

The University of Montana

Benchmark Comparisons August 2009

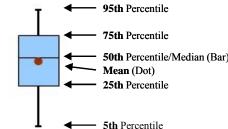


Interpreting the Benchmark Comparisons Report

To focus discussions about the importance of student engagement and to guide institutional improvement efforts, NSSE created five Benchmarks of Effective Educational Practice: Level of Academic Challenge, Active and Collaborative Learning, Student-Faculty Interaction, Enriching Educational Experiences, and Supportive Campus Environment. This Benchmark Comparisons Report compares the performance of your institution with your selected peers or consortium. In addition, page 9 provides two other comparisons between your school and (a) above-average institutions with benchmarks in the top 50% of all NSSE institutions and (b) high-performing institutions with benchmarks in the top 10% of all NSSE institutions. These displays allow you to determine if the engagement of your typical student differs in a statistically significant, meaningful way from the average student in these comparison groups. They also provide more insight into how the student experience varies on your campus and in comparison groups. More detailed information about how benchmarks are created can be found on the NSSE Web site at www.nsse.iub.edu/2009 Institutional Report/.

Class and Sample Statistical Significance Effect Sizea Means are reported for Benchmarks with mean differences that are larger than would be expected by Effect size indicates the chance alone are noted with one, two, or three asterisks, denoting one of three first-year students and practical significance of the seniors. Institutionsignificance levels (p<.05, p<.01, and p<.001). The smaller the significance mean difference. It is reported class levels level, the smaller the likelihood that the difference is due to chance. Please note calculated by dividing the are used. All randomly that statistical significance does not guarantee that the result is substantive or mean difference by the pooled standard deviation. In selected students are important. Large sample sizes (as with the NSSE project) tend to produce more included in these statistically significant results even though the magnitude of mean differences may practice, an effect size of .2 is analyses. Students in be inconsequential. It is recommended to consult effect sizes to judge the practical often considered small, .5 meaning of the results. moderate, and .8 large. A targeted or locally administered positive sign indicates that oversamples are not your institution's mean was included. greater, thus showing an Level of Academic Challenge (LAC) affirmative result for the Mean Comparison: institution. A negative sign NSSEville State Mid East Public NSSE 2009 indicates the institution lags First-Yea behind the comparison group, suggesting that the student behavior or Mean Distributions of Student Benchmark Scores institutional practice The mean is the weighted represented by the item may arithmetic average of the warrant attention. student level benchmark scores **Benchmark Description Box and Whiskers Charts** & Survey Items A visual display of first-year and A description of the senior benchmark score benchmark and the individual dispersion for your institution items used in its creation is and your selected comparison or provided. Level of Academic Challenge (LAC) Items consortium groups. ourse readings r of written papers or reports of <u>between 5 and 19 pa</u> 95th Percentile **Box and Whiskers Kev** A box and whiskers chart is a concise way to summarize the variation 75th Percentile of student benchmark scores. This display compares the distribution of scores at your institution, in percentile terms, with that of your 50th Percentile/Median (Bar) comparison groups. The ends of the whiskers show the 5th and 95th

percentile scores, while the box is bounded by the 25th and 75th percentiles. The bar inside the box indicates the median score, and the dot shows the mean score.



^a See Contextualizing NSSE Effect Sizes at www.nsse.iub.edu/pdf/effect size guide.pdf for additional information.



Level of Academic Challenge (LAC)

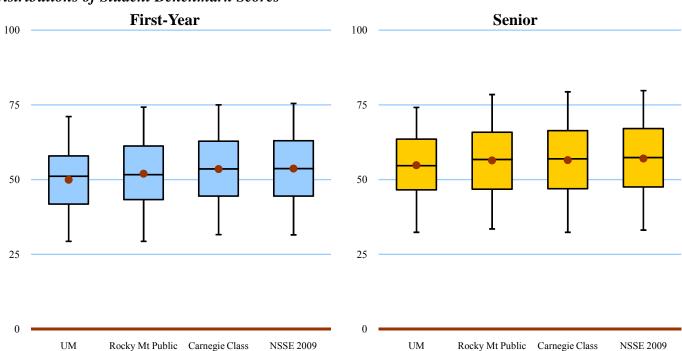
Mean Comparisons

The University of Montana compared with:

	UM	Rocky Mt	Public	Carne	egie Clas	s	NSS			
		·	Effect		O	Effect			Effect	
Class	Mean ^a	Mean ^a Sig ^b	Size c	Mean ^a	Sig b	Size c	Mean ^a	Sig b	Size c	
First-Year	49.9	52.0	15	53.5	**	27	53.7	**	28	
Senior	54.8	56.4	12	56.5		12	57.0		16	

^a Weighted by gender, enrollment status, and institutional size.

Distributions of Student Benchmark Scores



Note: Each box and whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot shows the benchmark mean. See page 2 for an illustration. See pages 10 and 11 for percentile values.

Level of Academic Challenge (LAC) Items

Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote high levels of student achievement by emphasizing the importance of academic effort and setting high expectations for student performance.

- Preparing for class (studying, reading, writing, doing homework or lab work, etc. related to academic program)
- Number of assigned textbooks, books, or book-length packs of course readings
- Number of written papers or reports of <u>20 pages or more</u>; number of written papers or reports of <u>between 5 and 19 pages</u>; and number of written papers or reports of <u>fewer than 5 pages</u>
- Coursework emphasizes: Analysis of the basic elements of an idea, experience or theory
- Coursework emphasizes: **Synthesis** and organizing of ideas, information, or experiences into new, more complex interpretations and relationships
- Coursework emphasizes: Making of judgments about the value of information, arguments, or methods
- Coursework emphasizes: Applying theories or concepts to practical problems or in new situations
- Working harder than you thought you could to meet an instructor's standards or expectations
- Campus environment emphasizes: Spending significant amount of time studying and on academic work.

b * p<.05 ** p<.01 ***p<.001 (2-tailed).

^c Mean difference divided by the pooled standard deviation.



Active and Collaborative Learning (ACL)

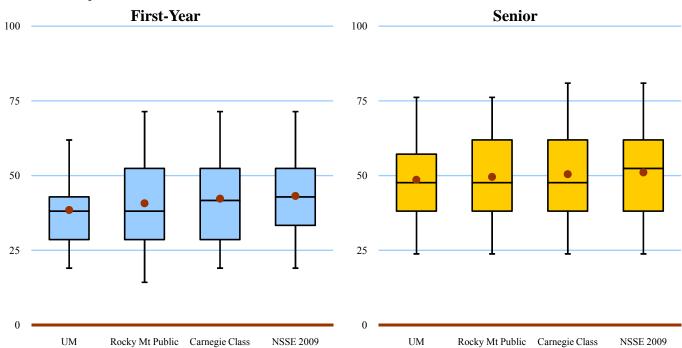
Mean Comparisons

The University of Montana compared with:

	UM	Rocky Mt	Public	Carne	egie Clas	s	NSSE 2009		
		·	Effect		C	Effect			Effect
Class	Mean ^a	Mean ^a Sig ^b	Size c	Mean ^a	Sig b	Size c	Mean ^a	Sig b	Size c
First-Year	38.5	40.7	14	42.2	**	23	43.2	***	28
Senior	48.6	49.6	06	50.5		11	51.0		14

^a Weighted by gender, enrollment status, and institutional size.

Distributions of Student Benchmark Scores



Note: Each box and whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot shows the benchmark mean. See page 2 for an illustration. See pages 10 and 11 for percentile values.

Active and Collaborative Learning (ACL) Items

Students learn more when they are intensely involved in their education and asked to think about what they are learning in different settings. Collaborating with others in solving problems or mastering difficult material prepares students for the messy, unscripted problems they will encounter daily during and after college.

- Asked questions in class or contributed to class discussions
- Made a class presentation
- Worked with other students on projects during class
- Worked with classmates outside of class to prepare class assignments
- Tutored or taught other students (paid or voluntary)
- Participated in a community-based project (e.g., service learning) as part of a regular course
- Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)

b * p<.05 ** p<.01 ***p<.001 (2-tailed).

^c Mean difference divided by the pooled standard deviation.



Student-Faculty Interaction (SFI)

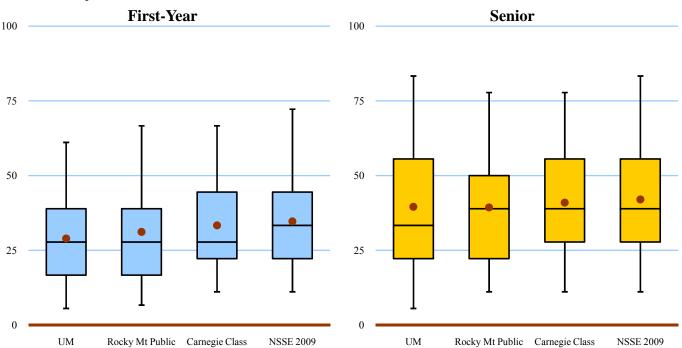
Mean Comparisons

The University of Montana compared with:

	UM	Rocky Mt l	Public	Carne	Carnegie Class			NSSE 2009		
		•	Effect			Effect			Effect	
Class	Mean ^a	Mean ^a Sig ^b	Size c	Mean ^a	Sig b	Size c	Mean ^a	Sig b	Size c	
First-Year	28.9	31.2	13	33.4	**	24	34.7	***	31	
Senior	39.5	39.3	.01	41.0		07	42.0		12	

^a Weighted by gender, enrollment status, and institutional size.

Distributions of Student Benchmark Scores



Note: Each box and whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot shows the benchmark mean. See page 2 for an illustration. See pages 10 and 11 for percentile values.

Student-Faculty Interaction (SFI) Items

Students learn firsthand how experts think about and solve practical problems by interacting with faculty members inside and outside the classroom. As a result, their teachers become role models, mentors, and guides for continuous, life-long learning.

- Discussed grades or assignments with an instructor
- Talked about career plans with a faculty member or advisor
- Discussed ideas from your readings or classes with faculty members outside of class
- Worked with faculty members on activities other than coursework (committees, orientation, student-life activities, etc.)
- Received prompt written or oral feedback from faculty on your academic performance
- · Worked on a research project with a faculty member outside of course or program requirements

^b * p<.05 ** p<.01 ***p<.001 (2-tailed).

^c Mean difference divided by the pooled standard deviation.



Enriching Educational Experiences (EEE)

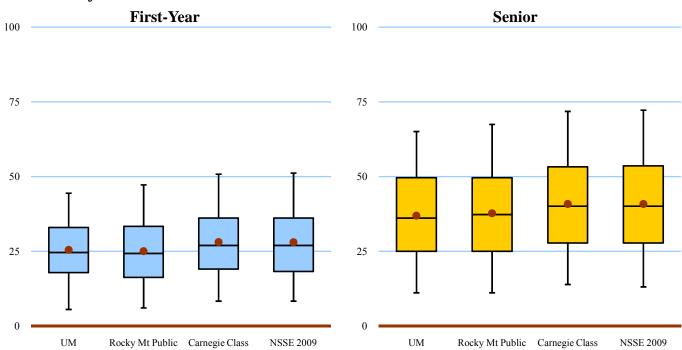
Mean Comparisons

The University of Montana compared with:

	UM	Rocky Mt l	Public	Carne	egie Clas	s	SE 2009		
		·	Effect			Effect			Effect
Class	Mean ^a	Mean ^a Sig ^b	Size c	Mean ^a	Sig b	Size c	Mean ^a	Sig b	Size c
First-Year	25.5	25.0	.03	28.1		20	28.0		19
Senior	36.9	37.7	05	40.8	*	22	40.9	*	22

^a Weighted by gender, enrollment status, and institutional size.

Distributions of Student Benchmark Scores



Note: Each box and whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot shows the benchmark mean. See page 2 for an illustration. See pages 10 and 11 for percentile values.

Enriching Educational Experiences (EEE) Items

Complementary learning opportunities enhance academic programs. Diversity experiences teach students valuable things about themselves and others. Technology facilitates collaboration between peers and instructors. Internships, community service, and senior capstone courses provide opportunities to integrate and apply knowledge.

- Participating in co-curricular activities (organizations, campus publications, student government, social fraternity or sorority, etc.)
- Practicum, internship, field experience, co-op experience, or clinical assignment
- · Community service or volunteer work
- Foreign language coursework / Study abroad
- Independent study or self-designed major
- Culminating senior experience (capstone course, senior project or thesis, comprehensive exam, etc.)
- Serious conversations with students of different religious beliefs, political opinions, or personal values
- Serious conversations with students of a different race or ethnicity than your own
- Using electronic medium (e.g., listsery, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment
- Campus environment encouraging contact among students from different economic, social, and racial or ethnic backgrounds
- Participate in a learning community or some other formal program where groups of students take two or more classes together

^b * p<.05 ** p<.01 ***p<.001 (2-tailed).

^c Mean difference divided by the pooled standard deviation.



Supportive Campus Environment (SCE)

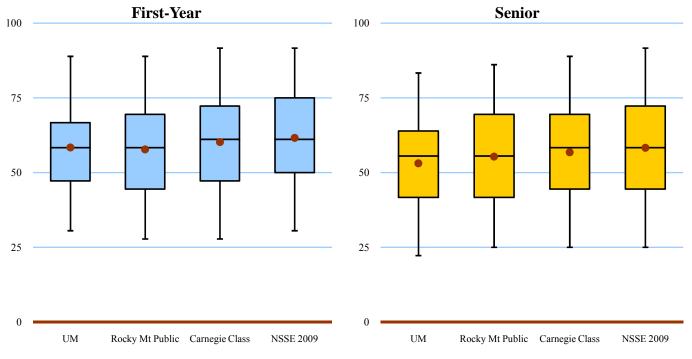
Mean Comparisons

The University of Montana compared with:

	UM	Rocky Mt l	Public	Carne	Carnegie Class			NSSE 2009		
		•	Effect		C	Effect			Effect	
Class	Mean ^a	Mean ^a Sig ^b	Size c	Mean ^a	Sig b	Size c	Mean ^a	Sig b	Size c	
First-Year	58.4	57.8	.03	60.2		10	61.6		17	
Senior	53.1	55.4	12	56.8	*	19	58.3	**	27	

^a Weighted by gender, enrollment status, and institutional size.

Distributions of Student Benchmark Scores



Note: Each box and whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot shows the benchmark mean. See page 2 for an illustration. See pages 10 and 11 for percentile values.

Supportive Campus Environment (SCE) Items

Students perform better and are more satisfied at colleges that are committed to their success and cultivate positive working and social relations among different groups on campus.

- Campus environment provides the support you need to help you succeed academically
- Campus environment helps you cope with your non-academic responsibilities (work, family, etc.)
- Campus environment provides the support you need to thrive socially
- Quality of relationships with other students
- Quality of relationships with faculty members
- Quality of relationships with administrative personnel and offices

^b * p<.05 ** p<.01 ***p<.001 (2-tailed).

^c Mean difference divided by the pooled standard deviation.



NSSE 2009 Benchmark Comparisons With Highly Engaging Institutions

Interpreting the Top 10% and Top 50% Comparisons

This section of the NSSE Benchmark Comparisons report allows you to estimate the performance of your average student in relation to the average student attending two different institutional peer groups identified by NSSE for their high levels of student engagement: (a) those with benchmark scores placing them in the top 50% of all NSSE schools in 2009 and (b) those with benchmark scores in the top 10% for 2009.^a These comparisons allow an institution to determine if the engagement of their students differs in significant, meaningful ways from students in these high performing peer groups.

Example

			NSSEville State compared with												
		NSSEville State		NSSE Top 5		NSSE 2009 Top 10%									
		Mean	Mean	Sig	Effect size	Mean	Sig	Effect size							
•	LAC	57.1	55.8	*	.10	60.5	***	-0.28							
t-Year	ACL	50.3	45.8	***	.28	50.7		-0.02							
t-Y	SFI	37.3	37.2		.01	42.0	***	-0.24							
First	EEE	21.8	30.0	***	63	34.4	***	-0.98							
1	SCE	60.9	64.7	***	21	69.7	***	-0.49							

NSSEville State CAN conclude...

- The average score for NSSEville State first-year students is slightly above (i.e., small positive effect size)
 that of the average student attending NSSE 2009 schools that scored in the top 50% on Level of Academic
 Challenge (LAC).
- The average NSSEville State first-year student is as engaged (i.e., not significantly different) as the average student attending NSSE 2009 schools that scored in the top 10% on Active and Collaborative Learning (ACL).
- It is *likely* that NSSEville State is in the top 50% of all NSSE 2009 schools for first-year students on Level of Academic Challenge (LAC) and Active and Collaborative Learning (ACL).^a

NSSEville State CANNOT conclude^a...

- NSSEville State is in the top half of all schools on the Student-Faculty Interaction (SFI) benchmark for first-year students.^a
- NSSEville State is a "top ten percent" institution on Active and Collaborative Learning (ACL) for first-year students.^a

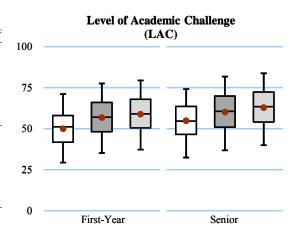
For additional information on how to understand and use the Top 50% and Top 10% section of the benchmark report, see www.nsse.iub.edu/2009_Institutional_Report/.

^a Precision-weighted means (produced by Hierarchical Linear Modeling) were used to determine the top 50% and top 10% institutions for each benchmark, separately for first-year and senior students. Using this method, benchmark scores of institutions with relatively large standard errors are adjusted substantially toward the grand mean of all students, while those with smaller standard errors receive smaller corrections. Thus, schools with less stable data, though they may have high scores, may not be identified among the top scorers. NSSE does not publish the names of the top 50% and top 10% institutions because of our commitment not to release individual school results and our policy against the ranking of institutions.



NSSE 2009 Benchmark Comparisons With Highly Engaging Institutions The University of Montana

			UM compared with										
			N	NSSE 2	009	NSSE 2009 Top 10%							
		\mathbf{UM}		Top 50)%								
		Mean ^a	Mean ^a	Sig b	Effect size c	Mean ^a	Sig b	Effect size c					
	LAC	49.9	56.8	***	53	58.9	***	69					
ear	ACL	38.5	47.8	***	56	51.7	***	76					
t-Y	SFI	28.9	39.1	***	53	43.7	***	72					
First-Year	EEE	25.5	31.0	***	41	32.8	***	54					
	SCE	58.4	66.2	***	43	69.1	***	59					
	LAC	54.8	60.1	***	39	62.8	***	60					
ï	ACL	48.6	55.7	***	42	59.1	***	61					
Senior	SFI	39.5	48.8	***	43	54.2	***	66					
Š	EEE	36.9	48.1	***	63	54.2	***	-1.01					
	SCE	53.1	64.1	***	59	67.5	***	78					



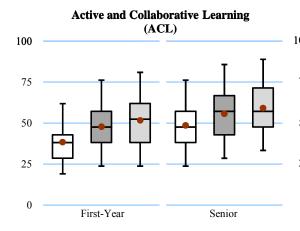
Legend

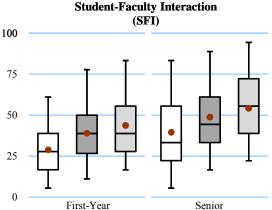
☐ UM

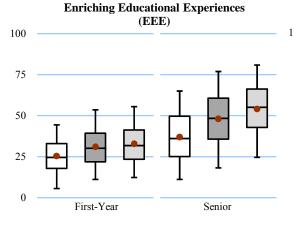
Top 50%

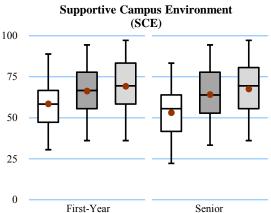
☐ Top 10%

This display compares your students with those attending schools that scored in the top 50% and top 10% of all NSSE 2009 institutions on a particular benchmark.









Note: Each box and whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot shows the benchmark mean. See page 2 for an illustration. See pages 10 and 11 for percentile values.

^a Weighted by gender, enrollment status, and institutional size.

^b * p<.05 ** p<.01 ***p<.001 (2-tailed).

^c Mean difference divided by the pooled standard deviation.



NSSE 2009 Benchmark Comparisons Detailed Statistics and Effect Sizes ^a The University of Montana

First-Year Students

		G		Distribution Statistics					Reference Group Comparison Statistics				
	Me	an Stati	stics	-				<u>s</u>	-	•	on Statistic		
	Mean	SD ^b	SEM ^c	5th	Pe 25th	50th	75th	95th	Deg. of Freedom ^e	Mean Diff.	Sig. f	Effect size ^g	
LEVEL OF ACADEMIC CHALLENGE (I	LAC)												
$UM \qquad (N = 98)$	49.9	12.3	1.2	29	42	51	58	71					
Rocky Mt Public	52.0	13.4	.3	29	43	52	61	74	1,965	-2.0	.146	15	
Carnegie Class	53.5	13.4	.1	32	44	54	63	75	8,528	-3.6	.008	27	
NSSE 2009	53.7	13.5	.1	32	44	54	63	75	41,555	-3.7	.006	28	
Top 50%	56.8	13.0	.1	35	48	57	66	78	15,924	-6.9	.000	53	
Top 10%	58.9	12.9	.2	37	50	59	68	79	4,389	-8.9	.000	69	
ACTIVE AND COLLABORATIVE LEAR	NING (A	CL)											
UM $(N = 102)$	38.5	12.9	1.3	19	29	38	43	62					
Rocky Mt Public	40.7	16.5	.4	14	29	38	52	71	119	-2.3	.093	14	
Carnegie Class	42.2	16.5	.2	19	29	42	52	71	105	-3.8	.004	23	
NSSE 2009	43.2	16.6	.1	19	33	43	52	71	102	-4.7	.000	28	
Top 50%	47.8	16.6	.1	24	38	48	57	76	104	-9.3	.000	56	
Top 10%	51.7	17.5	.3	24	38	52	62	81	115	-13.2	.000	76	
STUDENT-FACULTY INTERACTION (S	FI)												
UM $(N = 100)$	28.9	14.8	1.5	6	17	28	39	61					
Rocky Mt Public	31.2	17.2	.4	7	17	28	39	67	1,975	-2.2	.202	13	
Carnegie Class	33.4	18.3	.2	11	22	28	44	67	103	-4.4	.004	24	
NSSE 2009	34.7	18.4	.1	11	22	33	44	72	100	-5.7	.000	31	
Top 50%	39.1	19.2	.2	11	27	39	50	78	102	-10.2	.000	53	
Top 10%	43.7	20.6	.5	17	28	39	56	83	119	-14.8	.000	72	
ENRICHING EDUCATIONAL EXPERIE	NCES (EF	EE)											
$UM \qquad (N = 98)$	25.5	12.2	1.2	6	18	25	33	44					
Rocky Mt Public	25.0	12.9	.3	6	16	24	33	47	1,935	.4	.737	.03	
Carnegie Class	28.1	13.3	.1	8	19	27	36	51	8,315	-2.6	.054	20	
NSSE 2009	28.0	13.4	.1	8	18	27	36	51	40,477	-2.6	.058	19	
Top 50%	31.0	13.4	.1	11	22	30	39	54	18,006	-5.5	.000	41	
Top 10%	32.8	13.7	.2	12	23	32	41	56	5,732	-7.3	.000	54	
SUPPORTIVE CAMPUS ENVIRONMENT	T (SCE)												
$UM \qquad (N = 98)$	58.4	16.7	1.7	31	47	58	67	89					
Rocky Mt Public	57.8	18.8	.4	28	44	58	69	89	1,909	.6	.739	.03	
Carnegie Class	60.2	18.6	.2	28	47	61	72	92	8,128	-1.8	.350	10	
NSSE 2009	61.6	18.8	.1	31	50	61	75	92	39,494	-3.2	.096	17	
Top 50%													
F	66.2	18.1	.2	36	56	67	78	94	12,661	-7.8	.000	43	

^a All statistics are weighted by gender, enrollment status, and institutional size.

^b Standard deviation is a measure of the average amount the individual scores deviate from the mean of all the scores in the distribution.

 $^{^{\}rm c}$ The 95% confidence interval for the population mean is equal to the sample mean plus/minus 1.96 times the standard error of the mean.

^d A percentile is the point in the distribution of student-level benchmark scores at or below which a given percentage of benchmark scores fall.

e Degrees of freedom used to compute the t-tests. Values vary for the total Ns due to weighting and the equal variance assumption.

f Statistical significance represents the probability that the difference between the mean of your institution and that of the comparison group occurred by chance.

^g Effect size is calculated by subtracting the comparison group mean from the school mean, and dividing the result by the pooled standard deviation.



NSSE 2009 Benchmark Comparisons Detailed Statistics and Effect Sizes ^a The University of Montana

Seniors

			G		Distribution Statistics					Reference Group Comparison Statistics				
		Mea	an Stati	stics					<u> </u>	-	-			
		Mean	SD ^b	SEM ^c	5th	25th	ercentile 50th	75th	95th	Deg. of Freedom ^e	Mean Diff.	Sig. f	Effect size ^g	
LEVEL OF ACADEMIC CH	ALLENGE (LA	AC)		_									· · · · · · · · · · · · · · · · · · ·	
UM	(N = 123)	54.8	13.4	1.2	32	47	55	64	74					
Rocky Mt Public		56.4	13.7	.3	33	47	57	66	78	1,917	-1.6	.198	12	
Carnegie Class		56.5	14.2	.2	32	47	57	66	79	8,019	-1.7	.179	12	
NSSE 2009		57.0	14.3	.1	33	48	57	67	80	37,086	-2.3	.078	16	
Top 50%		60.1	13.7	.1	37	51	61	70	82	11,698	-5.3	.000	39	
Top 10%		62.8	13.3	.3	40	54	63	72	84	2,536	-8.0	.000	60	
ACTIVE AND COLLABORA	ATIVE LEARN	ING (AC	CL)											
UM	(N = 126)	48.6	17.1	1.5	24	38	48	57	76					
Rocky Mt Public		49.6	16.9	.4	24	38	48	62	76	1,977	-1.0	.529	06	
Carnegie Class		50.5	17.2	.2	24	38	48	62	81	8,442	-1.9	.219	11	
NSSE 2009		51.0	17.4	.1	24	38	52	62	81	38,939	-2.4	.114	14	
Top 50%		55.7	16.9	.2	29	43	57	67	86	10,615	-7.1	.000	42	
Top 10%		59.1	17.2	.4	33	48	57	71	89	2,347	-10.5	.000	61	
STUDENT-FACULTY INTE	RACTION (SF	I)												
UM	(N = 124)	39.5	23.0	2.1	6	22	33	56	83					
Rocky Mt Public		39.3	19.8	.5	11	22	39	50	78	136	.2	.926	.01	
Carnegie Class		41.0	20.7	.2	11	28	39	56	78	8,076	-1.4	.444	07	
NSSE 2009		42.0	20.9	.1	11	28	39	56	83	37,362	-2.5	.191	12	
Top 50%		48.8	21.3	.2	17	33	44	61	89	8,487	-9.3	.000	43	
Top 10%		54.2	22.0	.6	22	39	56	72	94	1,478	-14.6	.000	66	
ENRICHING EDUCATIONA	AL EXPERIEN	CES (EE	EE)											
UM	(N = 123)	36.9	16.8	1.5	11	25	36	50	65					
Rocky Mt Public		37.7	16.8	.4	11	25	37	50	67	1,884	8	.620	05	
Carnegie Class		40.8	17.9	.2	14	28	40	53	72	7,875	-3.9	.016	22	
NSSE 2009		40.9	18.2	.1	13	28	40	54	72	36,376	-3.9	.017	22	
Top 50%		48.1	17.8	.2	18	36	48	61	77	11,524	-11.1	.000	63	
Top 10%		54.2	17.1	.4	25	43	55	66	81	2,495	-17.2	.000	-1.01	
SUPPORTIVE CAMPUS EN	VIRONMENT	(SCE)												
UM	(N = 120)	53.1	17.9	1.6	22	42	56	64	83					
Rocky Mt Public		55.4	18.2	.4	25	42	56	69	86	1,863	-2.3	.187	12	
Carnegie Class		56.8	19.2	.2	25	44	58	69	89	7,734	-3.7	.037	19	
NSSE 2009		58.3	19.3	.1	25	44	58	72	92	35,732	-5.2	.003	27	
Top 50%		64.1	18.8	.2	33	53	64	78	94	9,765	-11.0	.000	59	
Top 10%		67.5	18.5	.4	36	56	69	81	97	2,466	-14.5	.000	78	

^a All statistics are weighted by gender, enrollment status, and institutional size.

^b Standard deviation is a measure of the average amount the individual scores deviate from the mean of all the scores in the distribution.

 $^{^{\}rm c}$ The 95% confidence interval for the population mean is equal to the sample mean plus/minus 1.96 times the standard error of the mean.

^d A percentile is the point in the distribution of student-level benchmark scores at or below which a given percentage of benchmark scores fall.

e Degrees of freedom used to compute the t-tests. Values vary for the total Ns due to weighting and the equal variance assumption.

f Statistical significance represents the probability that the difference between the mean of your institution and that of the comparison group occurred by chance.

^g Effect size is calculated by subtracting the comparison group mean from the school mean, and dividing the result by the pooled standard deviation.