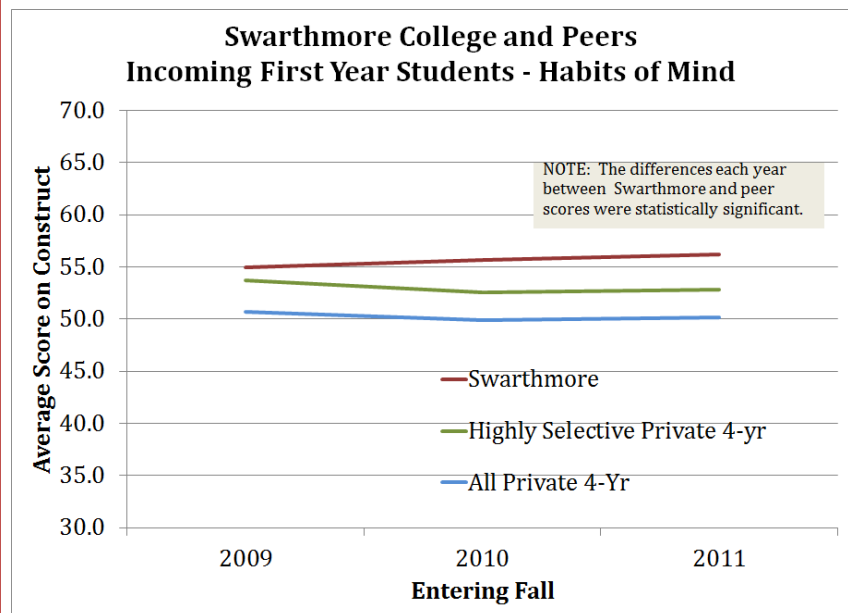


### Coming changes...

*Swarthmore's Institutional Research office has used CIRP data for many important research purposes over the years, and has provided a range of reports, from broad-based overviews to focused analyses of Swarthmore and its peers, with trends on key items. This coming fall, 2012, Swarthmore will be using a newly developed Survey of New Students instead of CIRP. The new survey will include some CIRP-like questions for continuity, but will in addition include baseline questions that will tie to other items in our consortium's suite of surveys that students will see again at later points in time. Examining patterns of responses over time will contribute to our understanding of student development, and assessment of changes and improvement. Because many institutions in our consortium wish to continue to use CIRP, the intention is to alternate between the two surveys each year. Having so many years of CIRP data has shown us that student characteristics do not change so quickly that administering it biennially will risk damaging the continuity of this important resource.*

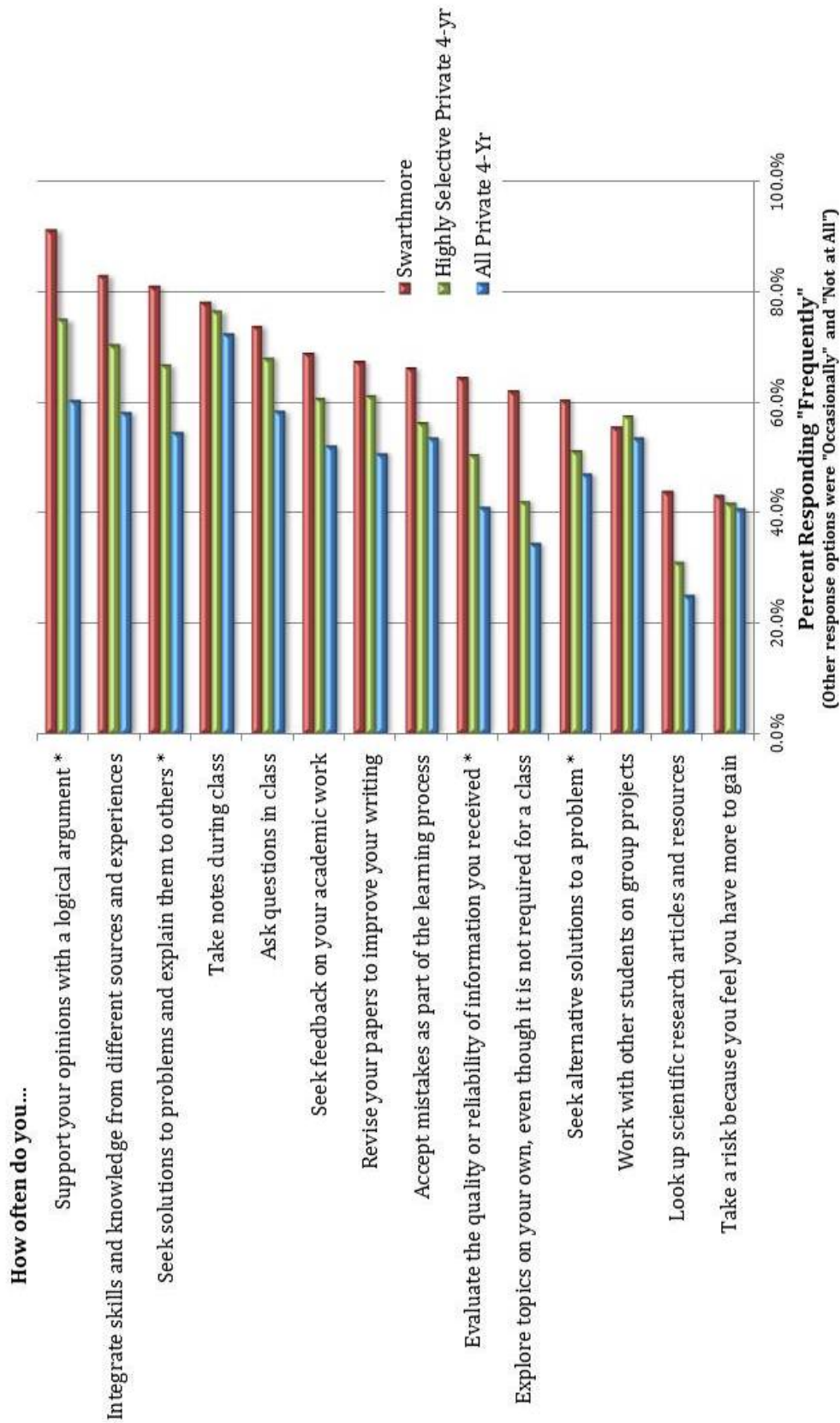
## CIRP Freshman Survey 2011

Swarthmore has administered the Higher Education Research Institute's "CIRP Freshman Survey" to incoming students annually since 1971. As a national, longitudinal survey, it allows us to compare our students with their peers nationally, as well as to follow trends in their backgrounds, attitudes, goals, and expectations. Beginning in 2009, HERI provided a number of useful "constructs" and "themes" that reflect important underlying concepts based on the survey data. This data brief focuses on two of the constructs that fit particularly well with Swarthmore's culture: "Habits of Mind," which HERI defines as "a unified measure of the behaviors and traits associated with academic success [and are] the foundation for lifelong learning," and "Social Agency, the extent to which students value political and social involvement as a personal goal."



The table above presents Swarthmore and other students' scores on the Habits of Mind construct for the past three years, and shows that Swarthmore students score relatively high on this

## Swarthmore College Incoming First Year Students Fall 2011 Habits of Mind



\* These items contribute most heavily to the "Habits of Mind" score.

measure. The comparison groups are “Highly Selective Private Four-Year Colleges,” and “All Private Four-Year Colleges.” The next chart (page 2) presents the individual items that comprise the construct, comparing Swarthmore students to their peers based on the 2011 survey. One can see that these items describe behaviors we discuss often and reflect areas that we seek to nurture and develop in our students. Entering Swarthmore students report greater engagement than their peers in many of these behaviors. Particularly high are:

*Explore topics on your own, even though it is not required for a class*

*Support your opinions with a logical argument*

*Seek solutions to problems and explain them to others*

*Evaluate the quality or reliability of information you received*

*Look up scientific research articles and resources*

*Integrate skills and knowledge from different sources and experiences*

*Accept mistakes as part of the learning process*

For each of these items, Swarthmore students responded that they did this “frequently” in the past year at a rate that is at least ten percentage points higher than did students in the comparison groups.

Activities for which Swarthmore students did not differ from others include:

*Take notes during class*

*Work with other students on group projects*

*Take a risk because you feel you have more to gain*

Each of these behaviors is reported at a frequency very similar (within two percentage points) of the comparison groups. They may suggest areas in which students need more attention. That Swarthmore students report greater willingness than their peers to “accept mistakes as part of learning,” and yet are no more willing to “take a risk,” may present an opportunity for further discussion.

The Social Agency construct represents another area consistent with Swarthmore values. It is not surprising that students attracted to Swarthmore are those who express the values reflected in the items that comprise this construct. The table and chart of the “construct score” on the following page is adapted from HERI’s presentation in their report to us, and is used here to illustrate how these constructs are designed, and the statistics that can help us to interpret them.

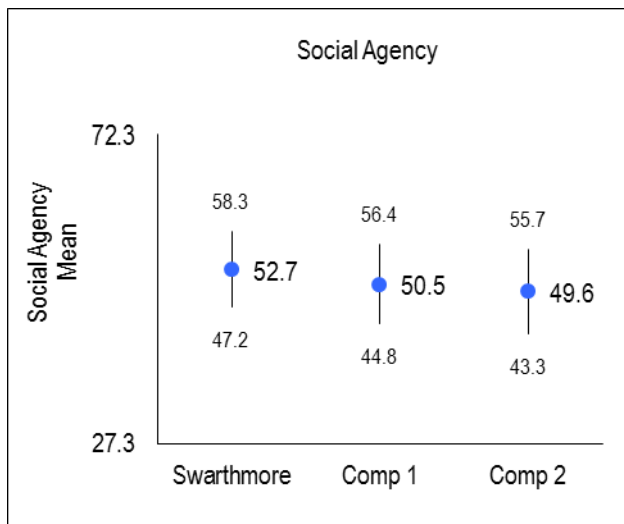
The measure reported is the average score on the construct, which is comprised of the items listed at the bottom. The items are not simply added together but are combined in a way that emphasizes the items that are most closely related to the underlying concept.<sup>1</sup> The value in parentheses next to each item is the ‘weight’ that the item contributes to the

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<sup>1</sup> This is accomplished using Item Response Theory (IRT), a family of statistical methods which combine individual survey items into global measures.

Social Agency – measures the extent to which students value political and social involvement as a personal goal.	Total		
	Swarthmore	Comp 1	Comp 2
Total (n)	249	14,616	33,363
Mean	52.7	50.5	49.6
Standard Deviation	8.44	8.88	9.30
Significance	-	***	***
Effect Size	-	0.25	0.34
25th percentile	47.2	44.8	43.3
75th percentile	58.3	56.4	55.7

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)

construct. For example, *Participation in a community action program* is given more weight than *Keep up to date with political affairs*. The construct scores are designed to have an overall mean (for all respondents in the nation) of approximately 50 (and a standard deviation of 10), and so Swarthmore’s mean score of 52.7 is just above the mean. The difference between the mean at Swarthmore and for each of the comparison groups is statistically significant, which means that it likely is a real difference, and not due simply to chance fluctuation.

The plot shows the mean scores, as well as the 25<sup>th</sup> and 75<sup>th</sup> percentile scores for each group. These are the values at which 25 percent and 75 percent of the respondents, respectively, fall at or below. The middle half of our students score between 47.2 and 58.3 on this measure. The chart

illustrates the considerable overlap between Swarthmore students and their peers. As a group, they score higher, but as individuals, our students reflect a range.

The final statistic on the table above is the “effect size.” This is a statistical measure that ranges from 0 to ±1.0, and reflects the strength or magnitude - the “practical significance” - of the finding. The .2 and .3 range would be considered a small effect, and so while the difference between Swarthmore students and their peers is probably a real difference, it is for all practical purposes a small one. As with the Habits of Mind, the findings suggest that these characteristics of our incoming students are somewhat higher than their peers when they begin college, but need further attention to more fully develop.