.2	12.0 ** ▽	-.23	11.2	-.13	11.2	-.13							
	(Recoded version of tmrelax created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	46	27	306	20	1,095	24	5,139	24														
	8	6-10 hrs	53	31	458	29	1,340	29	6,210	29															
	13	11-15 hrs	35	20	317	20	881	19	4,097	19															
	18	16-20 hrs	20	12	226	15	582	13	2,695	13															
	23	21-25 hrs	8	5	97	6	219	5	1,083	5															
	28	26-30 hrs	2	1	40	3	98	2	485	2															
	33	More than 30 hrs	4	2	78	5	229	5	1,039	5															
	Total			172	100	1,554	100	4,565	100	21,396	100														

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

Seniors^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k											
				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017				Your seniors compared with			
				UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017					
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ			
g. Providing care for dependents (children, parents, etc.)	tmcarehrs	0	0 hrs	119	69	1,281	82	3,466	76	16,126	76	6.4	▲	2.3 ***	.56	▲	3.2 ***	.40	▲	3.4 ***	.37		
	(Recorded version of tmcare created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	11	6	107	7	412	9	1,872	9												
	8	6-10 hrs	4	2	45	3	159	3	868	4													
	13	11-15 hrs	2	1	27	2	126	3	591	3													
	18	16-20 hrs	10	6	28	2	103	2	489	2													
	23	21-25 hrs	1	1	25	2	54	1	261	1													
	28	26-30 hrs	2	1	4	0	45	1	157	1													
	33	More than 30 hrs	23	13	42	3	184	4	990	5													
	Total		172	100	1,559	100	4,549	100	21,354	100													
h. Commuting to campus (driving, walking, etc.)	tmcommutehrs	0	0 hrs	70	41	144	9	610	13	3,564	17	2.1	▼	4.2 ***	-.51	▼	4.8 ***	-.54	▼	5.0 ***	-.52		
	(Recorded version of tmcommute created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	92	53	1,135	73	2,748	60	11,753	55												
	8	6-10 hrs	8	5	190	12	802	18	3,845	18													
	13	11-15 hrs	2	1	48	3	228	5	1,277	6													
	18	16-20 hrs	0	0	19	1	85	2	469	2													
	23	21-25 hrs	0	0	13	1	46	1	205	1													
	28	26-30 hrs	0	0	5	0	17	0	84	0													
	33	More than 30 hrs	0	0	9	1	40	1	247	1													
Total		172	100	1,563	100	4,576	100	21,444	100														
16. Of the time you spend preparing for class in a typical 7-day week, about how much is on assigned reading?																							
reading	1	Very little	48	28	583	37	1,534	34	6,996	33	2.2	▲	2.0 *	.18	2.1	.09	2.1	.07					
	2	Some	69	40	621	40	1,813	40	8,453	39													
	3	About half	38	22	207	13	754	16	3,673	17													
	4	Most	14	8	107	7	344	8	1,650	8													
	5	Almost all	3	2	40	3	128	3	634	3													
	Total		172	100	1,558	100	4,573	100	21,406	100													
tmreadinghrs																							
(Continuous variable created by NSSE. Calculated as a proportion of tmprephrs based on reading, where Very little=.10; Some=.25; About half=.50; Most=.75; Almost all=.90)																							
		5.6																					
		5.3 .06 5.5 .02 5.6 .00																					

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

Seniors^a in Aero and Engineering

Item wording or description	Variable name ^l	Values ^m	Response options	Frequency Distributions								Statistical Comparisons ^k					
				UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Your seniors compared with			
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean
	tmreadinghrscol	1	0 hrs	0	0	2	0	17	0	106	0						
	(Collapsed version of tmreadinghrs created by NSSE.)	2	More than zero, up to 5 hrs	100	58	995	64	2,803	61	12,788	60						
		3	More than 5, up to 10 hrs	45	26	380	24	1,160	25	5,626	26						
		4	More than 10, up to 15 hrs	20	12	81	5	273	6	1,252	6						
		5	More than 15, up to 20 hrs	5	3	44	3	152	3	836	4						
		6	More than 20, up to 25 hrs	1	1	34	2	105	2	502	2						
		7	More than 25 hrs	1	1	18	1	49	1	237	1						
			Total	172	100	1,554	100	4,559	100	21,347	100						

17. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

a. Writing clearly and effectively	pgwrite	1	Very little	21	13	202	13	537	12	2,204	10	2.6	2.6	.02	2.6	-.05	2.7	-.14
		2	Some	58	35	539	34	1,470	32	6,327	30							
		3	Quite a bit	57	34	542	35	1,645	36	8,119	38							
		4	Very much	32	19	280	18	924	20	4,783	22							
			Total	168	100	1,563	100	4,576	100	21,433	100							
b. Speaking clearly and effectively	pgspeak	1	Very little	27	16	210	13	525	11	2,411	11	2.5	2.6	-.05	2.7	-.14	2.7 *	-0.18
		2	Some	55	32	517	33	1,439	31	6,306	29							
		3	Quite a bit	60	35	545	35	1,622	35	7,726	36							
		4	Very much	30	17	290	19	984	22	4,978	23							
			Total	172	100	1,562	100	4,570	100	21,421	100							
c. Thinking critically and analytically	pgthink	1	Very little	2	1	40	3	103	2	535	2	3.3	3.4	-.09	3.4	-.07	3.4	-.06
		2	Some	23	13	170	11	527	12	2,454	11							
		3	Quite a bit	68	40	521	33	1,568	34	7,362	34							
		4	Very much	79	46	833	53	2,377	52	11,076	52							
			Total	172	100	1,564	100	4,575	100	21,427	100							
d. Analyzing numerical and statistical information	pganalyze	1	Very little	3	2	29	2	86	2	455	2	3.4	3.4	.03	3.4	.01	3.4	.03
		2	Some	13	8	178	11	451	10	2,302	11							
		3	Quite a bit	63	37	484	31	1,485	32	6,879	32							
		4	Very much	92	54	869	56	2,555	56	11,799	55							
			Total	171	100	1,560	100	4,577	100	21,435	100							

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

Seniors^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k														
				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017				Your seniors compared with						
Item wording or description	Variable name ^l	Values ^m	Response options	Count		%		Count		%		Count		%		Count		%		Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
				UND	%	Plains Public Plus	%	Carnegie Class	%	NSSE 2016 & 2017	%	UND	Plains Public Plus	Carnegie Class	NSSE 2016 & 2017											
e. Acquiring job- or work-related knowledge and skills	pgwork	1	Very little	11	6	106	7	356	8	1,691	8	3.0	3.0	.02	3.0	.07	3.0	.06								
		2	Some	37	22	349	22	1,042	23	4,866	23															
		3	Quite a bit	61	35	538	34	1,620	35	7,408	35															
		4	Very much	63	37	572	37	1,561	34	7,475	35															
		Total		172	100	1,565	100	4,579	100	21,440	100															
f. Working effectively with others	pgothers	1	Very little	14	8	77	5	212	5	977	5	2.8	3.0 **	-0.23	3.1 ***	-0.28	3.1 ***	-0.31	▽	▽	▽					
		2	Some	50	29	338	22	933	20	4,234	20															
		3	Quite a bit	62	36	651	42	1,838	40	8,524	40															
		4	Very much	45	26	498	32	1,591	35	7,701	36															
		Total		171	100	1,564	100	4,574	100	21,436	100															
g. Developing or clarifying a personal code of values and ethics	pgvalues	1	Very little	36	21	271	17	710	16	3,272	15	2.4	2.5	-0.09	2.6 **	-0.22	2.6 **	-0.24				▽	▽			
		2	Some	55	32	542	35	1,356	30	6,252	29															
		3	Quite a bit	57	33	468	30	1,482	32	6,851	32															
		4	Very much	24	14	282	18	1,028	22	5,061	24															
		Total		172	100	1,563	100	4,576	100	21,436	100															
h. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)	pgdiverse	1	Very little	51	30	320	20	900	20	3,756	18	2.1	2.4 **	-0.23	2.4 ***	-0.31	2.5 ***	-0.38	▽	▽	▽					
		2	Some	67	39	590	38	1,572	34	7,168	33															
		3	Quite a bit	34	20	421	27	1,285	28	6,219	29															
		4	Very much	20	12	230	15	822	18	4,286	20															
		Total		172	100	1,561	100	4,579	100	21,429	100															
i. Solving complex real-world problems	pgprobsolve	1	Very little	9	5	118	8	365	8	1,630	8	3.0	3.0	.06	3.0	.06	3.0	.05								
		2	Some	40	23	350	22	997	22	4,791	22															
		3	Quite a bit	60	35	556	36	1,646	36	7,465	35															
		4	Very much	62	36	539	34	1,573	34	7,551	35															
		Total		171	100	1,563	100	4,581	100	21,437	100															
j. Being an informed and active citizen	pgcitizen	1	Very little	44	26	390	25	1,120	25	4,561	21	2.3	2.2	.04	2.3	-0.01	2.4	-0.10								
		2	Some	65	38	604	39	1,631	36	7,643	36															
		3	Quite a bit	33	19	366	24	1,178	26	5,758	27															
		4	Very much	29	17	195	13	620	14	3,377	16															
		Total		171	100	1,555	100	4,549	100	21,339	100															

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Aero and Engineering

University of North Dakota

Seniors^a in Aero and Engineering

				Frequency Distributions								Statistical Comparisons ^k															
				UND				Plains Public Plus				Carnegie Class				NSSE 2016 & 2017				UND				Your seniors compared with			
				UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
18. How would you evaluate your entire educational experience at this institution?																											
	evalexp	1	Poor	7	4	51	3	137	3	729	3	3.1	3.2	-.13	3.2	-.12	3.2	-.14	3.2	-.14	3.2	-.14	3.2	-.14			
		2	Fair	28	16	205	13	644	14	2,941	14																
		3	Good	83	49	751	48	2,165	47	9,684	45																
		4	Excellent	53	31	559	36	1,636	36	8,096	38																
			Total	171	100	1,566	100	4,582	100	21,450	100																
19. If you could start over again, would you go to the same institution you are now attending?																											
	sameinst	1	Definitely no	13	8	66	4	245	5	1,102	5	3.0	3.2 **	-.22	3.1	-.15	3.2 *	-.17	3.2 *	-.17	3.2 *	-.17					
		2	Probably no	20	12	196	12	622	14	2,822	13																
		3	Probably yes	90	52	668	43	1,940	42	9,008	42																
		4	Definitely yes	49	28	639	41	1,781	39	8,555	40																
			Total	172	100	1,569	100	4,588	100	21,487	100																

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Aero and Engineering

University of North Dakota

Aero and Engineering

			First-Year Students ^a								Seniors ^a							
			UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017	
Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
20a. How many majors do you plan to complete? (Do not count minors.)	MAJnum	One	51	85	1,005	85	3,285	86	15,015	87	156	90	1,368	87	4,041	88	19,237	89
		More than one	9	15	175	15	545	14	2,155	13	17	10	204	13	559	12	2,295	11
		Total	60	100	1,180	100	3,830	100	17,170	100	173	100	1,572	100	4,600	100	21,532	100
First major or expected first major, in NSSE's default related-major categories. (This does not reflect any customization made for the Major Field Report.)	MAJfirstcol <i>(Recorded from MAJfirst.)</i>	Arts & Humanities	0	0	1	0	16	0	54	0	0	0	1	0	12	0	40	0
		Biological Sci., Agriculture, & Natural Resources	0	0	1	0	6	0	60	0	0	0	4	0	22	0	72	0
		Physical Sci., Mathematics, & Computer Science	4	7	56	5	152	4	931	5	14	8	114	7	242	5	1,422	7
		Social Sciences	0	0	0	0	4	0	24	0	0	0	1	0	6	0	32	0
		Business	0	0	3	0	4	0	50	0	1	1	2	0	12	0	68	0
		Communications, Media, & Public Relations	0	0	0	0	0	0	6	0	0	0	0	0	1	0	5	0
		Education	0	0	0	0	0	0	3	0	0	0	2	0	2	0	16	0
		Engineering	54	90	1,112	94	3,640	95	15,976	93	157	91	1,441	92	4,294	93	19,795	92
		Health Professions	1	2	4	0	3	0	23	0	0	0	0	0	3	0	15	0
		Social Service Professions	0	0	0	0	1	0	8	0	0	0	1	0	1	0	11	0
		All Other	1	2	3	0	4	0	30	0	1	1	6	0	4	0	52	0
		Undecided, Undeclared	0	0	0	0	0	0	4	0	0	0	0	0	0	0	1	0
		Total	60	100	1,180	100	3,830	100	17,169	100	173	100	1,572	100	4,599	100	21,529	100
Second major or expected second major, in NSSE's default related-major categories. (This does not reflect any customization made for the Major Field Report.)	MAJsecondcol <i>(Recorded from MAJsecond.)</i>	Arts & Humanities	1	13	8	5	56	10	180	8	2	12	11	6	57	10	144	6
		Biological Sci., Agriculture, & Natural Resources	1	13	7	4	18	3	84	4	0	0	11	6	15	3	87	4
		Physical Sci., Mathematics, & Computer Science	2	25	27	15	110	20	519	24	1	6	39	20	109	20	607	27
		Social Sciences	0	0	7	4	13	2	56	3	4	24	13	7	22	4	94	4
		Business	0	0	11	6	41	8	146	7	0	0	5	3	34	6	145	6
		Communications, Media, & Public Relations	0	0	0	0	0	0	6	0	0	0	1	1	3	1	6	0
		Education	0	0	0	0	3	1	22	1	0	0	1	1	1	0	19	1
		Engineering	2	25	108	62	270	50	1,010	47	8	47	108	54	283	51	1,002	44
		Health Professions	1	13	1	1	7	1	26	1	0	0	2	1	5	1	33	1
		Social Service Professions	0	0	2	1	5	1	17	1	0	0	1	1	4	1	19	1
		All Other	0	0	4	2	15	3	55	3	2	12	5	3	15	3	79	3
		Undecided, Undeclared	1	13	0	0	6	1	24	1	0	0	3	2	7	1	44	2
		Total	8	100	175	100	544	100	2,145	100	17	100	200	100	555	100	2,279	100

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Aero and Engineering

University of North Dakota

Aero and Engineering

First-Year Students^a

Seniors^a

Item wording or description	Variable name	Response options	NSSE 2016 & 2017								NSSE 2016 & 2017							
			UND		Plains Public Plus		Carnegie Class		2017		UND		Plains Public Plus		Carnegie Class		2017	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
21. What is your class level?	class	Freshman/First-year	54	90	1,036	88	3,460	91	15,285	90	2	1	3	0	21	0	65	0
		Sophomore	5	8	100	9	278	7	1,461	9	6	3	22	1	83	2	361	2
		Junior	1	2	31	3	41	1	215	1	38	22	224	14	654	14	3,200	15
		Senior	0	0	2	0	18	0	47	0	122	71	1,290	82	3,745	82	17,421	81
		Unclassified	0	0	6	1	14	0	65	0	5	3	27	2	83	2	396	2
		Total	60	100	1,175	100	3,811	100	17,073	100	173	100	1,566	100	4,586	100	21,443	100
22. Thinking about this current academic term, are you a full-time student?	fulltime	No	0	0	18	2	70	2	493	3	53	31	170	11	616	14	3,267	15
		Yes	58	100	1,150	98	3,719	98	16,507	97	119	69	1,382	89	3,934	86	18,042	85
		Total	58	100	1,168	100	3,789	100	17,000	100	172	100	1,552	100	4,550	100	21,309	100
23a. How many courses are you taking for credit this current academic term?	coursenum	0	0	0	1	0	5	0	53	0	0	0	30	2	81	2	492	2
		1	0	0	2	0	8	0	91	1	9	5	15	1	98	2	537	3
		2	1	2	6	1	17	0	175	1	25	14	40	3	186	4	1,089	5
		3	0	0	44	4	147	4	615	4	15	9	94	6	387	8	1,987	9
		4	9	15	415	35	921	24	4,517	26	36	21	471	30	1,238	27	6,205	29
		5	21	35	478	41	1,535	40	6,585	39	53	31	574	37	1,457	32	6,370	30
		6	14	23	132	11	724	19	3,084	18	17	10	208	13	710	15	2,831	13
		7 or more	15	25	97	8	453	12	1,959	11	18	10	133	8	427	9	1,942	9
Total	60	100	1,175	100	3,810	100	17,079	100	173	100	1,565	100	4,584	100	21,453	100		
b. Of these, how many are entirely online?	onlinenum	0	53	88	988	85	3,469	92	15,058	89	85	49	1,304	83	3,801	83	17,612	82
		1	7	12	134	11	233	6	1,332	8	27	16	185	12	534	12	2,498	12
		2	0	0	29	2	43	1	295	2	28	16	47	3	139	3	711	3
		3	0	0	10	1	20	1	121	1	13	8	16	1	43	1	234	1
		4	0	0	3	0	15	0	87	1	9	5	4	0	24	1	134	1
		5	0	0	1	0	6	0	37	0	6	3	2	0	7	0	61	0
		6	0	0	1	0	2	0	18	0	1	1	3	0	7	0	47	0
		7 or more	0	0	1	0	3	0	31	0	4	2	1	0	11	0	53	0
Total	60	100	1,167	100	3,791	100	16,979	100	173	100	1,562	100	4,566	100	21,350	100		
Collapsed recode of courses taken online (Based on responses to coursenum and onlinenum.)	onlinecrscol	No courses taken online	53	88	988	85	3,468	92	15,056	89	85	49	1,304	83	3,801	83	17,612	82
		Some courses taken online	7	12	171	15	286	8	1,604	9	28	16	244	16	667	15	3,014	14
		All courses taken online	0	0	8	1	36	1	317	2	60	35	14	1	98	2	724	3
		Total	60	100	1,167	100	3,790	100	16,977	100	173	100	1,562	100	4,566	100	21,350	100

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Aero and Engineering

University of North Dakota

Aero and Engineering

First-Year Students^a

Seniors^a

Item wording or description	Variable name	Response options	First-Year Students ^a								Seniors ^a							
			UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
24. What have most of your grades been up to now at this institution?	grades	C- or lower	0	0	19	2	62	2	259	2	0	0	2	0	23	1	91	0
		C	2	3	44	4	109	3	473	3	4	2	44	3	154	3	614	3
		C+	4	7	47	4	177	5	722	4	13	8	93	6	277	6	1,126	5
		B-	1	2	84	7	250	7	1,121	7	14	8	138	9	367	8	1,818	8
		B	13	22	230	20	704	19	3,308	19	47	27	347	22	948	21	4,628	22
		B+	12	20	200	17	704	19	3,050	18	22	13	256	16	856	19	4,108	19
		A-	9	15	215	18	727	19	3,438	20	22	13	280	18	799	17	3,870	18
		A	19	32	332	28	1,072	28	4,674	27	51	29	402	26	1,152	25	5,159	24
	Total	60	100	1,171	100	3,805	100	17,045	100	173	100	1,562	100	4,576	100	21,414	100	
25. Did you begin college at this institution or elsewhere?	begincol	Started here	58	97	1,056	90	3,557	94	15,787	93	75	43	979	63	2,989	65	13,456	63
		Started elsewhere	2	3	112	10	242	6	1,248	7	98	57	578	37	1,585	35	7,947	37
		Total	60	100	1,168	100	3,799	100	17,035	100	173	100	1,557	100	4,574	100	21,403	100
26. Since graduating from high school, which of the following types of schools have you attended <i>other than</i> the one you are now attending? (Select all that apply.)	attend_voc	Vocational or technical school	1	2	29	2	65	2	444	3	11	6	83	5	209	5	1,263	6
	attend_com	Community or junior college	1	2	101	9	282	7	1,284	8	78	45	618	40	1,564	34	7,544	35
	attend_col	4-year college or university other than this one	2	3	90	8	239	6	1,289	8	76	44	334	21	984	22	4,749	22
	attend_none	None	54	90	925	79	3,140	83	13,700	81	55	32	690	44	2,284	50	10,187	48
	attend_other	Other	1	2	35	3	102	3	615	4	13	8	50	3	169	4	813	4
27. What is the highest level of education you ever expect to complete?	edaspire	Some college but less than a bachelor's degree	5	8	55	5	164	4	769	5	14	8	69	4	196	4	1,054	5
		Bachelor's degree (B.A., B.S., etc.)	31	52	526	45	1,241	33	5,799	34	80	46	664	43	1,503	33	7,474	35
		Master's degree (M.A., M.S., etc.)	20	33	433	37	1,731	46	7,589	45	63	36	630	40	2,142	47	9,601	45
		Doctoral or professional degree (Ph.D., J.D., M.D., etc.)	4	7	150	13	656	17	2,842	17	16	9	195	13	729	16	3,270	15
		Total	60	100	1,164	100	3,792	100	16,999	100	173	100	1,558	100	4,570	100	21,399	100

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Aero and Engineering

University of North Dakota

Aero and Engineering

			First-Year Students ^a								Seniors ^a								
			UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		
Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	
28. What is the highest level of education completed by either of your parents (or those who raised you)?	parented	Did not finish high school	0	0	32	3	147	4	727	4	5	3	36	2	208	5	1,030	5	
		High school diploma or G.E.D.	3	5	114	10	472	12	2,175	13	25	15	201	13	564	12	2,953	14	
		Attended college, but did not complete degree	9	15	79	7	301	8	1,326	8	19	11	113	7	371	8	1,705	8	
		Associate's degree (A.A., A.S., etc.)	6	10	117	10	286	8	1,304	8	19	11	172	11	396	9	1,832	9	
		Bachelor's degree (B.A., B.S., etc.)	22	37	459	39	1,228	33	5,562	33	53	31	593	38	1,565	34	7,074	33	
		Master's degree (M.A., M.S., etc.)	12	20	273	23	1,000	26	4,365	26	40	23	334	21	1,080	24	4,918	23	
		Doctoral or professional degree (Ph.D., J.D., M.D., etc.)	8	13	91	8	343	9	1,502	9	11	6	106	7	382	8	1,818	9	
		Total	60	100	1,165	100	3,777	100	16,961	100	172	100	1,555	100	4,566	100	21,330	100	
First-generation status (Neither parent holds a bachelor's degree.)	firstgen (Recoded from parented.)	Not first-generation	42	70	823	71	2,571	68	11,429	67	104	60	1,033	66	3,027	66	13,810	65	
		First-generation	18	30	342	29	1,206	32	5,532	33	68	40	522	34	1,539	34	7,520	35	
		Total	60	100	1,165	100	3,777	100	16,961	100	172	100	1,555	100	4,566	100	21,330	100	
29. What is your gender identity?	genderid	Man	44	75	840	72	2,554	67	11,602	68	129	75	1,133	73	3,173	69	14,937	70	
		Woman	14	24	305	26	1,149	30	5,028	30	35	20	380	24	1,271	28	5,772	27	
		Another gender identity	0	0	7	1	46	1	192	1	6	3	17	1	44	1	286	1	
		I prefer not to respond	1	2	12	1	43	1	188	1	3	2	25	2	79	2	377	2	
		Total	59	100	1,164	100	3,792	100	17,010	100	173	100	1,555	100	4,567	100	21,372	100	
30. Enter your year of birth (e.g., 1994):	agecat (Recoded from the information entered in birthyear.)	19 or younger	59	100	1,064	92	3,388	90	15,163	90	0	0	8	1	36	1	165	1	
		20-23	0	0	70	6	307	8	1,234	7	85	50	1,182	76	3,256	72	14,893	70	
		24-29	0	0	13	1	40	1	243	1	35	20	220	14	785	17	3,720	18	
		30-39	0	0	9	1	24	1	164	1	40	23	98	6	316	7	1,748	8	
		40-55	0	0	5	0	7	0	77	0	11	6	37	2	114	3	606	3	
		Over 55	0	0	1	0	2	0	6	0	0	0	1	0	14	0	63	0	
		Total	59	100	1,162	100	3,768	100	16,887	100	171	100	1,546	100	4,521	100	21,195	100	
31a. Are you an international student?	internat	No	60	100	1,070	92	3,458	92	15,513	92	170	99	1,446	93	4,239	93	19,930	94	
		Yes	0	0	90	8	310	8	1,397	8	2	1	106	7	302	7	1,346	6	
		Total	60	100	1,160	100	3,768	100	16,910	100	172	100	1,552	100	4,541	100	21,276	100	
[If answered "yes"] Country of citizenship, collapsed into regions by NSSE. Responses to country are in the data file.	countrycol (Recoded from country.)	Africa Sub-Saharan	0	0	4	5	15	5	115	9	0	0	14	14	33	12	101	8	
		Asia	0	0	43	52	124	42	540	41	0	0	54	54	104	36	528	42	
		Canada	0	0	0	0	5	2	18	1	2	100	0	0	7	2	17	1	
		Europe	0	0	1	1	17	6	86	7	0	0	1	1	15	5	78	6	
		Latin America and Caribbean	0	0	16	19	78	26	266	20	0	0	11	11	55	19	214	17	
		Middle East and North Africa	0	0	18	22	56	19	283	22	0	0	19	19	70	25	319	25	
		Oceania	0	0	1	1	1	0	8	1	0	0	1	1	1	0	5	0	
		Unknown region/uncoded	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	0	0	83	100	296	100	1,316	100	2	100	100	100	285	100	1,262	100	

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Aero and Engineering

University of North Dakota

Aero and Engineering

			First-Year Students ^a								Seniors ^a								
			UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		
Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	
32. What is your racial or ethnic identification? (Select all that apply.)	re_amind	American Indian or Alaska Native	0	0	28	2	90	2	307	2	5	3	31	2	85	2	387	2	
	re_asian	Asian	0	0	90	8	431	11	2,350	14	1	1	122	8	418	9	2,603	12	
	re_black	Black or African American	2	3	40	3	281	7	1,323	8	6	3	58	4	263	6	1,175	6	
	re_latino	Hispanic or Latino	2	3	71	6	524	14	2,267	13	8	5	66	4	516	11	2,390	11	
	re_pacific	Native Hawaiian or Other Pacific Islander	0	0	10	1	33	1	194	1	1	1	7	0	34	1	185	1	
	re_white	White	54	90	941	81	2,569	68	11,149	66	149	86	1,261	81	3,254	72	14,685	69	
	re_other	Other	1	2	22	2	114	3	522	3	2	1	31	2	122	3	630	3	
	re_pnr	I prefer not to respond	3	5	34	3	111	3	565	3	10	6	69	4	230	5	1,052	5	
	Racial or ethnic identification	re_all	American Indian or Alaska Native	0	0	5	0	20	1	44	0	0	0	3	0	20	0	83	0
		(Recoded from re_amind to re_pnr where each student is represented only once.)	Asian	0	0	80	7	347	9	1,897	11	1	1	105	7	329	7	2,130	10
re_amind to re_pnr		Black or African American	1	2	34	3	219	6	1,026	6	5	3	43	3	223	5	951	4	
re_pnr		Hispanic or Latino	2	3	47	4	377	10	1,600	9	6	3	40	3	380	8	1,741	8	
where each student is represented only once.)		Native Hawaiian/Other Pac. Islander	0	0	1	0	7	0	48	0	1	1	1	0	8	0	38	0	
		White	52	87	884	76	2,301	61	9,939	59	142	82	1,193	77	2,984	66	13,391	63	
		Other	0	0	19	2	76	2	339	2	1	1	21	1	81	2	415	2	
		Multiracial	2	3	61	5	317	8	1,474	9	7	4	73	5	295	6	1,492	7	
		I prefer not to respond	3	5	34	3	111	3	565	3	10	6	69	4	230	5	1,052	5	
	Total	60	100	1,165	100	3,775	100	16,932	100	173	100	1,548	100	4,550	100	21,293	100		
33. Are you a member of a social fraternity or sorority?	greek	No	53	88	982	84	3,341	88	15,456	91	158	91	1,263	81	3,798	83	18,675	88	
		Yes	7	12	183	16	440	12	1,503	9	15	9	288	19	755	17	2,633	12	
		Total	60	100	1,165	100	3,781	100	16,959	100	173	100	1,551	100	4,553	100	21,308	100	
34. Which of the following best describes where you are living while attending college?	living	Residence hall, dormitory or other camp.	57	95	804	69	2,636	70	11,680	69	17	10	125	8	526	12	3,308	16	
		Fraternity or sorority house	0	0	98	8	102	3	230	1	3	2	108	7	215	5	587	3	
		Residence (house, apartment, etc.) within walking distance to the institution	1	2	103	9	311	8	1,236	7	46	27	676	44	1,576	35	6,602	31	
		Residence (house, apartment, etc.) farther than walking distance to the institution	2	3	144	12	631	17	3,208	19	87	51	609	39	2,100	46	9,929	47	
		None of the above	0	0	16	1	89	2	552	3	19	11	34	2	130	3	860	4	
		Total	60	100	1,165	100	3,769	100	16,906	100	172	100	1,552	100	4,547	100	21,286	100	
35. Are you a student-athlete on a team sponsored by your institution's athletics department?	athlete	No	58	97	1,098	94	3,513	93	15,552	92	169	98	1,488	96	4,313	95	20,267	95	
		Yes	2	3	64	6	256	7	1,330	8	3	2	57	4	223	5	994	5	
		Total	60	100	1,162	100	3,769	100	16,882	100	172	100	1,545	100	4,536	100	21,261	100	

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Aero and Engineering University of North Dakota

Aero and Engineering

			First-Year Students ^a								Seniors ^a							
Item wording or description	Variable name	Response options	UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
36. Are you a current or former member of the U.S. Armed Forces, Reserves, or National Guard?	veteran	No	59	98	1,129	98	3,698	98	16,162	96	154	90	1,483	96	4,281	94	19,616	92
		Yes	1	2	25	2	72	2	739	4	17	10	64	4	254	6	1,644	8
		Total	60	100	1,154	100	3,770	100	16,901	100	171	100	1,547	100	4,535	100	21,260	100
37a. Have you been diagnosed with any disability or impairment?	disability	No	56	93	1,028	88	3,329	88	14,921	88	145	84	1,384	89	3,969	87	18,520	87
		Yes	3	5	102	9	334	9	1,482	9	21	12	137	9	462	10	2,122	10
		I prefer not to respond	1	2	32	3	118	3	543	3	7	4	33	2	126	3	679	3
		Total	60	100	1,162	100	3,781	100	16,946	100	173	100	1,554	100	4,557	100	21,321	100
b. <i>[If answered "yes"]</i> Which of the following has been diagnosed? (Select all that apply.)	dis_sense	A sensory impairment (vision or hearing)	0	0	16	16	68	20	297	20	2	10	14	10	57	12	317	15
	dis_mobility	A mobility impairment	0	0	2	2	23	7	90	6	3	14	6	4	28	6	172	8
	dis_learning	A learning disability (e.g., ADHD, dyslexia)	2	67	53	52	175	53	737	50	13	62	78	57	246	53	1,043	49
	dis_mental	A mental health disorder	1	33	30	29	82	25	387	26	6	29	43	31	142	31	637	30
	dis_other	A disability or impairment not listed above	0	0	17	17	50	15	239	16	2	10	25	18	77	17	419	20
	Disability or impairment	disability_all	A sensory impairment	0	0	9	1	49	1	209	1	0	0	10	1	42	1	197
(Recoded from disability and dis_sense to dis_other where each student is represented only once.)		A mobility impairment	0	0	1	0	12	0	56	0	1	1	3	0	12	0	79	0
		A learning disability	2	3	40	3	135	4	564	3	12	7	59	4	185	4	782	4
		A mental health disorder	1	2	22	2	44	1	227	1	4	2	24	2	89	2	385	2
		A disability or impairment not listed	0	0	14	1	39	1	170	1	0	0	17	1	56	1	285	1
		More than one disability or impairment	0	0	16	1	53	1	242	1	4	2	24	2	76	2	380	2
		No disability or impairment	56	93	1,028	88	3,329	88	14,921	88	145	84	1,384	89	3,969	87	18,520	87
	Prefer not to respond	1	2	32	3	118	3	543	3	7	4	33	2	126	3	679	3	
	Total	60	100	1,162	100	3,779	100	16,932	100	173	100	1,554	100	4,555	100	21,307	100	
38. Which of the following best describes your sexual orientation?	sexorient17	Straight (heterosexual)	56	95	102	90	1,976	89	9,737	89	149	87	191	88	2,279	89	12,635	88
		Bisexual	1	2	6	5	80	4	363	3	3	2	8	4	76	3	430	3
		Gay	0	0	1	1	18	1	114	1	5	3	0	0	31	1	176	1
		Lesbian	0	0	1	1	9	0	62	1	1	1	0	0	13	1	78	1
		Queer	0	0	0	0	8	0	48	0	0	0	0	0	6	0	50	0
		Questioning or unsure	0	0	1	1	29	1	125	1	0	0	2	1	16	1	96	1
		Another sexual orientation	0	0	0	0	29	1	154	1	5	3	5	2	23	1	207	1
		I prefer not to respond	2	3	2	2	70	3	365	3	9	5	10	5	105	4	605	4
		Total	59	100	113	100	2,219	100	10,968	100	172	100	216	100	2,549	100	14,277	100

NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Aero and Engineering

University of North Dakota

Aero and Engineering

First-Year Students^a

Seniors^a

Item wording or description	Variable name	Response options	UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017		UND		Plains Public Plus		Carnegie Class		NSSE 2016 & 2017	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Institution-reported information																		
(Variables provided by your institution in your NSSE population file.)																		
Institution-reported:	IRsex	Female	15	25	312	26	1,176	31	5,163	30	35	20	392	25	1,293	28	5,902	27
Sex		Male	45	75	868	74	2,653	69	12,005	70	138	80	1,180	75	3,307	72	15,630	73
		Total	60	100	1,180	100	3,829	100	17,168	100	173	100	1,572	100	4,600	100	21,532	100
Institution-reported:	IRrace	American Indian or Alaska Native	0	0	6	1	17	0	51	0	0	0	4	0	11	0	90	0
Race or ethnicity		Asian	0	0	34	3	194	6	1,275	8	1	1	60	4	201	5	1,537	8
		Black or African American	1	2	34	3	212	6	908	6	4	2	35	2	188	5	801	4
		Hispanic or Latino	2	3	62	5	359	11	1,786	12	8	5	58	4	369	9	1,930	10
		Native Hawaiian/Other Pac. Islander	0	0	0	0	2	0	21	0	1	1	1	0	4	0	23	0
		White	56	93	905	77	2,153	63	9,100	60	150	87	1,245	79	2,711	67	12,278	65
		Other	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	0
		Foreign or nonresident alien	0	0	84	7	259	8	1,123	7	2	1	90	6	254	6	1,077	6
		Two or more races/ethnicities	1	2	28	2	118	3	531	3	4	2	36	2	111	3	555	3
		Unknown	0	0	24	2	90	3	448	3	3	2	41	3	177	4	636	3
		Total	60	100	1,177	100	3,404	100	15,247	100	173	100	1,570	100	4,026	100	18,931	100
Institution-reported:	IRclass	Freshman/First-Year	60	100	1,180	100	3,830	100	17,170	100	0	0	0	0	0	0	0	0
Class level		Sophomore	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Junior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Senior	0	0	0	0	0	0	0	0	173	100	1,572	100	4,600	100	21,532	100
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	60	100	1,180	100	3,830	100	17,170	100	173	100	1,572	100	4,600	100	21,532	100
Institution-reported:	IRftfy	Not first-time first-year	0	0	84	7	288	8	1,532	9	173	100	1,557	99	4,555	99	21,357	99
First-time first-year (FTFY) student		First-time first-year	60	100	1,089	93	3,535	92	15,631	91	0	0	15	1	45	1	175	1
		Total	60	100	1,173	100	3,823	100	17,163	100	173	100	1,572	100	4,600	100	21,532	100
Institution-reported:	IRenrollment	Not full-time	0	0	23	2	85	2	676	4	54	31	188	12	512	11	2,920	14
Enrollment status		Full-time	60	100	1,157	98	3,745	98	16,494	96	119	69	1,384	88	4,088	89	18,612	86
		Total	60	100	1,180	100	3,830	100	17,170	100	173	100	1,572	100	4,600	100	21,532	100

Endnotes

- a. All results are unweighted.
- b. Standard deviation is a measure of the amount the individual scores deviate from the mean of all the scores in the distribution.
- c. Standard error of the mean, used to compute a confidence interval (CI) around the sample mean. For example, the 95% CI is the range of values that is 95% likely to contain the true population mean, equal to the sample mean $\pm 1.96 * SEM$.
- d. A percentile is the point in the distribution of student-level EI scores at or below which a given percentage of EI scores fall.
- e. Degrees of freedom used to compute the t -tests. Values differ from Ns due to whether equal variances were assumed.
- f. Statistical significance represents the probability that the difference between the mean of your institution and that of the comparison group occurred by chance: $*p < .05$, $**p < .01$, $***p < .001$ (2-tailed).
- g. Cohen's d : The mean difference divided by the pooled standard deviation. Effect size indicates the practical importance of an observed difference. For EI comparisons, NSSE research has concluded that an effect size of about .1 may be considered small, .3 medium, and .5 large (Rocconi & Gonyea, 2015). Comparisons with an effect size of at least .3 in magnitude (before rounding) are highlighted in the Overview.
- h. Percentage of students who responded "Done or in progress" except for service-learning which is the percentage who responded that at least "Some" courses included a community-based project.
- i. Percentage point differences (institution – comp. group) rounded to whole numbers. Values less than one may not display a bar and may be shown as +0 or -0.
 $*p < .05$, $**p < .01$, $***p < .001$ (z -test comparing participation rates).
- j. Cohen's h : The standardized difference between two proportions. Effect size indicates the practical importance of an observed difference. NSSE research has found that interpretations vary by HIP: For service-learning, internships, study abroad, and culminating senior experiences, an effect size of about .2 may be considered small, .5 medium, and .8 large. For learning community and research with faculty, an effect size of about .1 may be considered small, .3 medium, and .5 large (Rocconi & Gonyea, 2015).
- k. Means calculated from ordered response options (e.g., Very Often, Often, Sometimes, Never) assume equal intervals and should be interpreted with caution. Unless otherwise noted, statistical comparisons are two-tailed independent t -tests. Exceptions are the dichotomous high-impact practice items (11a to 11f) which are compared using a z -test.
- l. Items that make up the Engagement Indicators include the following two-letter prefixes: CL = Collaborative Learning, DD = Discussions with Diverse Others, ET = Effective Teaching Practices, HO = Higher-Order Learning, LS = Learning Strategies, QI = Quality of Interactions, QR = Quantitative Reasoning, RI = Reflective and Integrative Learning, SE = Supportive Environment, and SF = Student-Faculty Interaction.
- m. These are the values used to calculate means. For the majority of items, these values match the codes in the data file and codebook. For items estimating number of papers and hours per week, the values represent actual units using the midpoints of response option ranges and an estimate for unbounded options.
- n. Effect size for independent t -tests uses Cohen's d ; z -tests use Cohen's h .
- o. Statistical comparison uses z -test to compare the percentage who responded "Done or in progress."

Key to symbols:

- ▲ **Your students' average** was significantly higher ($p < .05$) with an effect size at least .3 in magnitude.
- △ **Your students' average** was significantly higher ($p < .05$) with an effect size less than .3 in magnitude.
- ▽ **Your students' average** was significantly lower ($p < .05$) with an effect size less than .3 in magnitude.
- ▼ **Your students' average** was significantly lower ($p < .05$) with an effect size at least .3 in magnitude.

Note: It is important to interpret the direction of differences relative to item wording and your institutional context.

Reference: Rocconi, L., & Gonyea, R. M. (2015). Contextualizing student engagement effect sizes: An empirical analysis. Paper presented at the Association for Institutional Research Annual Forum, Denver, CO.