

Western Michigan University

Benchmark Comparisons August 2010

Effect Sizea

Effect size indicates the

mean difference. It is

practical significance of the

pooled standard deviation. In

practice, an effect size of .2 is

calculated by dividing the

often considered small, .5

moderate, and .8 large. A

positive sign indicates that

greater, thus showing an

affirmative result for the institution. A negative sign

vour institution's mean was

indicates the institution lags behind the comparison group, suggesting that the student behavior or institutional

practice represented by the

item may warrant attention.

mean difference by the



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. Additional details regarding how benchmarks are created can be found on the NSSE Web site.

nsse.iub.edu/links/institutional reporting

Class and Sample

Means are reported for first-year students and seniors. Institutionreported class levels are used. All randomly selected students are included in these analyses. Students in targeted or locally administered oversamples are not included.

Statistical Significance

Benchmarks with mean differences that are larger than would be expected by chance alone are noted with one, two, or three asterisks, denoting one of three significance levels (p<.05, p<.01, and p<.001). The smaller the significance level, the smaller the likelihood that the difference is due to chance. Please note that statistical significance does not guarantee that the result is substantive or important. Large sample sizes (as with the NSSE project) tend to produce more statistically significant results even though the magnitude of mean differences may be inconsequential. Consult effect sizes to judge the practical meaning of the

Level of Academic Challenge (LAC) NSSEville State Mid Fast Public NSSE 2010

Benchmark Description & Survey Items

The mean is the weighted

arithmetic average of the student level benchmark

Mean

scores.

A description of the benchmark and the individual items used in its creation is provided.

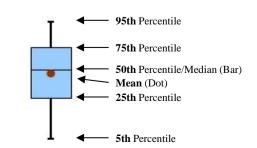
Box and Whiskers Charts

A visual display of first-year and senior benchmark score dispersion for your institution and your selected comparison or consortium groups.

evel of Academic Challenge (LAC) Items

Box and Whiskers Key

A box and whiskers chart is a concise way to summarize the variation of student benchmark scores. This display compares the distribution of scores at your institution, in percentile terms, with that of your 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.



See Contextualizing NSSE Effect Sizes at fisse.iud.edu/pdi/effect size guide.pdi for additional information.

Level of Academic Challenge (LAC)

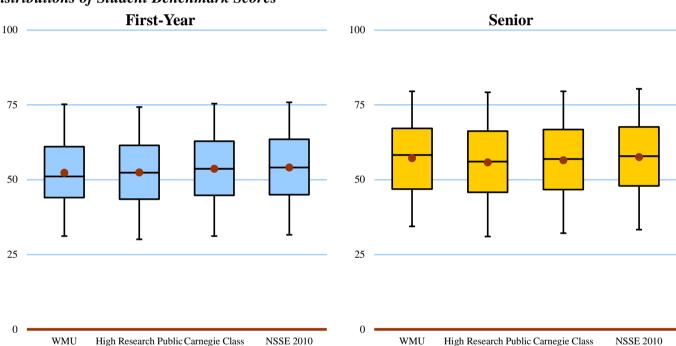
Mean Comparisons

Western Michigan University compared with:

-		High	n Resea	rch						
	\mathbf{WMU}	:	Public		Carne	egie Clas	S	NSS	SE 2010	
				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	52.3	52.4		01	53.7	*	10	54.1	**	13
Senior	57.2	55.8	**	.10	56.5		.05	57.6		02

^a Weighted by gender and enrollment status (and by institution size for comparison groups).

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.

- Hours spent 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 20 pages or more, between 5 and 19 pages, and fewer than 5 pages
- 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)

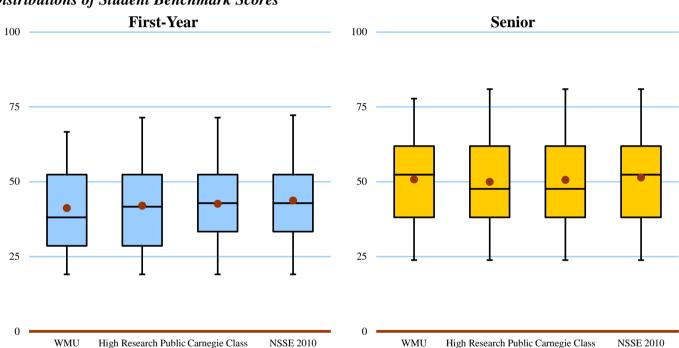
Mean Comparisons

Western Michigan University compared with:

_		High Res	earch						
	WMU	Publ	ic	Carne	egie Clas	S	NSS	SE 2010	
			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	41.2	42.0	05	42.6	*	08	43.7	***	15
Senior	50.8	50.0	.04	50.6		.01	51.4		04

^a Weighted by gender and enrollment status (and by institution size for comparison groups).

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)

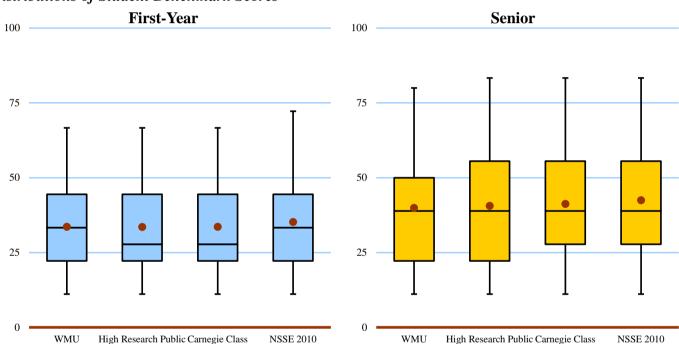
Mean Comparisons

Western Michigan University compared with:

		High Res	search						
	WMU	Publ	Public			S	NSSE 2010		
			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	33.6	33.5	.00	33.6		.00	35.2	*	09
Senior	39.9	40.6	03	41.2	*	06	42.5	***	12

^a Weighted by gender and enrollment status (and by institution size for comparison groups).

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)

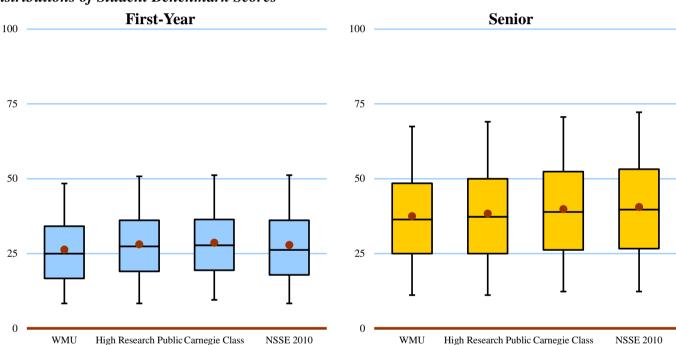
Mean Comparisons

Western Michigan University compared with:

		High Resea	arch						
	\mathbf{WMU}	Public		Carn	egie Clas	S	NS	SE 2010	
			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	26.3	28.1 ***	14	28.6	***	17	27.9	**	12
Senior	37.5	38.4	05	39.9	***	13	40.5	***	17

^a Weighted by gender and enrollment status (and by institution size for comparison groups).

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.

- Hours spent participating in co-curricular activities (organizations, campus publications, student gov., social fraternity or sorority, etc.)
- Practicum, internship, field experience, co-op experience, or clinical assignment
- Community service or volunteer work
- Foreign language coursework and 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)

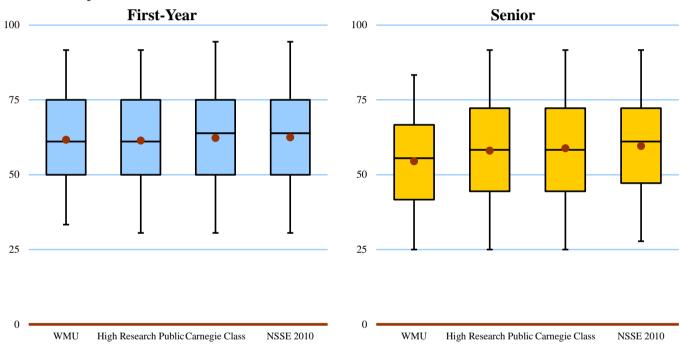
Mean Comparisons

Western Michigan University compared with:

_		High	1 Resea	rch						
	WMU		Public		Carne	egie Clas	S	NSS	SE 2010	
				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	61.7	61.4		.01	62.3		03	62.5		04
Senior	54.5	58.1	***	18	58.8	***	22	59.6	***	26

^a Weighted by gender and enrollment status (and by institution size for comparison groups).

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 2010 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) institutions with benchmark scores placing them in the top 50% of all NSSE schools in 2010 and (b) institutions with benchmark scores in the top 10% for 2010. 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 Sta	te compared w	ith				
		NSSEville State		NSSE Top 5		NSSE 2010 Top 10%					
	Mean		Mean	Sig	Effect size	Mean	Sig	Effect size			
• .	LAC	57.1	55.8	*	.10	60.5	***	-0.28			
ear	ACL	50.3	45.8	***	.28	50.7		-0.02			
First-Y	SFI	37.3	37.2		.01	42.0	***	-0.24			
irs	EEE	21.8	30.0	***	63	34.4	***	-0.98			
<u> </u>	SCE	60.9	64.7	***	21	69.7	***	-0.49			

Based on the example above 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 2010 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 2010 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 2010 schools for first-year students on Level of Academic Challenge (LAC) and Active and Collaborative Learning (ACL).^a

Based on the example above 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.
- NSSEville State is a "top ten percent" institution on Active and Collaborative Learning (ACL) for first-year students.

Additional information regarding the Top 50% and Top 10% section of the benchmark report can be found on the NSSE Web site. **nsse.iub.edu/links/institutional_reporting**

^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 2010 Benchmark Comparisons With Highly Engaging Institutions Western Michigan University

					WMU comp	pared with				
			ľ	NSSE 2	010	I	NSSE 2	010		
		WMU		Top 50)%		Top 10)%		Level of Academic Challenge
		Mean ^a	Mean ^a	Sig b	Effect size c	Mean ^a Sig ^b Effect size ^c				(LAC)
	LAC	52.3	57.2	***	37	60.5	***	63	100	
ear	ACL	41.2	48.1	***	40	52.2	***	63		
ť-Y	SFI	33.6	39.9	***	32	44.1	***	50	75	
First-Year	EEE	26.3	31.1	***	35	33.6	***	53		
	SCE	61.7	67.2	***	31	70.8	***	51		
•	LAC	57.2	60.9	***	27	63.8	***	48	50	
Ä	ACL	50.8	56.6	***	34	60.3	***	54		
Senior	SFI	39.9	49.2	***	43	55.3	***	70	25	
Š	EEE	37.5	47.7	***	57	55.8	***	-1.06		
	SCE	54.5	64.7	***	54	68.6	***	76		
									0	First-Year Senior

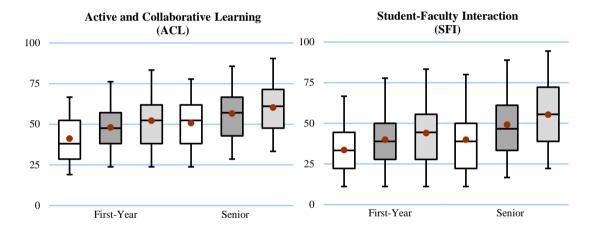


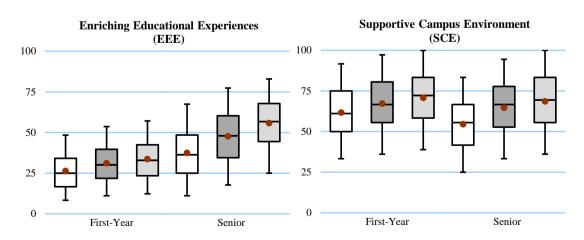
☐ WMU

☐ 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 2010 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 and enroll. status (and by inst. size for comp. groups).

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

^c Mean diff. divided by the pooled standard dev.



NSSE 2010 Benchmark Comparisons Detailed Statistics and Effect Sizes ^a Western Michigan University

First-Year Students

		-						ruuc		Reference Group				
		Me	an Stati	stics		Distrib			s	Comparison Statistics				
						Pe	ercentile	s d		Deg. of	Mean		Effect	
		Mean	SD b	SEM °	5th	25th	50th	75th	95th	Freedom e	Diff.	Sig. f	size ^g	
LEVEL OF ACADEMIC CH	IALLENGE (L	AC)												
WMU	(N = 643)	52.3	13.0	.5	31	44	51	61	75					
High Research Public		52.4	13.3	.1	30	44	52	61	74	17,568	1	.857	01	
Carnegie Class		53.7	13.4	.1	31	45	54	63	75	23,398	-1.3	.012	10	
NSSE 2010		54.1	13.6	.0	32	45	54	64	76	130,449	-1.8	.001	13	
Top 50%		57.2	13.1	.1	35	48	57	66	78	50,628	-4.9	.000	37	
Top 10%		60.5	12.9	.1	38	52	61	70	80	10,496	-8.2	.000	63	
ACTIVE AND COLLABORA	ATIVE LEARN	NING (A	CL)											
WMU	(N = 710)	41.2	15.8	.6	19	29	38	52	67					
High Research Public		42.0	16.8	.1	19	29	42	52	71	773	8	.183	05	
Carnegie Class		42.6	16.7	.1	19	33	43	52	71	756	-1.4	.018	08	
NSSE 2010		43.7	16.8	.0	19	33	43	52	72	717	-2.5	.000	15	
Top 50%		48.1	17.0	.1	24	38	48	57	76	735	-6.9	.000	40	
Top 10%		52.2	17.8	.2	24	38	52	62	83	877	-11.0	.000	63	
STUDENT-FACULTY INTE	RACTION (SF	I)												
WMU	(N = 655)	33.6	17.6	.7	11	22	33	44	67					
High Research Public		33.5	18.4	.1	11	22	28	44	67	17,760	.1	.913	.00	
Carnegie Class		33.6	18.3	.1	11	22	28	44	67	23,649	.0	.993	.00	
NSSE 2010		35.2	18.6	.1	11	22	33	44	72	661	-1.6	.021	09	
Top 50%		39.9	19.6	.1	11	28	39	50	78	683	-6.3	.000	32	
Top 10%		44.1	21.5	.3	11	28	44	56	83	851	-10.5	.000	50	
ENRICHING EDUCATION	AL EXPERIEN	CES (E	EE)											
WMU	(N = 614)	26.3	11.9	.5	8	17	25	34	48					
High Research Public		28.1	13.2	.1	8	19	27	36	51	17,159	-1.8	.001	14	
Carnegie Class		28.6	13.2	.1	10	19	28	36	51	656	-2.3	.000	17	
NSSE 2010		27.9	13.5	.0	8	18	26	36	51	621	-1.6	.001	12	
Top 50%		31.1	13.6	.1	11	22	30	40	54	632	-4.8	.000	35	
Top 10%		33.6	14.0	.1	12	23	33	42	57	696	-7.3	.000	53	
SUPPORTIVE CAMPUS EN	VIRONMENT	(SCE)												
WMU	(N = 597)	61.7	17.8	.7	33	50	61	75	92					
High Research Public		61.4	18.6	.1	31	50	61	75	92	16,700	.3	.745	.01	
Carnegie Class		62.3	18.7	.1	31	50	64	75	94	22,271	6	.437	03	
NSSE 2010		62.5	18.8	.1	31	50	64	75	94	123,942	8	.295	04	
Top 50%		67.2	18.0	.1	36	56	67	81	97	35,906	-5.5	.000	31	
Top 10%		70.8	17.9	.2	39	58	72	83	100	6,519	-9.1	.000	51	

^a All statistics are weighted by gender and enrollment status. Comparison group statistics are also weighted by institutional size.

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^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: Use SEM 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 +/- 1.96 * SEM.

^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 2010 Benchmark Comparisons Detailed Statistics and Effect Sizes ^a Western Michigan University

Seniors

		Mea		Distrib	ution S	tatistics	i	Reference Group Comparison Statistics					
		Mean	SD ^b	SEM ^c	5th	Pe 25th	ercentile 50th	s ^d 75th	95th	Deg. of Freedom ^e	Mean Diff.	Sig. f	Effect size ^g
LEVEL OF ACADEMIC CH	ALLENGE (LA	C)											
WMU	(N = 1192)	57.2	14.2	.4	34	47	58	67	80				
High Research Public		55.8	14.8	.1	31	46	56	66	79	34,569	1.4	.001	.10
Carnegie Class		56.5	14.6	.1	32	47	57	67	80	43,366	.7	.103	.05
NSSE 2010		57.6	14.4	.0	33	48	58	68	80	203,204	3	.438	02
Top 50%		60.9	13.7	.1	38	52	61	71	82	1,234	-3.7	.000	27
Top 10%		63.8	13.6	.1	41	55	65	73	85	1,386	-6.6	.000	48
ACTIVE AND COLLABORA	ATIVE LEARN	ING (AC	L)										
WMU	(N = 1256)	50.8	16.5	.5	24	38	52	62	78				
High Research Public		50.0	18.4	.1	24	38	48	62	81	1,370	.8	.099	.04
Carnegie Class		50.6	18.1	.1	24	38	48	62	81	1,342	.2	.697	.01
NSSE 2010		51.4	17.7	.0	24	38	52	62	81	1,272	6	.183	04
Top 50%		56.6	17.2	.1	29	43	57	67	86	53,182	-5.8	.000	34
Top 10%		60.3	17.9	.2	33	48	61	71	90	1,598	-9.6	.000	54
STUDENT-FACULTY INTE	RACTION (SF	I)											
WMU	(N = 1201)	39.9	20.7	.6	11	22	39	50	80				
High Research Public		40.6	21.2	.1	11	22	39	56	83	34,837	7	.258	03
Carnegie Class		41.2	21.1	.1	11	28	39	56	83	43,695	-1.3	.033	06
NSSE 2010		42.5	21.0	.0	11	28	39	56	83	204,849	-2.5	.000	12
Top 50%		49.2	21.5	.1	17	33	47	61	89	1,271	-9.3	.000	43
Top 10%		55.3	22.2	.3	22	39	56	72	94	1,710	-15.4	.000	70
ENRICHING EDUCATIONA	L EXPERIENC	CES (EE	E)										
WMU	(N = 1169)	37.5	17.0	.5	11	25	36	48	67				
High Research Public		38.4	17.7	.1	11	25	37	50	69	1,260	9	.076	05
Carnegie Class		39.9	17.9	.1	12	26	39	52	71	1,242	-2.4	.000	13
NSSE 2010		40.5	18.3	.0	12	27	40	53	72	1,184	-3.1	.000	17
Top 50%		47.7	18.0	.1	18	35	48	60	77	1,215	-10.2	.000	57
Top 10%		55.8	17.3	.2	25	44	57	68	83	10,456	-18.3	.000	-1.06
SUPPORTIVE CAMPUS EN	VIRONMENT	(SCE)											
WMU	(N = 1142)	54.5	18.1	.5	25	42	56	67	83				
High Research Public		58.1	19.5	.1	25	44	58	72	92	1,237	-3.5	.000	18
Carnegie Class		58.8	19.4	.1	25	44	58	72	92	1,216	-4.3	.000	22
NSSE 2010		59.6	19.3	.0	28	47	61	72	92	1,157	-5.1	.000	26
Top 50%		64.7	18.9	.1	33	53	67	78	94	53,217	-10.2	.000	54
Top 10%		68.6	18.5	.2	36	56	69	83	100	7,958	-14.1	.000	76

^a All statistics are weighted by gender and enrollment status. Comparison group statistics are also weighted by institutional size.

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^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: Use SEM 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 +/- 1.96 * SEM.

^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.