



**MULTI-INSTITUTIONAL STUDY OF
LEADERSHIP**

2015

School Report



**General and Sub-Study
Outcomes**

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General and Sub-Study Outcomes

This report provides key information on your students' reported achievement across the general and sub-study outcomes in the MSL. It also provides statistical tests to determine the extent to which your students score significantly differently than their peers in the comparison groups that you've selected. In addition to the general and sub-study outcomes, this report also includes the MSL Delta Measure tables, which provide a change over time analysis focused on outcome achievement for seniors at your school (for community colleges, this measure has been adapted to include all students in your sample).

Reading the Tables

Please consider the following when reviewing tables:

- The blue column in each table represents the results for your random sample respondents only.
- Different measures use different size scales. Please consult the header for each major variable to determine the scaling. For example, some measures may be built on a 4, 5, or 7-point scale, and thus a mean of 4 will be interpreted very differently from one scale to another.
- In tests of significance, a boxed 'S' indicates the result is statistically significant at the .01 level.
- For statistically significant results, effect sizes are calculated and reported as 'trivial,' 'small,' 'moderate,' or 'large.' We recommend that you examine closely any results with effect sizes of small or greater.
- Cells populated with a period indicate that an insufficient number of respondents, less than 15, answered that particular question for analyses to be conducted. The MSL requires 15 cases for a statistic to be reported to ensure respondent confidentiality as well as appropriate interpretations of the data are made. Basing a finding off of fewer than 15 cases may lead to erroneous conclusions.
- The data presented in these tables include all responses received from respondents in the survey for each item or measure. In some places, where individual items were missing (item missing data), composite measures were not calculated. To help identify cases in the data with high rates of missing data, we have calculated a variable called CORE_PCT (CORE variable percentage). This variable will consist of a proportion of CORE variables with responses over the total number of CORE variables. This measure will be included in the analytic data file and may be used to filter specific cases with various levels of completeness.

The General and Sub-Study Outcomes Tables

This table describes students' capacities across core outcomes and substudy outcomes in the MSL. Data represent your random sample, the MSL National Sample, and other benchmark/comparison sample groups pre-selected by your institution for inclusion in this report. Statistical tests of differences are provided comparing your general population data with data from each of your comparison groups using independent samples *t*-tests. Results in this section are useful for:

- benchmarking student capacity from your random sample with that of students in selected benchmark/comparison sample groups, and
- determining potential outcome areas that should be targeted for further development.

Mean (M): Represents the average score for all cases on an outcome measure with higher number indicating greater capacity.

Standard Deviation (SD): Indicator of the variation of the distribution from the mean.

Sig: Provides the results of an independent samples *t*-test to determine whether the mean for this comparison group is significantly different than the mean in the blue column (general population sample); significance is determined at the .01 level

Effect: Indicates the effect size, or magnitude, of any significantly different results

General Outcome Measure Scores and Comparisons																							
University of MSL2015				MSL National Sample				Coalition: Catholic				Custom Pk: 999999				MSL2012 School Data: 999999				Comparative Sample 1			
M	SD	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect		
Social Change Model Leadership Outcomes																							
Scored on a 5-point scale ranging from Strongly Disagree (1) to Strongly Agree (5)																							
Consciousness of Self	4.05	0.61	4.05	0.61		4.07	0.61			4.08	0.63			4.12	0.57	S	-	4.10	0.61				
Congruence	4.27	0.56	4.24	0.57		4.26	0.56			4.27	0.56			4.28	0.54			4.33	0.51				
Commitment	4.42	0.49	4.40	0.51		4.42	0.51			4.41	0.52			4.42	0.49			4.48	0.45				
Collaboration	4.21	0.53	4.18	0.54		4.21	0.54			4.21	0.55			4.23	0.52			4.26	0.52				
Controversy with Civility	4.29	0.51	4.23	0.53	S	-	4.24	0.53	S	-	4.26	0.55		4.27	0.52			4.34	0.49				
Citizenship	4.00	0.67	3.94	0.68	S	-	4.00	0.66			4.01	0.69		4.04	0.65			4.06	0.64				
Resiliency	3.88	0.67	3.88	0.65			3.90	0.65			3.90	0.66		3.98	0.64	S	-	3.96	0.63				
Omnibus SRLS	4.20	0.47	4.17	0.48	S	-	4.20	0.48			4.20	0.49		4.22	0.46			4.26	0.45				
Scored on a 4-point scale ranging from Not At All Confident (1) to Very Confident (4)																							
Leadership Efficacy	3.12	0.67	3.12	0.66			3.15	0.65			3.16	0.66		3.15	0.64			3.16	0.65				
Scored on a 4-point scale ranging from Not Grown At All (1) to Grown Very Much (4)																							
Complex Cognitive Skills	3.17	0.62	3.18	0.62			3.20	0.61			3.21	0.62		3.16	0.62			3.29	0.60				
Scored on on a 5-point scale from Does Not Describe Me Well (1) to Describes Me Very Well (5)																							
Social Perspective-Taking	3.96	0.72	3.88	0.74	S	-	3.89	0.73	S	-	3.92	0.74		3.94	0.72			4.05	0.68				
Significance: S = p < .01 Effect Sizes: Trivial - Small ○ Moderate ◐ Large ●																							

Indicator of effect size: A dash indicates the effect is trivial, a white circle indicates a small effect, a half filled circle is a moderate effect, and a fully shaded circle is a large effect

Be sure to check the scaling for each measure before interpreting the mean scores

The presence of an 'S' indicates that the difference between this comparison group mean and the general population mean is statistically significant.

MSL2015 General Outcomes

Metropolitan State University of Denver	MSL National Sample				MSL2012 School Data: 127565				Carnegie Peers: Baccalaureate				Size Peers: 20,000 and above				Control Peers: Public					
	M	SD	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect
Social Change Model of Leadership Outcomes																						
<i>Scored on a 5-point scale ranging from Strongly Disagree (1) to Strongly Agree (5)</i>																						
Consciousness of Self	4.10	0.61	4.05	0.61	S	-	4.16	0.55			4.05	0.61			4.03	0.61	S	-	4.04	0.61	S	-
Congruence	4.26	0.59	4.24	0.57			4.26	0.54			4.25	0.58			4.23	0.57			4.23	0.57		
Commitment	4.44	0.50	4.40	0.51			4.42	0.46			4.38	0.53	S	-	4.39	0.51			4.40	0.51		
Collaboration	4.18	0.54	4.18	0.54			4.18	0.52			4.17	0.55			4.17	0.54			4.17	0.54		
Controversy with Civility	4.25	0.55	4.23	0.53			4.27	0.50			4.23	0.54			4.21	0.53			4.22	0.53		
Citizenship	3.85	0.71	3.94	0.68	S	-	3.87	0.70			3.96	0.68	S	-	3.90	0.69			3.90	0.69		
Omnibus SRLS	4.18	0.48	4.17	0.48			4.19	0.46			4.17	0.49			4.15	0.48			4.16	0.48		
Resiliency	4.00	0.67	3.88	0.65	S	-	4.03	0.62			3.90	0.65	S	-	3.87	0.65	S	○	3.88	0.65	S	-
<i>Scored on a 4-point scale ranging from Not At All Confident (1) to Very Confident (4)</i>																						
Leadership Efficacy	3.14	0.71	3.12	0.66			3.10	0.67			3.12	0.67			3.11	0.66			3.10	0.67		
<i>Scored on a 4-point scale ranging from Not Grown At All (1) to Grown Very Much (4)</i>																						
Complex Cognitive Skills	3.25	0.64	3.18	0.62	S	-	3.15	0.63	S	-	3.23	0.62			3.17	0.62	S	-	3.17	0.63	S	-
<i>Scored on a 5-point scale from Does Not Describe Me Well (1) to Describes Me Very Well (5)</i>																						
Social Perspective-Taking	3.95	0.75	3.88	0.74	S	-	3.90	0.73			3.88	0.75	S	-	3.87	0.74	S	-	3.89	0.74		
<i>Scored on an 8-point scale ranging from Definitely False (1) to Definitely True (8)</i>																						
Hope (Agency)	6.69	1.08	6.62	1.06			.	.			6.67	1.03			6.58	1.09	S	-	6.59	1.08	S	-
Hope (Pathways)	6.65	0.99	6.50	1.00	S	-	.	.			6.53	1.00	S	-	6.49	1.00	S	-	6.49	1.01	S	-
Significance: S = p < .01 Effect Sizes: Trivial - Small ○ Moderate ◐ Large ●																						

MSL2015 Sub-Study Outcomes

Metropolitan State University of Denver	MSL National Sample		MSL2012 School Data: 127565				Carnegie Peers: Baccalaureate				Size Peers: 20,000 and above				Control Peers: Public							
	M	SD	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect				
Sub-Study Outcome Measure Scores and Comparisons																						
<i>Scored on a 4-point scale ranging from Never (1) to Very Often (4)</i>																						
Spirituality: Search for Meaning	1.78	0.85	1.66	0.83	S	-	1.72	0.85			1.72	0.82			1.63	0.83	S	-	1.64	0.83	S	-
<i>Scored on a 7-point scale ranging from Strongly Disagree (1) to Strongly Agree (7)</i>																						
Private Collective Racial Esteem	5.48	1.11	5.52	1.10			5.32	1.18			5.50	1.14			5.52	1.10			5.52	1.10		
Public Collective Racial Esteem	4.75	1.21	4.94	1.22	S	-	4.67	1.20			4.89	1.22			4.93	1.22	S	-	4.91	1.22	S	-
Importance to Identity	3.48	1.50	3.59	1.41			3.33	1.43			3.71	1.41	S	-	3.49	1.43			3.53	1.41		
Significance: S = p < .01 Effect Sizes: Trivial - Small ○ Moderate ◐ Large ●																						

The MSL Delta Measure: Change Over Time

This table describes changes in students' perceived capacities across core outcomes in the MSL and is limited to those students who have experienced the campus environment for the longest duration – respondents who identified as seniors and beyond (omitting graduate students). All MSL respondents are asked to retrospectively report on their capacities prior to college as well as present capacities. This table specifically analyzes only data provided by students who indicated they are in their senior year. Data represent seniors in your random sample, the MSL National Sample, and other benchmark/comparison sample groups pre-selected by your institution for inclusion in this report. Data in the blue columns represent seniors from your institution's random sample. Statistical tests in this table examine differences in the reported capacities of seniors prior to the start of college and currently. This is done using paired samples *t*-tests. Similar tests are provided for seniors in each of your comparison groups. The presence of an 'S' symbol indicates the differences are significant at the .01 level: the rate of change in students' capacities is above and beyond simple chance. Results in this section are useful for:

- determining the degree to which students change in their capacity across key outcomes while in college,
- identifying the extent to which outcomes of focus for your institution reflect developmental gains, and
- benchmarking against comparison groups to see where your students are either mirroring patterns of significant difference or demonstrating unique patterns.

Mean (M): Represents the average score for all cases on an outcome measure with higher number indicating greater capacity.

Standard Deviation (SD): Indicator of the variation of the distribution from the mean.

Sig: Provides the results of an independent samples *t*-test to determine whether the mean for this comparison group is significantly different than the mean in the blue column (general population sample); significance is determined at the .01 level

Effect: Indicates the effect size, or magnitude, of any significantly different results

MSL2015 Delta Measure: Change Over Time

University of MSL2015	MSL National Sample			Coalition: Catholic			Custom Peer: 999999			MSL2012 School Data: 999999			Comparative Sample 1					
	M	SD	Sig Effect	M	SD	Sig Effect	M	SD	Sig Effect	M	SD	Sig Effect	M	SD	Sig Effect			
Social Change Model of Leadership Outcomes																		
Scored on a 5-point scale ranging from Strongly Disagree (1) to Strongly Agree (5); please note separate scale for Resiliency																		
Consciousness of Self																		
Prior to College	3.41	1.05	S	3.45	1.00	S	3.48	0.99	S	3.44	1.02	S	3.48	0.97	S	3.46	0.99	S
Senior Year	4.15	0.61	S	4.13	0.58	S	4.17	0.57	S	4.18	0.58	S	4.20	0.55	S	4.10	0.61	S
Congruence																		
Prior to College	3.84	0.98	S	3.92	0.86	S	3.94	0.86	S	3.92	0.87	S	3.97	0.80	S	3.95	0.87	S
Senior Year	4.33	0.56	S	4.29	0.55	S	4.32	0.54	S	4.30	0.55	S	4.32	0.52	S	4.33	0.51	S

Seniors' perceived capacity on outcome measure prior to college

Seniors' perceived capacity on outcome measure during spring semester senior year

Indicator of effect size: A dash indicates the effect is trivial, a white circle indicates a small effect, a half filled circle is a moderate effect, and a fully shaded circle is a large effect

Be sure to check the scaling for each measure before interpreting the mean scores

The presence of an 'S' indicates that the difference between this comparison group mean and the general population mean is statistically significant.

MSL2015 Delta Measure: Change Over Time

Metropolitan State University of Denver				MSL National Sample				MSL2012 School Data: 127565				Carnegie Peers: Baccalaureate				Size Peers: 20,000 and above				Control Peers: Public			
	M	SD	Sig Effect	M	SD	Sig Effect	M	SD	Sig Effect	M	SD	Sig Effect	M	SD	Sig Effect	M	SD	Sig Effect	M	SD	Sig Effect		
Social Change Model of Leadership Outcomes																							
<i>Scored on a 5-point scale ranging from Strongly Disagree (1) to Strongly Agree (5)</i>																							
Consciousness of Self																							
Prior to College	3.53	1.01	S ●	3.45	1.00	S ●	3.46	1.06	S ●	3.49	0.98	S ●	3.42	1.01	S ●	3.45	1.02	S ●					
Senior Year	4.22	0.56	S ●	4.13	0.58	S ●	4.20	0.54	S ●	4.15	0.58	S ●	4.11	0.59	S ●	4.12	0.59	S ●					
Congruence																							
Prior to College	3.86	0.95	S ○	3.92	0.86	S ○	3.87	0.99	S ○	3.91	0.89	S ○	3.92	0.87	S ○	3.92	0.86	S ○					
Senior Year	4.37	0.55	S ○	4.29	0.55	S ○	4.35	0.53	S ○	4.32	0.55	S ○	4.27	0.56	S ○	4.28	0.57	S ○					
Commitment																							
Prior to College	4.00	0.95	S ○	4.13	0.83	S ○	4.09	0.92	S ○	4.11	0.82	S ○	4.11	0.84	S ○	4.11	0.84	S ○					
Senior Year	4.51	0.46	S ○	4.43	0.50	S ○	4.42	0.47	S ○	4.43	0.49	S ○	4.42	0.51	S ○	4.42	0.51	S ○					
Collaboration																							
Prior to College	3.74	0.87	S ○	3.84	0.87	S ○	3.80	0.88	S ○	3.85	0.87	S ○	3.81	0.87	S ○	3.82	0.88	S ○					
Senior Year	4.25	0.52	S ○	4.24	0.53	S ○	4.25	0.49	S ○	4.25	0.51	S ○	4.22	0.54	S ○	4.22	0.54	S ○					
Controversy with Civility																							
Prior to College	3.81	0.90	S ○	3.86	0.83	S ○	3.92	0.82	S ○	3.86	0.84	S ○	3.85	0.83	S ○	3.84	0.84	S ○					
Senior Year	4.30	0.57	S ○	4.27	0.53	S ○	4.32	0.51	S ○	4.29	0.51	S ○	4.25	0.54	S ○	4.26	0.54	S ○					
Citizenship																							
Prior to College	3.59	0.91	S ○	3.73	0.89	S ○	3.63	0.94	S ○	3.75	0.87	S ○	3.69	0.90	S ○	3.70	0.90	S ○					
Senior Year	3.90	0.72	S ○	3.98	0.68	S ○	3.94	0.72	S ○	4.03	0.66	S ○	3.93	0.70	S ○	3.93	0.70	S ○					
Omnibus SRLS																							
Prior to College	3.76	0.62	S ●	3.82	0.56	S ●	3.85	0.63	S ●	3.83	0.56	S ●	3.80	0.56	S ●	3.81	0.57	S ●					
Senior Year	4.26	0.47	S ●	4.22	0.47	S ●	4.24	0.46	S ●	4.24	0.46	S ●	4.20	0.48	S ●	4.20	0.48	S ●					
Resiliency																							
Prior to College	3.52	0.83	S ○	3.53	0.81	S ○	3.81	0.96	S ○	3.53	0.81	S ○	3.51	0.81	S ○	3.53	0.82	S ○					
Senior Year	4.11	0.62	S ○	3.95	0.64	S ○	4.07	0.62	S ○	3.98	0.63	S ○	3.93	0.64	S ○	3.95	0.64	S ○					

Significance: S = p < .01 **Effect Sizes:** Trivial - Small ○ Moderate ● Large ●

MSL2015 Delta Measure: Change Over Time

Metropolitan State University of Denver	MSL National Sample				MSL2012 School Data: 127565				Carnegie Peers: Baccalaureate				Size Peers: 20,000 and above				Control Peers: Public			
	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect
Leadership Efficacy																				
Scored on a 4-point scale ranging from Not At All Confident (1) to Very Confident (4)																				
Prior to College	2.86	0.81	S	●	2.83	0.76	S	●	2.77	0.78	S	●	2.85	0.76	S	●	2.81	0.76	S	●
Senior Year	3.27	0.64	S	●	3.24	0.63	S	●	3.17	0.65	S	●	3.27	0.63	S	●	3.22	0.63	S	●
Complex Cognitive Skills																				
Scored on a 4-point scale ranging from Not Grown At All (1) to Grown Very Much (4)																				
Prior to College	3.11	0.68	S	○	3.01	0.64	S	●	3.08	0.67	S	○	3.00	0.66	S	●	3.01	0.64	S	●
Senior Year	3.32	0.61	S	○	3.34	0.58	S	●	3.31	0.61	S	○	3.40	0.57	S	●	3.31	0.58	S	●
Social Perspective-Taking																				
Scored on on a 5-point scale from Does Not Describe Me Well (1) to Describes Me Very Well (5)																				
Prior to College	3.49	1.00	S	●	3.52	0.91	S	●	3.47	0.96	S	●	3.52	0.90	S	○	3.50	0.92	S	○
Senior Year	3.96	0.76	S	●	3.94	0.72	S	●	3.94	0.69	S	●	3.95	0.71	S	●	3.91	0.73	S	○
Hope Scale - Agency																				
Scored on an 8-point scale ranging from Definitely False (1) to Definitely True (8)																				
Prior to College	3.85	0.70	S	●	3.89	0.67	S	●	.	.	.	.	3.87	0.67	S	●	3.88	0.68	S	●
Senior Year	6.81	1.05	S	●	6.70	1.05	S	●	.	.	.	.	6.77	0.99	S	●	6.65	1.09	S	●
Hope Scale - Pathways																				
Scored on an 8-point scale ranging from Definitely False (1) to Definitely True (8)																				
Prior to College	3.85	0.70	S	●	3.89	0.67	S	●	.	.	.	.	3.87	0.67	S	●	3.88	0.68	S	●
Senior Year	6.72	0.96	S	●	6.57	0.99	S	●	.	.	.	.	6.62	0.99	S	●	6.55	0.99	S	●
Significance: S = p < .01 Effect Sizes: Trivial - Small ○ Moderate ● Large ●																				