

COOPERATIVE INSTITUTIONAL RESEARCH PROGRAM  
*at the* HIGHER EDUCATION RESEARCH INSTITUTE AT UCLA

## 2017 CIRP Freshman Survey

CIRP Construct Reports

First-time, Full-time Freshmen

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# Miami University-Oxford

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Comparison group 1: Public Universities - high  
Comparison group 2: Public Universities



## How to Read the CIRP Construct Percentage Report

CIRP Constructs are designed to capture the experiences and outcomes institutions are often interested in understanding, but that present a measurement challenge because of their complex and multifaceted nature. To measure these broad underlying areas more precisely, we use Item Response Theory (IRT) to combine individual survey items into global measures that capture these areas. CIRP Constructs are more than a summation of related items; IRT uses response patterns to derive construct score estimates while simultaneously giving greater weight in the estimation process to survey items that tap into the construct more directly. This results in more accurate construct scores. Constructs are particularly useful for benchmarking. They allow you to determine if the experiences and outcomes for your students differ from your comparison groups. Two reports are generated for each CIRP Construct. The Mean Score Report shows comparative information based on the mean score of a construct. The Percentage Report shows comparative information based on the percentage of students who score in the high, average, and low score groups of a construct. We suggest you use the report that best fits your needs as an institution. Both CIRP Construct reports are generated for first-time, full-time freshmen, which we define as those respondents who first entered college in 2014 and are currently enrolled full-time. For more information about IRT and the CIRP Construct development process, see the CIRP Constructs Technical Report at [www.heri.ucla.edu](http://www.heri.ucla.edu)

**CIRP Construct Definition** – Summarizes the theoretical rationale for creating the construct.

**Comp 1** – The first comparison group is based on your institution's type, control, and selectivity.

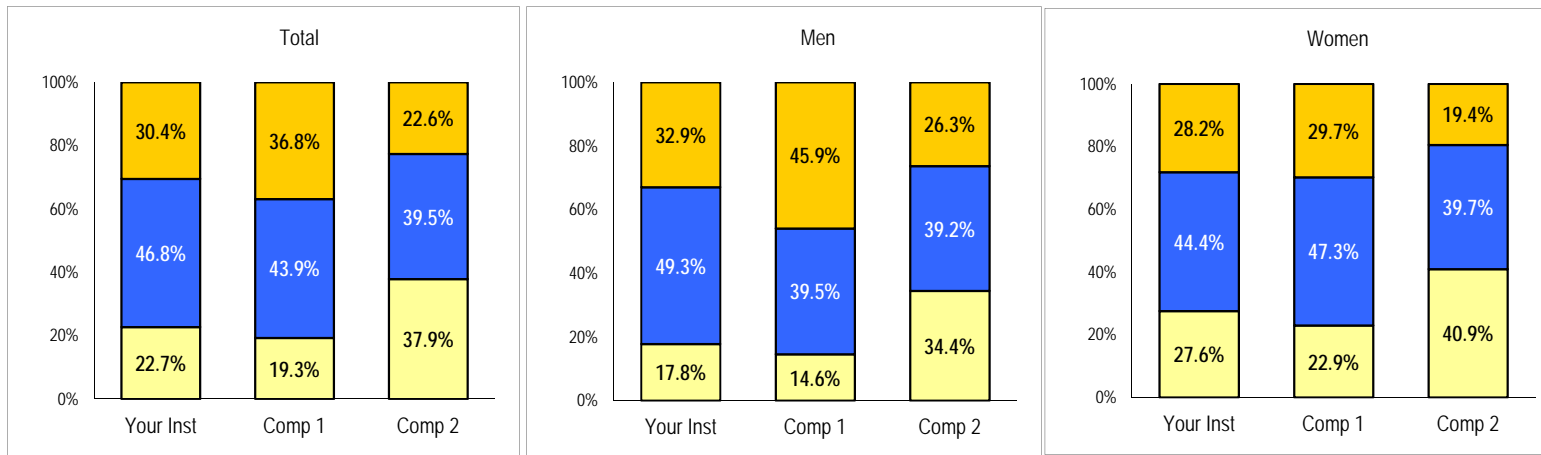
**Comp 2** – The second comparison group is based on your institution's type and control.

**Statistical Significance** – uses a proportional difference test to examine the difference between the percentage of students in the high score group for your institution and the percentage of students in the high score group in the comparison group. Differences larger than what would be expected by chance are noted with one, two, or three stars, which correspond to the three standard levels of significance (\*p<.05, \*\*p<.01, \*\*\*p<.001). Statistical significance measures the extent to which a difference is occurring by chance, not the extent to which a difference is practically important. Large sample sizes (like those in the comparison groups) tend to generate statistical significance even though the magnitude of the difference might be small and not practically important. Unlike the means scores report, in this case there are no effect size calculations to guide you in determining practical importance when comparing proportional differences.

**Academic Self-Concept** – is a unified measure of students' beliefs about their abilities and confidence in academic environments.

Sample University	Total			Men			Women		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	313	13,401	30,456	153	5,876	13,369	160	7,525	17,087
High Academic Self-Concept	30.4%	36.8%	22.6%	32.9%	45.9%	26.3%	28.2%	29.7%	19.4%
Average Academic Self-Concept	46.8%	43.9%	39.5%	49.3%	39.5%	39.2%	44.4%	47.3%	39.7%
Low Academic Self-Concept	22.7%	19.3%	37.9%	17.8%	14.6%	34.4%	27.6%	22.9%	40.9%
Significance (based on High score group)	-	*	***	-	**	***	-		***

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001



**Survey items and estimation "weights":**

Rate yourself on each of the following traits as compared with the average person your age:

- \* Academic ability (3.52)
- \* Self-confidence - intellectual (1.22)
- \* Drive to achieve (0.95)
- \* Mathematical ability (1.32)

**Survey Items and Estimation "Weights"** – The survey items used in the creation of the CIRP Construct are presented in the order in which they contribute to the construct along with the estimation weights generated in IRT. Items that tap into a trait more effectively are given greater weight in the estimation process.

**Charts** – CIRP Constructs are scored on a z-score metric and rescaled for a mean of approximately 50 and standard deviation of 10. The Low, Average, and High construct score group percentages are reported here. The "Low" score group represents students who are one-half standard deviation below the mean. The "Average" score group represents students whose scores are within one-half standard deviation of the mean. The "High" score group represents students who are one-half standard deviation or more above the mean.

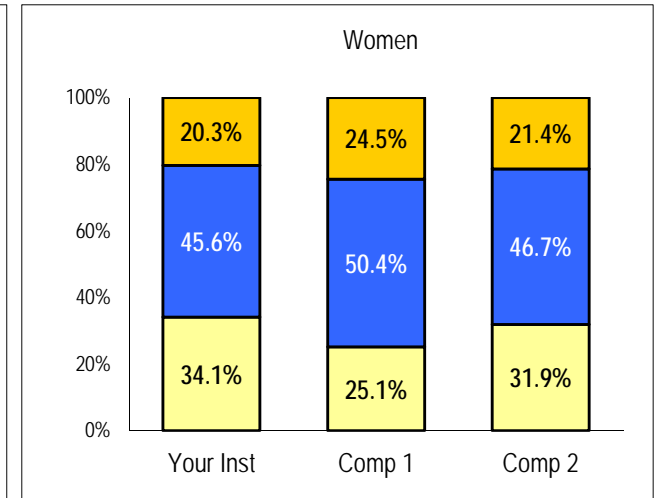
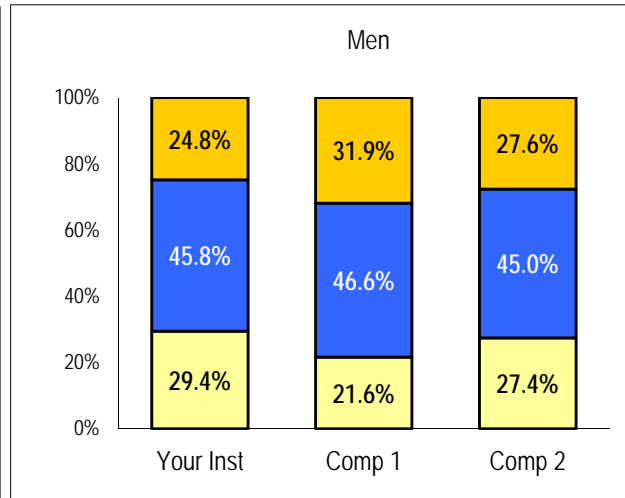
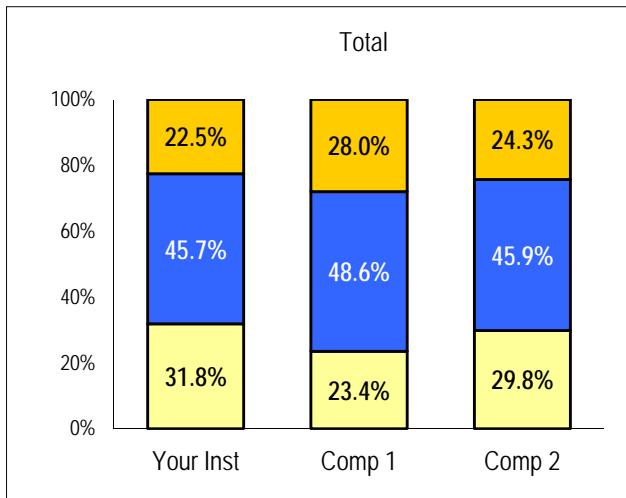


2017 CIRP Freshman Survey  
First-time, Full-time Freshmen  
Habits of Mind  
CIRP Construct Percentage Report

Habits of Mind - is a unified measure of the behaviors and traits associated with academic success. These learning behaviors are seen as the foundation for lifelong learning.

Miami University-Oxford	Total			Men			Women		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	2,299	18,341	40,204	1,123	8,338	17,912	1,176	10,003	22,292
High Habits of Mind	22.5%	28.0%	24.3%	24.8%	31.9%	27.6%	20.3%	24.5%	21.4%
Average Habits of Mind	45.7%	48.6%	45.9%	45.8%	46.6%	45.0%	45.6%	50.4%	46.7%
Low Habits of Mind	31.8%	23.4%	29.8%	29.4%	21.6%	27.4%	34.1%	25.1%	31.9%
Significance (based on High score group)	-	**		-	*		-		

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001



Survey items and estimation "weights":

How often in the past year did you:

- \* Seek solutions to problems and explain them to others (1.99)
- \* Support your opinions with a logical argument (1.74)
- \* Seek alternative solutions to a problem (1.61)
- \* Evaluate the quality or reliability of information you received (1.58)
- \* Explore topics on your own, even though it was not required for a class (1.27)
- \* Seek feedback on your academic work (1.24)

- \* Ask questions in class (1.20)
- \* Look up scientific research articles and resources (1.05)
- \* Revise your papers to improve your writing (1.04)
- \* Take a risk because you feel you have more to gain (1.03)
- \* Accept mistakes as part of the learning process (0.95)

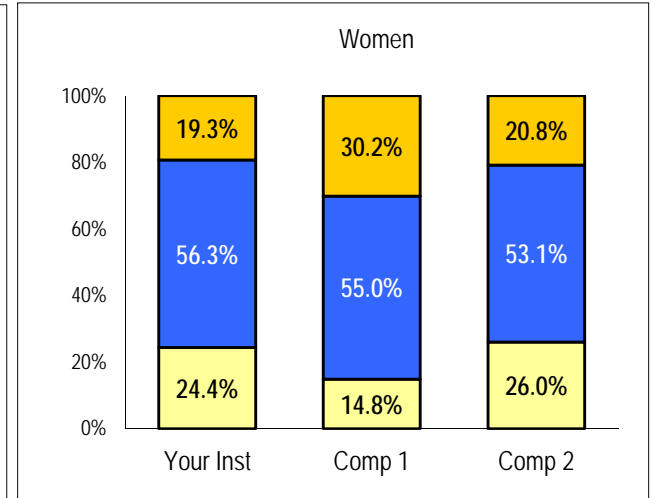
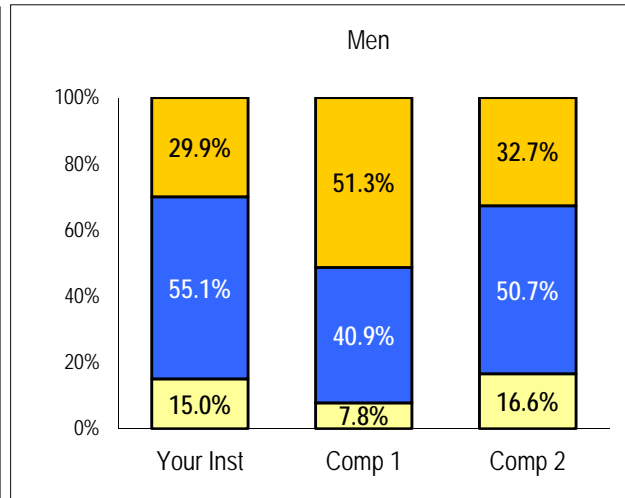
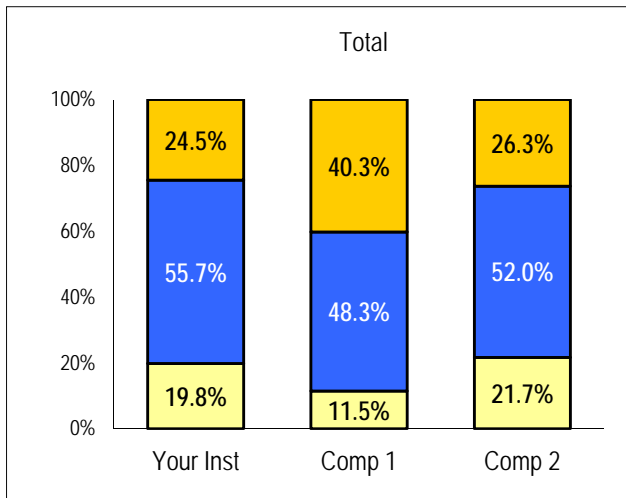


2017 CIRP Freshman Survey  
First-time, Full-time Freshmen  
Academic Self-Concept  
CIRP Construct Percentage Report

Academic Self-Concept - is a unified measure of students' beliefs about their abilities and confidence in academic environments.

Miami University-Oxford	Total			Men			Women		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	2,129	17,530	38,394	1,042	8,004	17,140	1,087	9,526	21,254
High Academic Self-Concept	24.5%	40.3%	26.3%	29.9%	51.3%	32.7%	19.3%	30.2%	20.8%
Average Academic Self-Concept	55.7%	48.3%	52.0%	55.1%	40.9%	50.7%	56.3%	55.0%	53.1%
Low Academic Self-Concept	19.8%	11.5%	21.7%	15.0%	7.8%	16.6%	24.4%	14.8%	26.0%
Significance (based on High score group)	-	***		-	***		-	***	

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001



Survey items and estimation "weights":

Rate yourself on each of the following traits as compared with the average person your age:

- \* Academic ability (3.52)
- \* Mathematical ability (1.32)
- \* Self-confidence - intellectual (1.22)
- \* Drive to achieve (0.95)

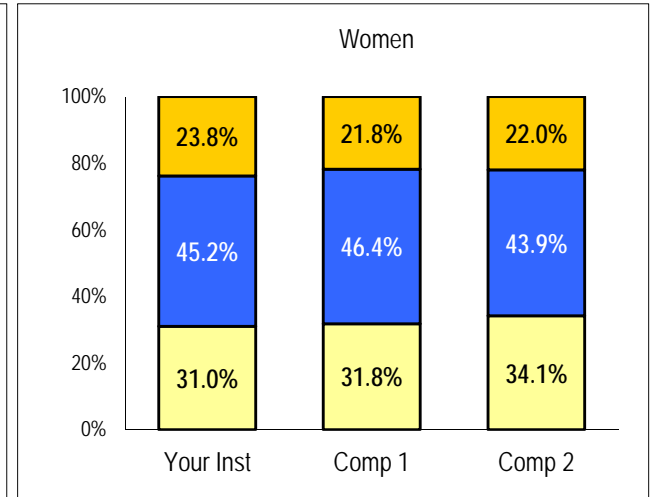
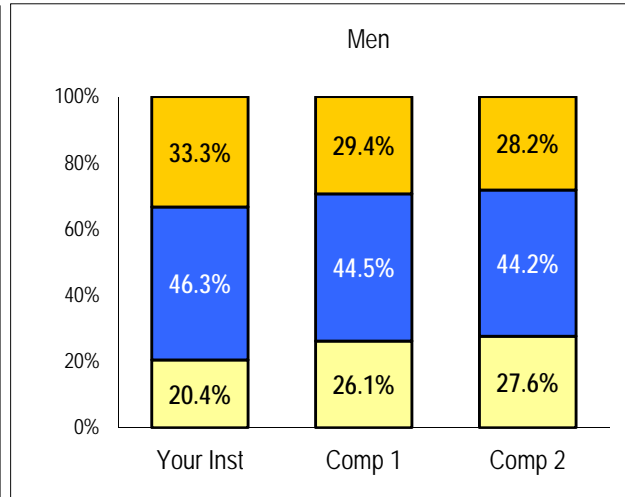
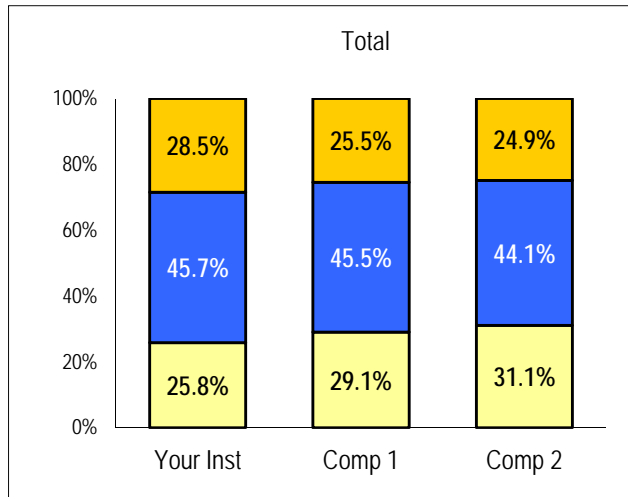


2017 CIRP Freshman Survey  
First-time, Full-time Freshmen  
Social Self-Concept  
CIRP Construct Percentage Report

Social Self-Concept - is a unified measure of students' beliefs about their abilities and confidence in social situations.

Miami University-Oxford	Total			Men			Women		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	2,115	17,417	38,125	1,035	7,950	17,026	1,080	9,467	21,099
High Social Self-Concept	28.5%	25.5%	24.9%	33.3%	29.4%	28.2%	23.8%	21.8%	22.0%
Average Social Self-Concept	45.7%	45.5%	44.1%	46.3%	44.5%	44.2%	45.2%	46.4%	43.9%
Low Social Self-Concept	25.8%	29.1%	31.1%	20.4%	26.1%	27.6%	31.0%	31.8%	34.1%
Significance (based on High score group)	-		*	-		*	-		

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001



Survey items and estimation "weights":

Rate yourself on each of the following traits as compared with the average person your age:

\* Self-confidence - social (2.33)

\* Leadership ability (1.96)

\* Public speaking ability (1.68)

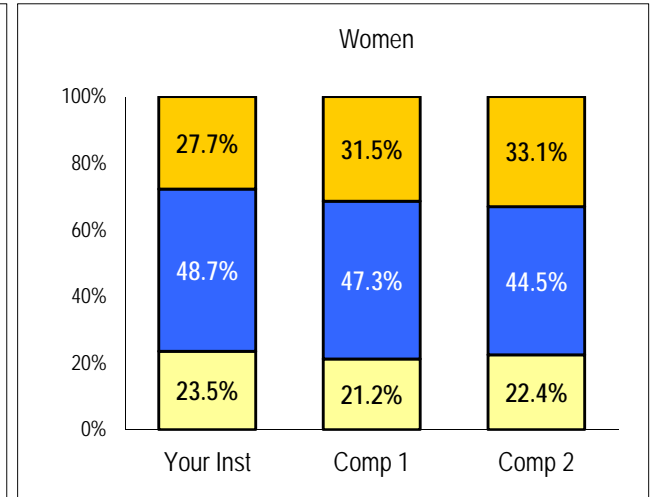
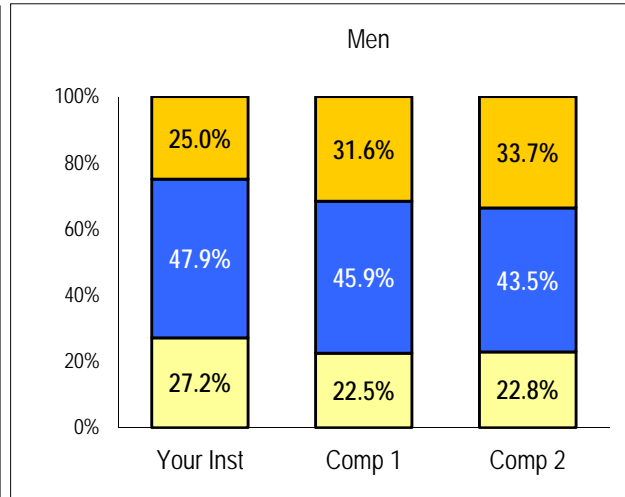
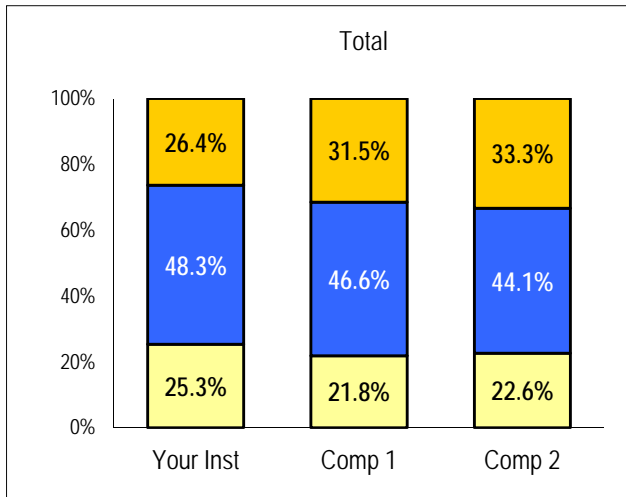


2017 CIRP Freshman Survey  
First-time, Full-time Freshmen  
Pluralistic Orientation  
CIRP Construct Percentage Report

Pluralistic Orientation - measures skills and dispositions appropriate for living and working in a diverse society.

Miami University-Oxford	Total			Men			Women		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	2,328	18,542	40,591	1,138	8,415	18,067	1,190	10,127	22,524
High Pluralistic Orientation	26.4%	31.5%	33.3%	25.0%	31.6%	33.7%	27.7%	31.5%	33.1%
Average Pluralistic Orientation	48.3%	46.6%	44.1%	47.9%	45.9%	43.5%	48.7%	47.3%	44.5%
Low Pluralistic Orientation	25.3%	21.8%	22.6%	27.2%	22.5%	22.8%	23.5%	21.2%	22.4%
Significance (based on High score group)	-	**	***	-	*	**	-		*

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001



Survey items and estimation "weights":

Rate yourself on each of the following traits as compared with the average person your age:

- \* Ability to work cooperatively with diverse people (2.39)
- \* Tolerance of others with different beliefs (2.35)
- \* Openness to having my own views challenged (2.13)
- \* Ability to discuss and negotiate controversial issues (2.03)
- \* Ability to see the world from someone else's perspective (1.78)

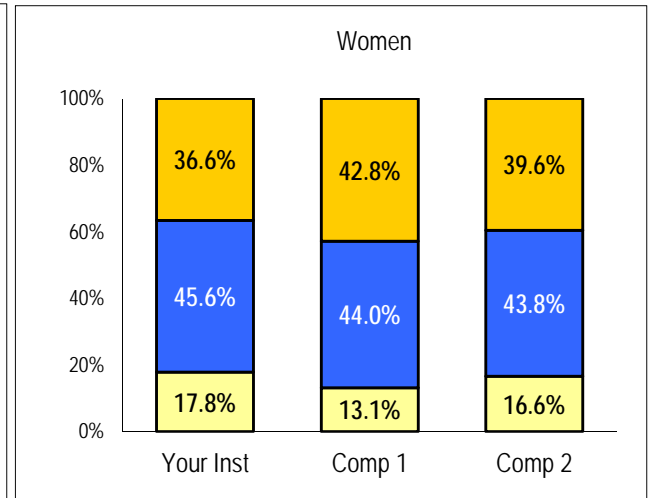
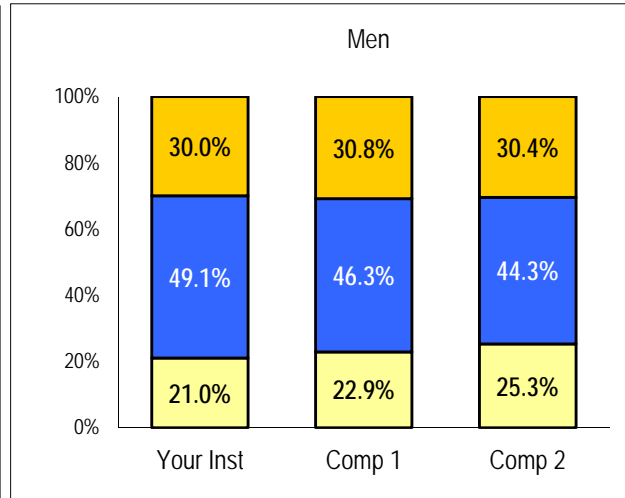
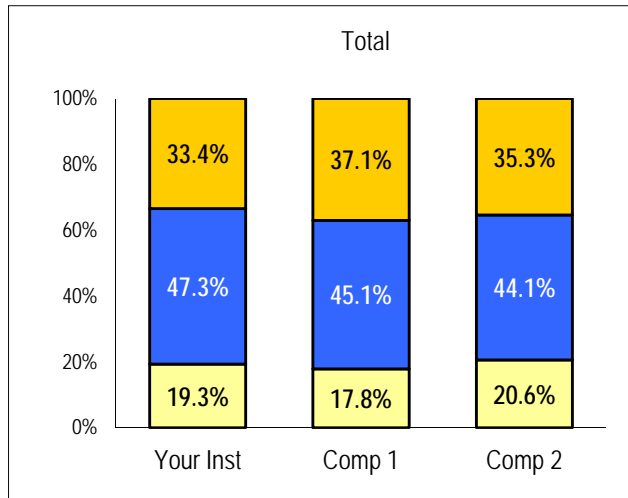


2017 CIRP Freshman Survey  
First-time, Full-time Freshmen  
Social Agency  
CIRP Construct Percentage Report

Social Agency - measures the extent to which students value political and social involvement as a personal goal.

Miami University-Oxford	Total			Men			Women		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	1,657	15,499	33,698	791	7,072	15,094	866	8,427	18,604
High Social Agency	33.4%	37.1%	35.3%	30.0%	30.8%	30.4%	36.6%	42.8%	39.6%
Average Social Agency	47.3%	45.1%	44.1%	49.1%	46.3%	44.3%	45.6%	44.0%	43.8%
Low Social Agency	19.3%	17.8%	20.6%	21.0%	22.9%	25.3%	17.8%	13.1%	16.6%
Significance (based on High score group)	-	-	-	-	-	-	-	*	-

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001



Survey items and estimation "weights":

Indicate the importance to you personally of each of the following:

- \* Participating in a community action program (2.42)
- \* Helping to promote racial understanding (2.05)
- \* Becoming a community leader (2.01)

- \* Influencing social values (1.58)
- \* Helping others who are in difficulty (1.36)
- \* Keeping up to date with political affairs (1.35)

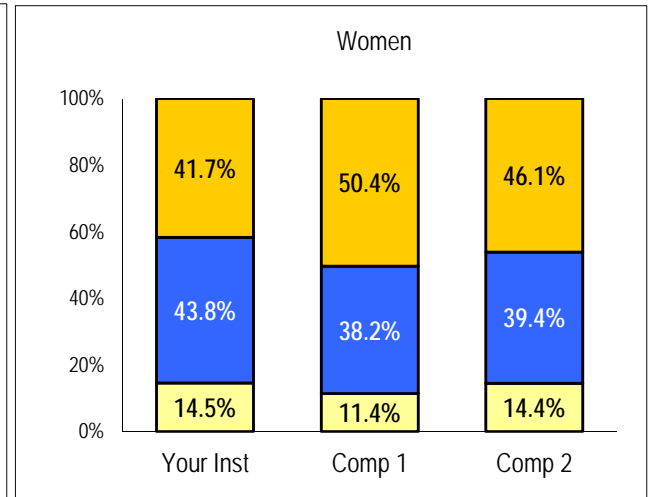
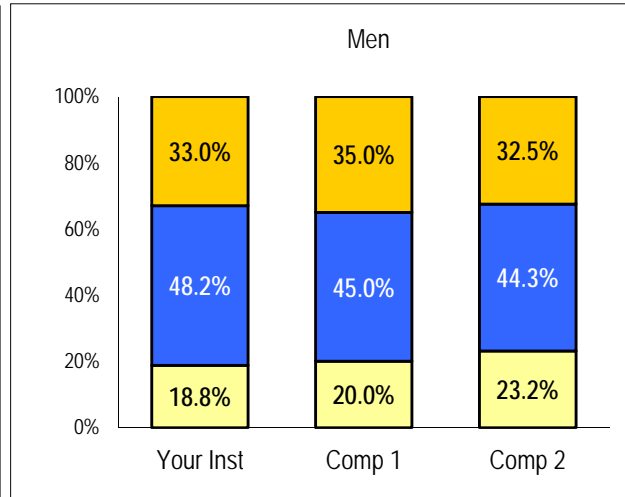
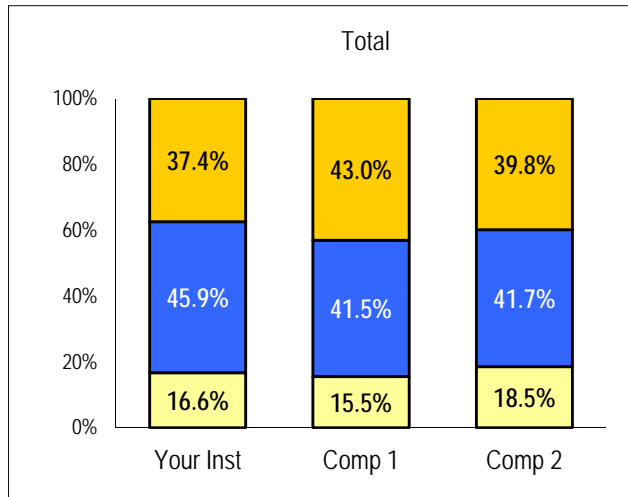


2017 CIRP Freshman Survey  
First-time, Full-time Freshmen  
Civic Engagement  
CIRP Construct Percentage Report

**Civic Engagement** - measures the extent to which students are motivated and involved in civic, electoral, and political activities.

Miami University-Oxford	Total			Men			Women		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	2,449	19,179	41,788	1,201	8,710	18,613	1,248	10,469	23,175
High Civic Engagement	37.4%	43.0%	39.8%	33.0%	35.0%	32.5%	41.7%	50.4%	46.1%
Average Civic Engagement	45.9%	41.5%	41.7%	48.2%	45.0%	44.3%	43.8%	38.2%	39.4%
Low Civic Engagement	16.6%	15.5%	18.5%	18.8%	20.0%	23.2%	14.5%	11.4%	14.4%
Significance (based on High score group)	-	***		-			-	***	*

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001



**Survey items and estimation "weights":**

Indicate activities you did in the past year:

- \*Demonstrated for a cause (e.g., boycott, rally, protest) (1.46)
- \*Publicly communicated my opinion about a cause (e.g., blog, email, petition) (1.35)
- \*Helped raise money for a cause or campaign (1.11)
- \*Performed volunteer work (0.80)

Indicate the importance to you personally of each of the following:

- \*Influencing social values (0.97)
- \*Keeping up to date with political affairs (0.86)



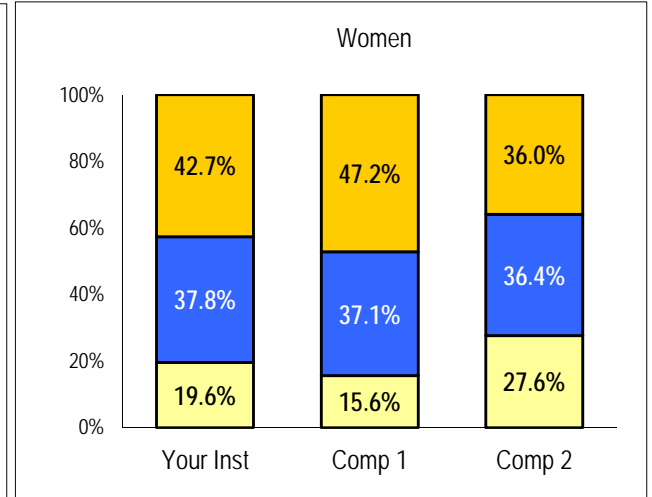
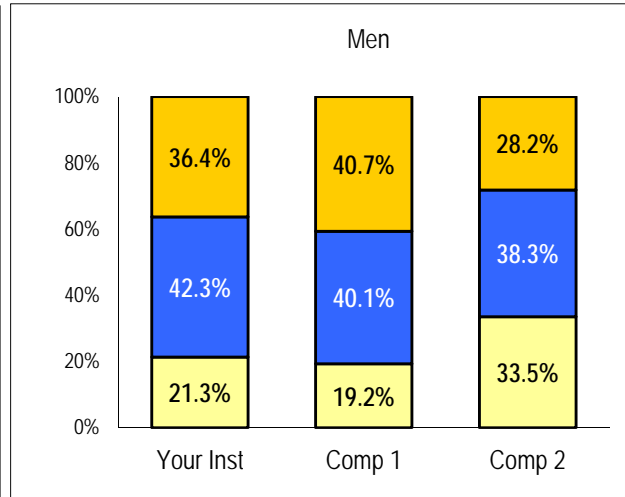
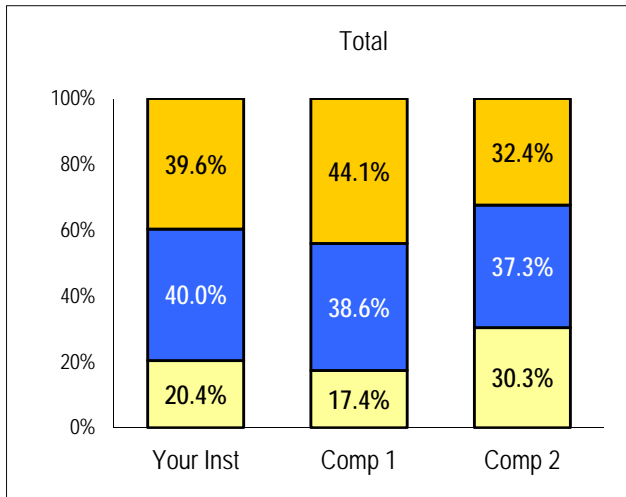


2017 CIRP Freshman Survey  
First-time, Full-time Freshmen  
College Reputation Orientation  
CIRP Construct Percentage Report

**College Reputation Orientation** - measures the degree to which students value academic reputation and future career potential as a reason for choosing this college.

Miami University-Oxford	Total			Men			Women		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	1,941	16,658	36,049	940	7,598	16,113	1,001	9,060	19,936
High College Reputation Orientation	39.6%	44.1%	32.4%	36.4%	40.7%	28.2%	42.7%	47.2%	36.0%
Average College Reputation Orientation	40.0%	38.6%	37.3%	42.3%	40.1%	38.3%	37.8%	37.1%	36.4%
Low College Reputation Orientation	20.4%	17.4%	30.3%	21.3%	19.2%	33.5%	19.6%	15.6%	27.6%
Significance (based on High score group)	-	*	***	-		***	-		**

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001



**Survey items and estimation "weights":**

How important was each reason in your decision to come here?

- \* *This college's graduates get good jobs* (6.11)
- \* *This college's graduates gain admission to top graduate/professional schools* (2.50)
- \* *This college has a very good academic reputation* (1.54)

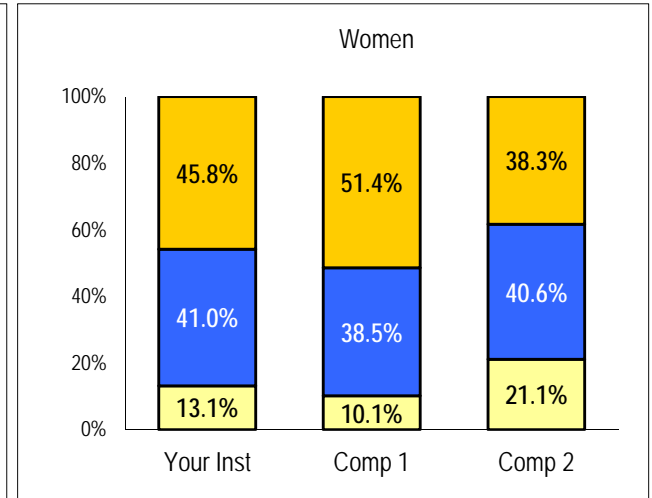
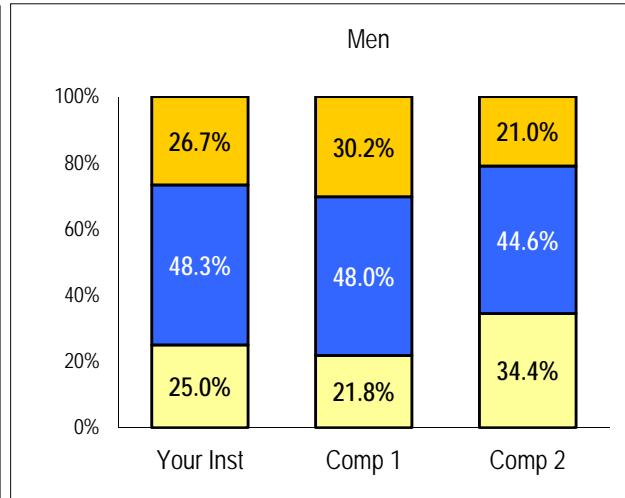
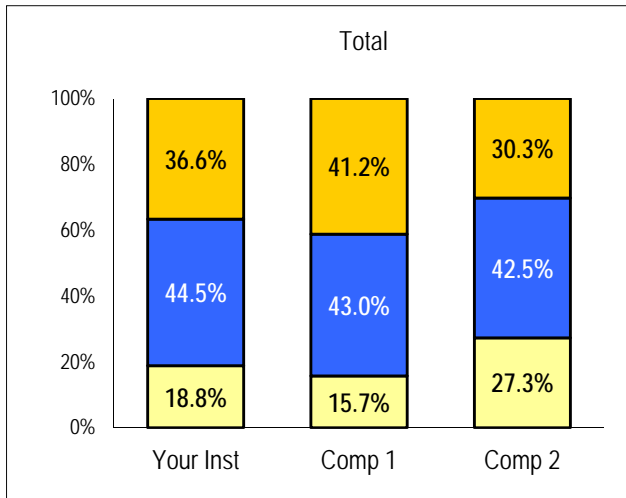


2017 CIRP Freshman Survey  
First-time, Full-time Freshmen  
Likelihood of College Involvement  
CIRP Construct Percentage Report

Likelihood of College Involvement - is a unified measure of students' expectations about their involvement in college life generally.

Miami University-Oxford	Total			Men			Women		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	1,603	15,262	33,012	772	6,977	14,776	831	8,285	18,236
High Likelihood of College Involvement	36.6%	41.2%	30.3%	26.7%	30.2%	21.0%	45.8%	51.4%	38.3%
Average Likelihood of College Involvement	44.5%	43.0%	42.5%	48.3%	48.0%	44.6%	41.0%	38.5%	40.6%
Low Likelihood of College Involvement	18.8%	15.7%	27.3%	25.0%	21.8%	34.4%	13.1%	10.1%	21.1%
Significance (based on High score group)	-	*	***	-		*	-	*	**

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001



Survey items and estimation "weights":

What is your best guess as to the chances that you will:

- \* Participate in student clubs/groups (3.25)
- \* Participate in volunteer or community service work (1.58)
- \* Socialize with someone of another racial/ethnic group (1.28)
- \* Participate in a study abroad program (1.24)
- \* Participate in student government (0.96)

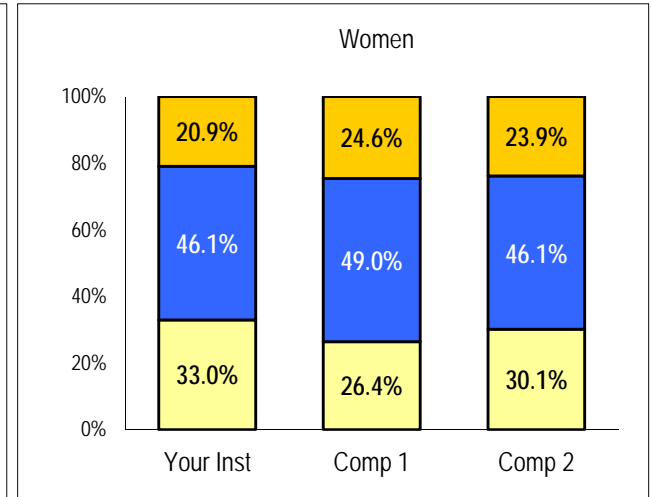
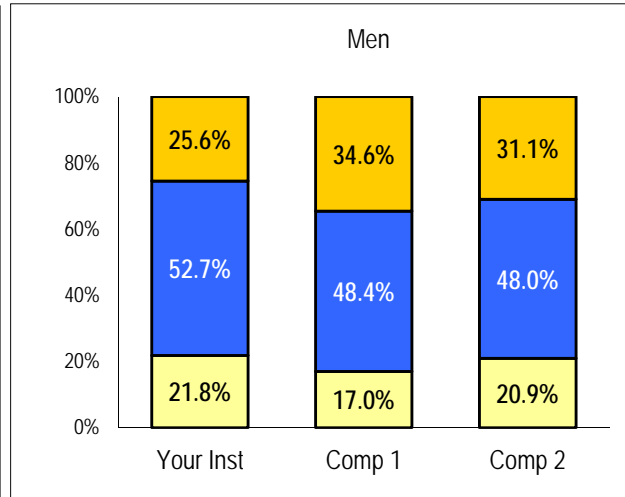
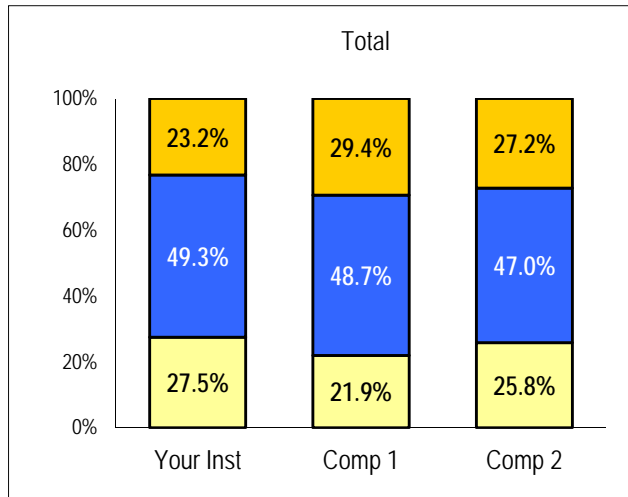


2017 CIRP Freshman Survey  
First-time, Full-time Freshmen  
Science Self-Efficacy  
CIRP Construct Percentage Report

Science Self-Efficacy: A measure of students' confidence in their ability to conduct scientific research

Miami University-Oxford	Total			Men			Women		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	2,222	17,960	39,374	1,084	8,176	17,566	1,138	9,784	21,808
High Science Self-Efficacy	23.2%	29.4%	27.2%	25.6%	34.6%	31.1%	20.9%	24.6%	23.9%
Average Science Self-Efficacy	49.3%	48.7%	47.0%	52.7%	48.4%	48.0%	46.1%	49.0%	46.1%
Low Science Self-Efficacy	27.5%	21.9%	25.8%	21.8%	17.0%	20.9%	33.0%	26.4%	30.1%
Significance (based on High score group)	-	**	*	-	**	*	-		

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001



Survey items and estimation "weights":

How confident are you that you can:

Use technical science skills (use of tools, instruments, and/or techniques) (1.48)

Generate a research question (2.33)

Determine how to collect appropriate data (2.82)

Explain the results of a study (2.87)

Use scientific literature to guide research (2.70)

Integrate results from multiple studies (2.79)

Ask relevant questions (1.73)

Identify what is known and not known about a problem (1.95)

Understand scientific concepts (2.40)

See connections between different areas of science and mathematics (1.90)

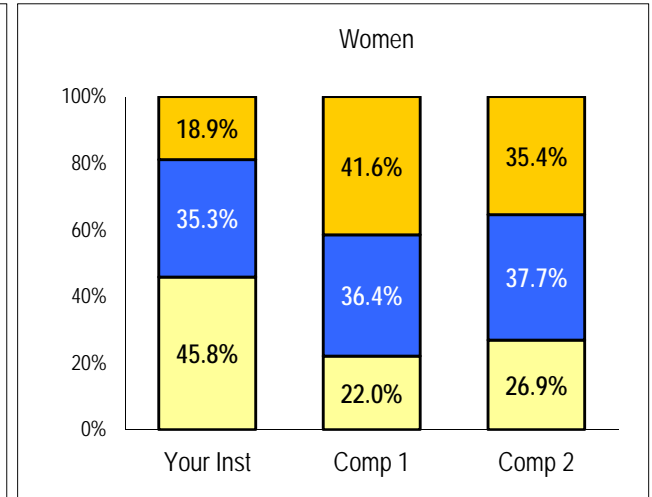
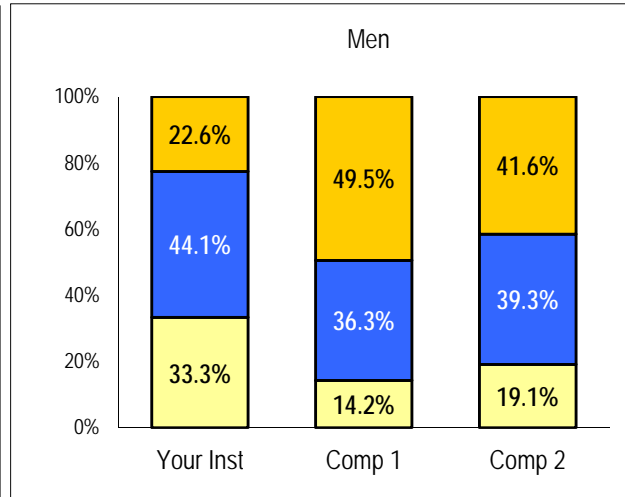
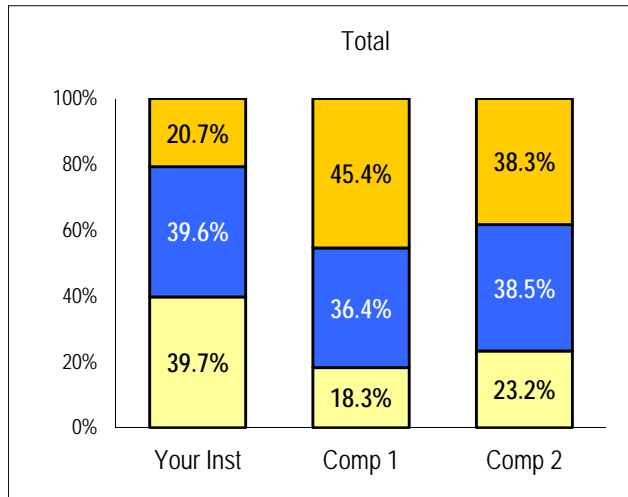


2017 CIRP Freshman Survey  
First-time, Full-time Freshmen  
Science Identity  
CIRP Construct Percentage Report

Science Identity: The extent to which students conceive of themselves as scientists

Miami University-Oxford	Total			Men			Women		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	1,716	15,835	34,509	827	7,242	15,482	889	8,593	19,027
High Science Identity	20.7%	45.4%	38.3%	22.6%	49.5%	41.6%	18.9%	41.6%	35.4%
Average Science Identity	39.6%	36.4%	38.5%	44.1%	36.3%	39.3%	35.3%	36.4%	37.7%
Low Science Identity	39.7%	18.3%	23.2%	33.3%	14.2%	19.1%	45.8%	22.0%	26.9%
Significance (based on High score group)	-	***	***	-	***	***	-	***	***

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001



Survey items and estimation "weights":

To what extent are the following statements true of you:

*I have a strong sense of belonging to the community of scientists (3.52)*

*I derive great personal satisfaction from working on a team that is doing important research (1.78)*

*I think of myself as a scientist (5.53)*

*I feel like I belong in the field of science (4.43)*