

**An Assessment of Expected Student Outcomes Found in the
Macalester College Statement of Purpose and Belief**

Institutional Research Office

Summer, 2003

Assessment of Expected Student Outcomes Found in the Statement of Purpose and Belief

The purpose of this report is to summarize the matching of items found on standard Institutional Research Office surveys (NSSE, CSEQ, CSS, Senior, Alumni) with each of these 12 student outcomes that are embedded in the Statement of Purpose and Belief (SOPB) (see Appendix C for the full SOPB). The responses of Macalester students to these items are analyzed relative to the responses of Macalester students over intervals of time and relative to the responses of students at similar colleges.

The Expected Outcomes are the following:

1. Students should develop a broad understanding of the liberal arts.
2. Students should follow a primary course of study in order to acquire an understanding of disciplinary theory and methodology.
3. Students should be able to apply their understanding of theories to address problems in the larger community.
4. Students should develop the ability to use information and communication resources effectively.
5. Students should be adept at critical, analytical and logical thinking.
- 6a. Students should express themselves well in both oral
6b. and written forms.
7. Students should be prepared to take responsibility for their personal, social, and intellectual choices.
8. Students should develop into individuals who make informed judgments and interpretations of the broader world.
9. Students should choose actions or beliefs for which they are willing to be held accountable.
10. Students should develop the ability to seek and use knowledge and experience in contexts that challenge and inform their suppositions about the world.
11. Students should grow intellectually and personally.

Appendix A provides a description of each survey used in this analysis.

Statistical note: Shaded cells on the tables that follow indicate horizontal pairs of percentages that are significantly different ($p < .05$) based on analysis of the locally computed 95% confidence interval around each percentage. The symbol \updownarrow indicates that differences in the year to year (vertical) pairs of percentages are significant. Confidence intervals could not be computed for the normed CSS percentages. The NSSE program office determined the differences in means between Macalester and normed responses on the NSSE using the standard t -test for significant differences. Because very large sample sizes are used in many of these calculations, statistically significant differences do not imply “important” differences. Appendix B identifies the institutions in each of the norm/comparison groups of colleges.

Outcome 1: Students should develop a broad understanding of the liberal arts.

CSEQ Estimate of Gains – In thinking over your experiences in college up to now, to what extent do you feel you have gained or made progress in gaining a broad general education about different fields of knowledge? (Very much (4), quite a bit (3), some (2), very little (1))

CSEQ Year	Mac Mean	Norm Mean	Mac % very much	Norm % very much
1998	3.02	3.04	30.7 %	29.2 %
2003	3.23	3.18	40.1 % ↑	38.8 % ↓

HEDS Alumni – Please indicate the extent to which an appreciation of art, literature, music, and drama was enhanced by your undergraduate experiences at your alma mater. (Greatly, moderately, very little, none)

Year of '5 Year Out' Alumni Survey	Mac % greatly or moderately	HEDS Peers % greatly or moderately
1995	67 %	Not available
2000	68.7 %	67.1 %

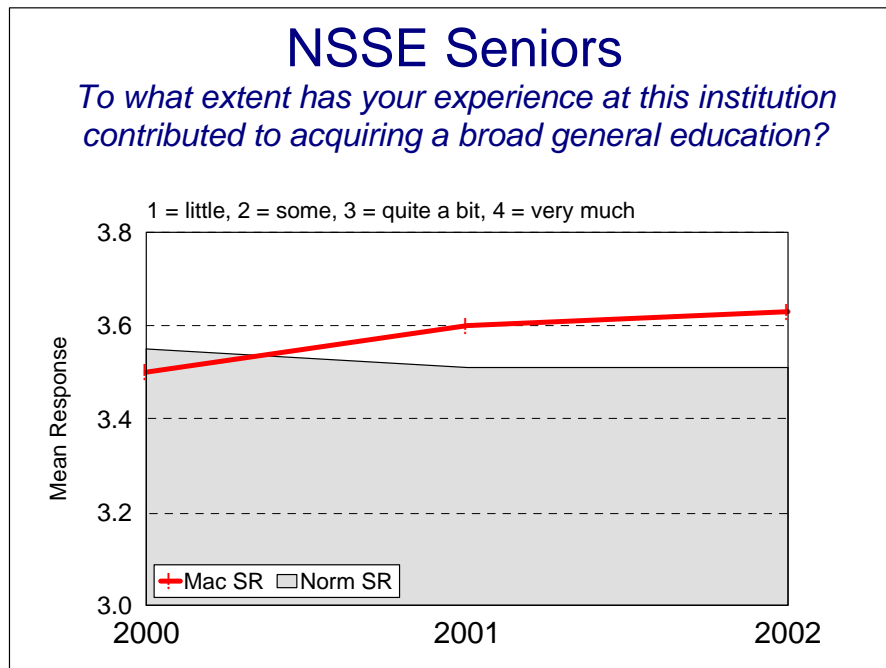
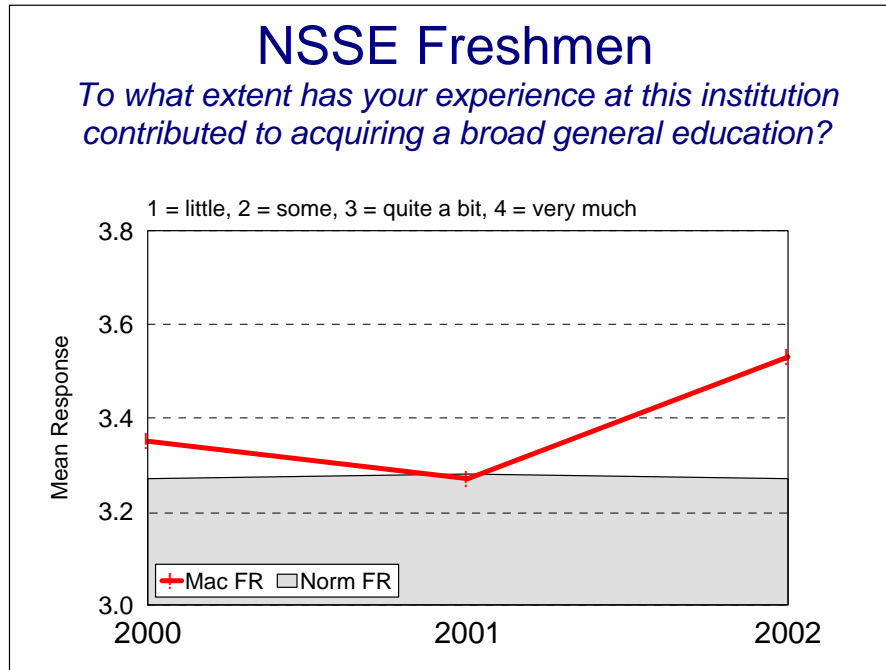
NSSE 8 – To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in terms of acquiring a broad general education? (Very much (4), quite a bit (3), some (2), little (1))

NSSE Year	Mac FR Mean	Norm FR Mean	Sig diff p < .001	Mac SR Mean	Norm SR Mean	Sig diff p < .001	'Change' in Mac Mean
2000	3.35	3.27		3.50	3.55		+ 0.15
2001	3.27	3.28		3.60	3.51		+ 0.33
2002	3.53	3.27	*	3.63	3.51		+ 0.10

Analysis:

These data provide evidence that Macalester students recognize their exposure to the liberal arts as well as or better than students at other liberal arts colleges. Macalester's CSEQ mean and percentage are the same as the norm mean and percentage but the 1998 norms are based on data from only six other colleges. The 2003 survey data show an increase in the perceived gain in this area for students at both Macalester and the norm colleges. In addition, the norm group of colleges includes nine of the colleges normally used at Mac for comparison purposes. For the alumni survey data, the HEDS peer colleges consist of six colleges – all of which are on the most recent US News top 50 colleges list. The responses on this item seem to be very stable. For the NSSE survey item Macalester's mean responses for both freshmen and seniors are generally higher than the normed responses from students at all baccalaureate I liberal arts colleges. The mean responses for both classifications of students are also generally increasing over the three survey administrations. In all three years, seniors show a higher response than freshmen (understand that students in these two classifications are not the same and that the comparison is made recognizing that limitation). This seems to indicate a general increase in the recognition by students of their acquiring a broad, liberal arts education as they progress through their years at the college.

Outcome 1: Students should develop a broad understanding of the liberal arts.



Outcome 2: Students should follow a primary course of study in order to acquire an understanding of disciplinary theory and methodology.

CSEQ Estimate of Gains – In thinking over your experiences in college up to now, to what extent do you feel you have gained or made progress in acquiring background and specialization for further education in some professional, scientific, or scholarly field? (Very much (4), quite a bit (3), some (2), very little (1))

CSEQ Year	Mac Mean	Norm Mean	Mac % very much	Norm % very much
1998	2.89	2.81	29.6 %	23.6 %
2003	3.21	2.96	41.0 % ↑	30.5 % ↑

CSS 17 – Compared to when you entered college as a freshman how would you now describe your knowledge of a particular field or discipline? (Much stronger, stronger, no change, weaker, much weaker)

CSS Year	Mac Seniors % much stronger	Non-Sectarian, 4-year, Private College Seniors % much stronger
1996	75.2 %	71.2 %
1999	80.7 %	71.9 %

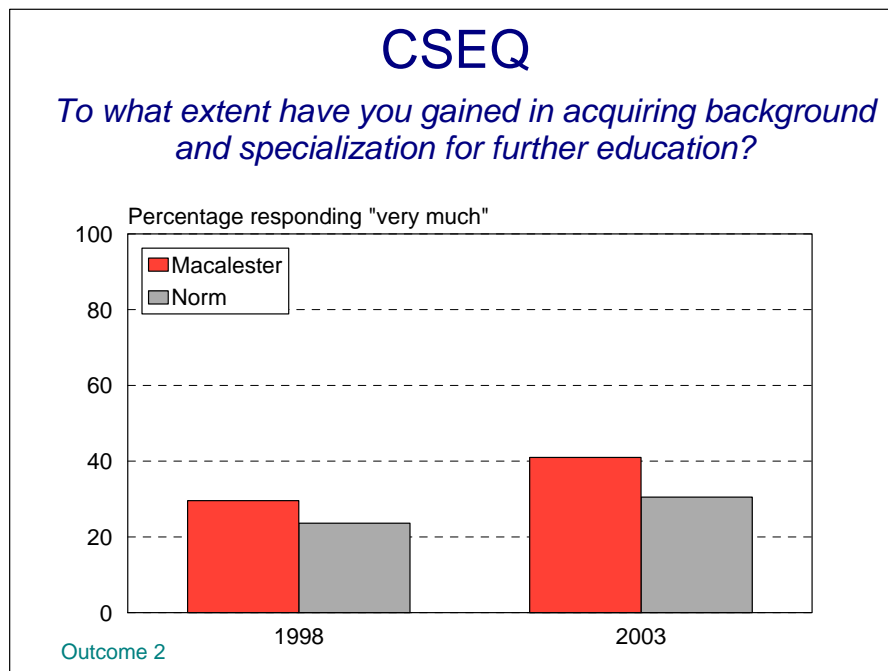
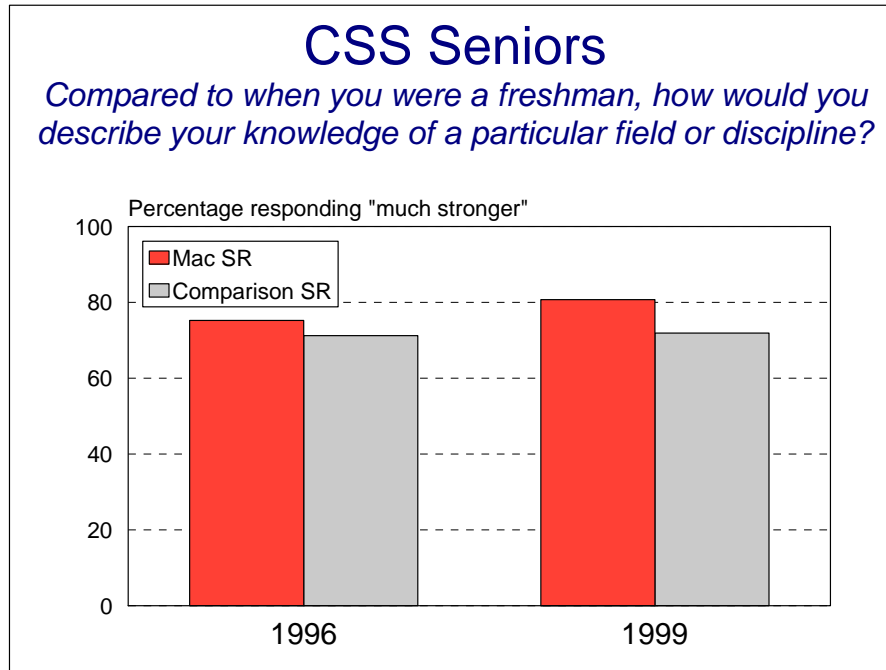
HEDS Alumni – Please indicate the extent to which your ability to gain in-depth knowledge of a field (e.g. academic, major/occupational field) was enhanced by your undergraduate experiences at your alma mater. (Greatly, moderately, very little, none)

Year of '5 Year Out' Alumni Survey	Mac % greatly or moderately	HEDS Peers % greatly or moderately
1995	74 %	Not available
2000	82.5 %	77.6 %

Analysis:

This is the only student outcome where the response from Macalester students increased from one survey administration to the next and is higher than the comparison group of response for each survey administration. The percentage of Macalester students responding “very much” to the CSEQ item in 1998 is significantly higher than the corresponding percentage of students from other private liberal arts colleges. With the 2003 CSEQ survey the percentage of students responding this way increased at both Macalester and the norm colleges. The Macalester student response remained significantly higher than the response from other students. In the 1999 CSS survey the “much stronger” response from Macalester students is likely to be significantly higher than that of students from the HEDS colleges but limitations in the data prevent a statistical test from being formally made. Even where differences are not statistically significant on the CSS and alumni surveys the Macalester percentages are substantially higher than those from students at other colleges. These data indicate that students recognize that Macalester is successfully exposing them to concentrated study in a single discipline.

Outcome 2: Students should follow a primary course of study in order to acquire an understanding of disciplinary theory and methodology.



Outcome 3: Students should be able to apply their understanding of theories to address problems in the larger community.

CSEQ Course Learning Experiences – In your experience at this college during the current school year, about how often did you think about practical applications of the material? (Very often, often, occasionally, never)

CSEQ Year	Mac % v often + often	Norm % v often + often	Mac % very often	Norm % very often
1998	75.4 %	72.4 %	35.5 %	28.3 %
2003	74.1 %	71.1 %	36.2 %	34.2 % ↓

HEDS Senior 12 – Indicate the extent to which the ability to formulate creative/original ideas and solutions was enhanced by your undergraduate experiences. (Greatly, moderately, a little, not at all)

Survey Year	Mac % greatly	HEDS Peers % greatly
1997	35 %	40 %
2001	38.3 %	38.4 %

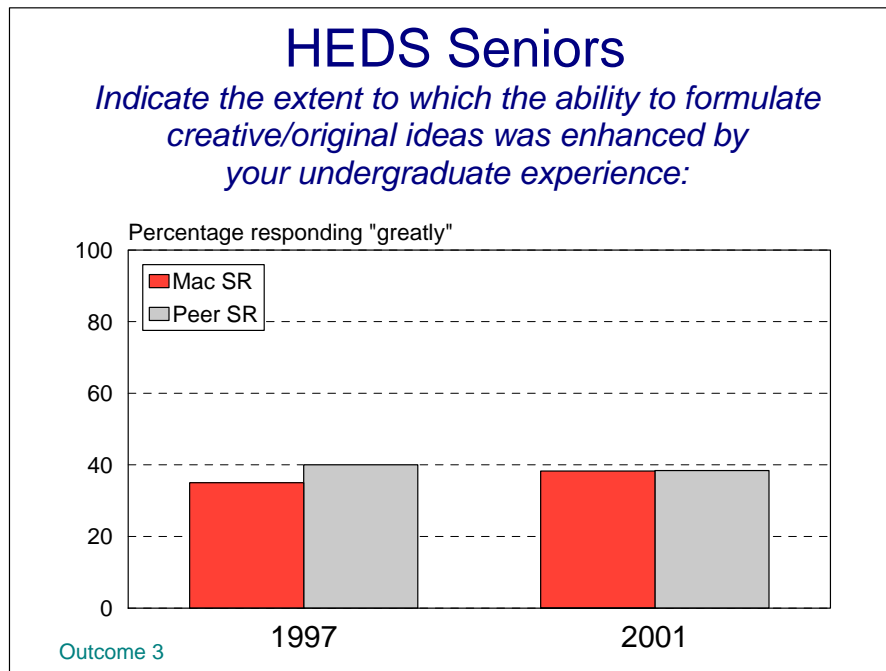
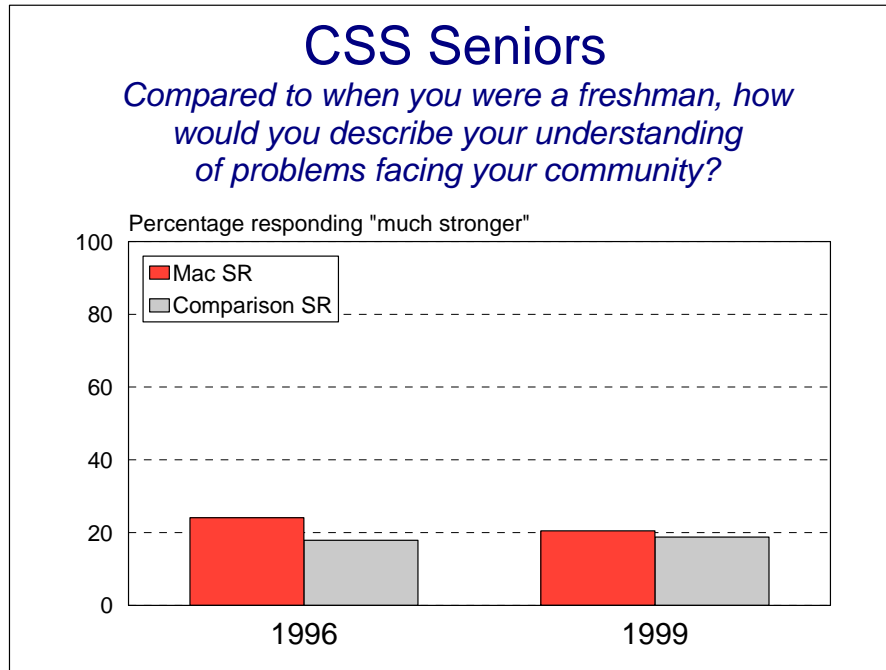
CSS 17 – Compared to when you entered college as a freshman how would you now describe your understanding of the problems facing your community? (Much stronger, stronger, no change, weaker, much weaker)

CSS Year	Mac Seniors % much stronger	Non-Sectarian, 4-year, Private College Seniors % much stronger
1996	24.1 %	17.9 %
1999	20.5 %	18.8 %

Analysis:

None of the survey items selected to measure this student outcome use the exact wording found in the SOPB. Thus, any conclusions drawn from the results of these items should be viewed accordingly. The responses of Macalester students on all three surveys are very similar to those of students from other colleges. The exception is for the percentage of Macalester students responding “very often” to the CSEQ item in 1998 that is significantly higher than the corresponding percentage of students from other private liberal arts colleges. This difference indicates an “intensity” of student response to this survey item that is lost when the percentages for very often and often are combined. The difference disappears in the 2003 CSEQ due to the significant increase in the response from students at norm colleges. This increase may be due to the increased stature of the colleges making up this norm group in 2003. The slight decline from 1996 to 1999 in the CSS percentage for Macalester seniors is not statistically significant and should not warrant major concern. Taken together, all of these data seem to show that Macalester is doing at least as well as its peers in helping students be aware of their responsibility to apply their knowledge to help solve the problems faced by their communities.

Outcome 3: Students should be able to apply their understanding of theories to address problems in the larger community.



Outcome 4: Students should develop the ability to use information and communication resources effectively.

CSEQ Library Experiences – In your experience at your college during the current school year, about how often have you gone back to read a basic reference or document that others authors had often referred to? (Very often, often, occasionally, never)

CSEQ Year	Mac % v often + often	Norm % v often + often	Mac % very often	Norm % very often
1998	16.6 %	10.8 %	4.6 %	2.7 %
2003	20.1 %	16.3 % ↓	6.4 %	5.7 % ↓

HEDS Senior 12 – Indicate the extent to which the ability to acquire new skills and knowledge on your own was enhanced by your undergraduate experiences. (Greatly, moderately, a little, not at all)

Survey Year	Mac % greatly	HEDS Peers % greatly
1997	51 %	55 %
2001	46.7 %	55.7 %

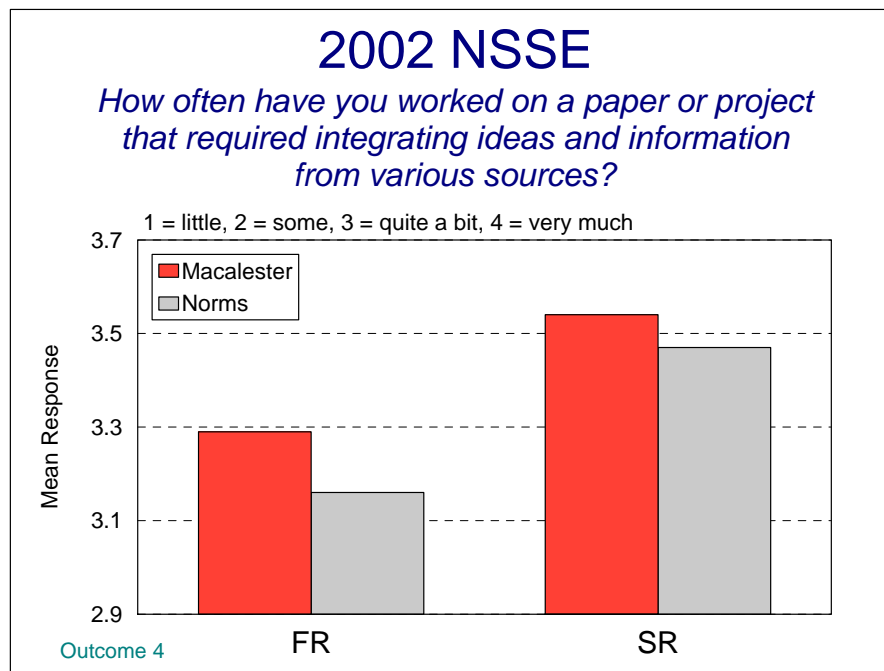
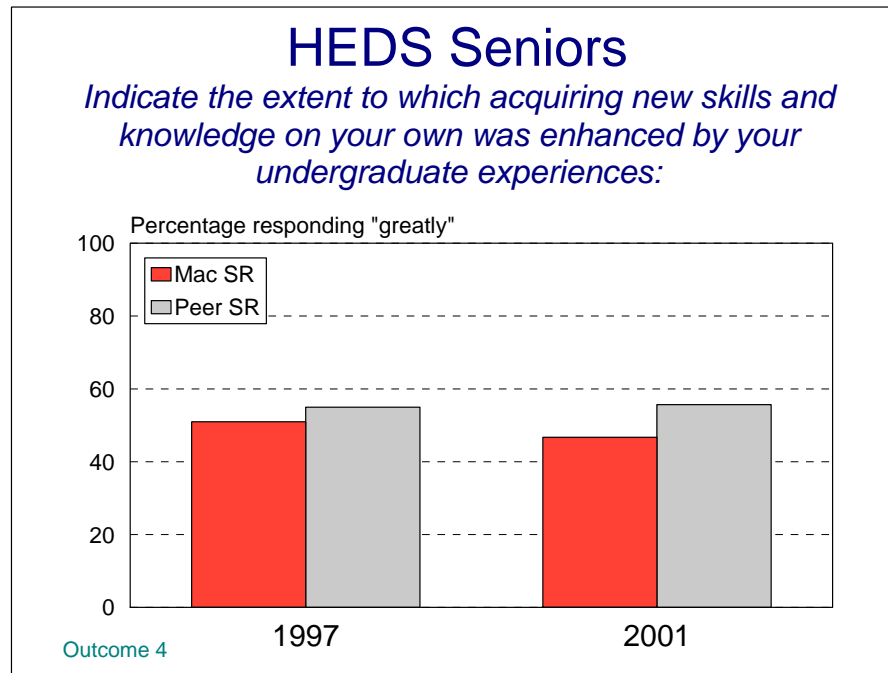
NSSE 1 – In your experience at your institution during the current school year, about how often have you worked on a paper or project that required integrating ideas and information from various sources? (Very often (4), often (3), sometimes (2), never (1))

NSSE Year	Mac FR Mean	Norm FR Mean	Mac SR Mean	Norm SR Mean	‘Change’ in Mac Mean
2000	-	-	-	-	-
2001	3.24	3.13	3.55	3.46	+ 0.31
2002	3.29	3.16	3.54	3.47	+ 0.25

Analysis:

Survey items selected for the assessment of this student outcome were chosen because they seem to describe actions where students are “doing” things that would indicate they are developing the ability described in the outcome statement. The results are somewhat inconsistent but the differences are not statistically significant. For the 1998 CSEQ item the percentage of Macalester students responding for both measures of frequency is significantly higher than the corresponding percentage of students from other private liberal arts colleges. This difference disappears in the 2003 CSEQ survey. For both the 1997 and the 2001 HEDS Senior surveys, however, the percentage of “greatly” responses from Macalester seniors is lower than that of the seniors from other HEDS colleges. These differences are large but not large enough to be significant. For the NSSE survey in both years this item was offered, the mean Macalester student response is higher than the mean norm group response although these differences are not significant. Taken together, all of these data seem to show that Macalester is effectively helping its students to develop the ability to use information and communication resources effectively, particularly when it comes to use of sophisticated library research techniques.

Outcome 4: Students should develop the ability to use information and communication resources effectively.



Outcome 5: Students should be adept at critical, analytical and logical thinking.

CSEQ Science Experiences – In your experience at your college during the current school year, about how often have you tested your understanding of some scientific principle by seeing if you could explain it to another student? (Very often, often, occasionally, never)

CSEQ Year	Mac % v often + often	Norm % v often + often	Mac % very often	Norm % very often
1998	33.4 %	31.7 %	15.2 %	12.8 %
2003	42.4 % ↓	44.7 % ↓	21.6 % ↓	22.3 % ↓

CSS 17 – Compared to when you entered college as a freshman how would you now describe (Much stronger, stronger, no change, weaker, much weaker)

CSS Year	Mac Seniors % much stronger	Non-Sectarian, 4-year, Private College Seniors % much stronger
... your analytical and problem solving skills?		
1996	38.9 %	37.9 %
1999	47.6 %	41.7 %
...your ability to think critically?		
1996	43.7 %	44.4 %
1999	50.6 %	46.7 %

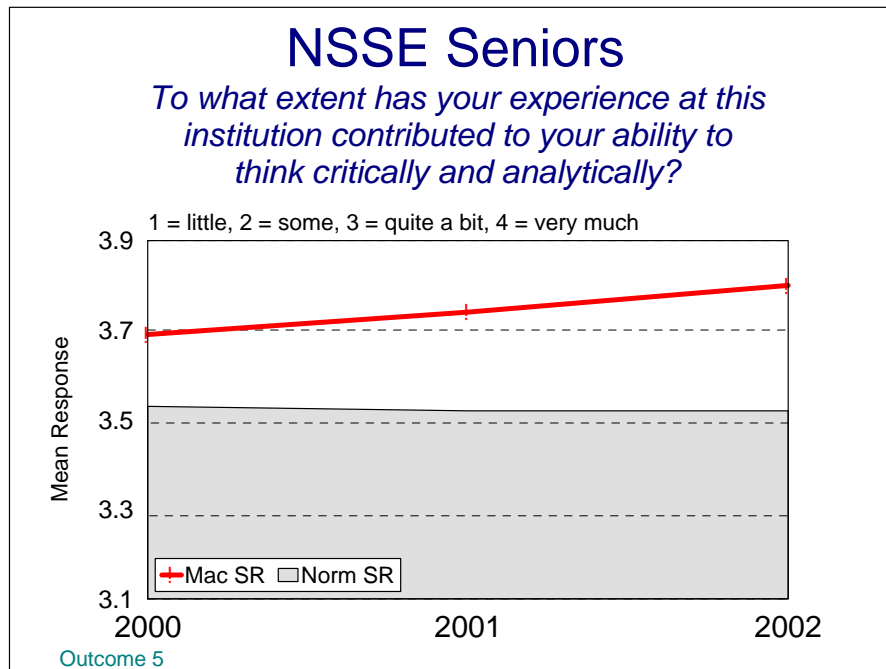
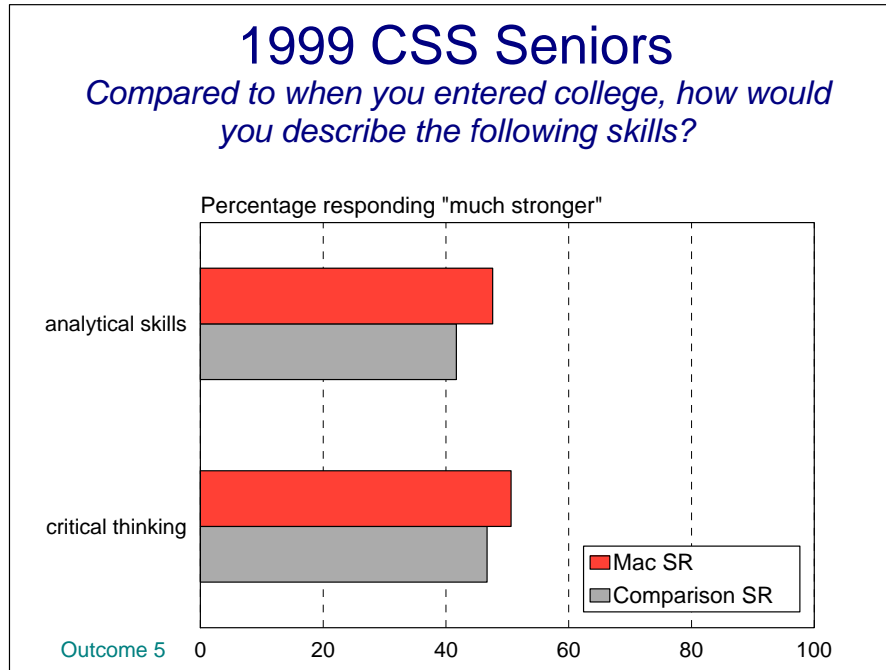
NSSE 8 – To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in terms of thinking critically and analytically? (Very much (4), quite a bit (3), some (2), little (1))

NSSE Year	Mac FR Mean	Norm FR Mean	Sig diff p < .001	Mac SR Mean	Norm SR Mean	Sig diff p < .001	'Change' in Mac Mean
2000	3.41	3.21		3.69	3.53		+ 0.28
2001	3.35	3.27		3.74	3.52	*	+ 0.39
2002	3.50	3.27	*	3.80	3.52	*	+ 0.30

Analysis:

Survey items involving language nearly identical to that found in this outcome are found in each of the surveys normally administered to students by the IR Office. The Science Experiences item from the CSEQ was chosen for this analysis precisely because it is not couched in the identical language and yet appears to be a suitable stand-in for the outcome. For both this CSEQ item and the CSS item that follows it, the Macalester student responses are generally higher than those students from other colleges although these differences are not large. Note that the Macalester responses to the 2003 CSEQ item are significantly higher than those on the 1998 CSEQ item and that a parallel increase can be seen in the responses from students at the norm colleges. For the NSSE survey item, the mean Macalester student response from both freshmen and seniors is much higher than the mean response from students at other colleges. For freshmen, the mean response at Macalester is significantly higher in 2002, while for seniors the mean response at Macalester is significantly higher in both 2001 and 2002. These data seem to indicate that Macalester is doing very well in helping students become adept at these skills.

Outcome 5: Students should be adept at critical, analytical and logical thinking.



Outcome 6a: Students should express themselves well in oral forms.

CSEQ Conversations – In conversations with other students at this college during the current school year, about how often have you persuaded others to change their minds as a result of the knowledge or arguments you cited? (Very often, often, occasionally, never)

CSEQ Year	Mac % v often + often	Norm % v often + often	Mac % very often	Norm % very often
1998	31.3 %	24.2 %	8.8 %	4.9 %
2003	35.5 %	35.2 % ↓	11.4 %	9.7 % ↓

HEDS Alumni – Please indicate the extent to which your ability to communicate well orally was enhanced by your undergraduate experiences at your alma mater. (Greatly, moderately, very little, none)

Year of '5 Year Out' Alumni Survey	Mac % greatly or moderately	HEDS Peers % greatly or moderately
1995	78%	Not available
2000	89.5 % ↓	89.3 %

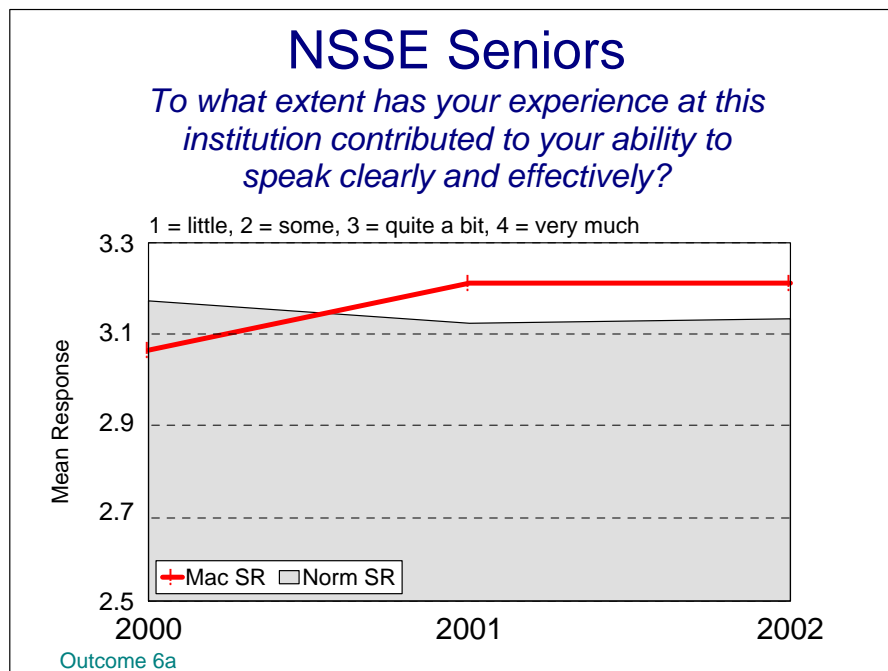
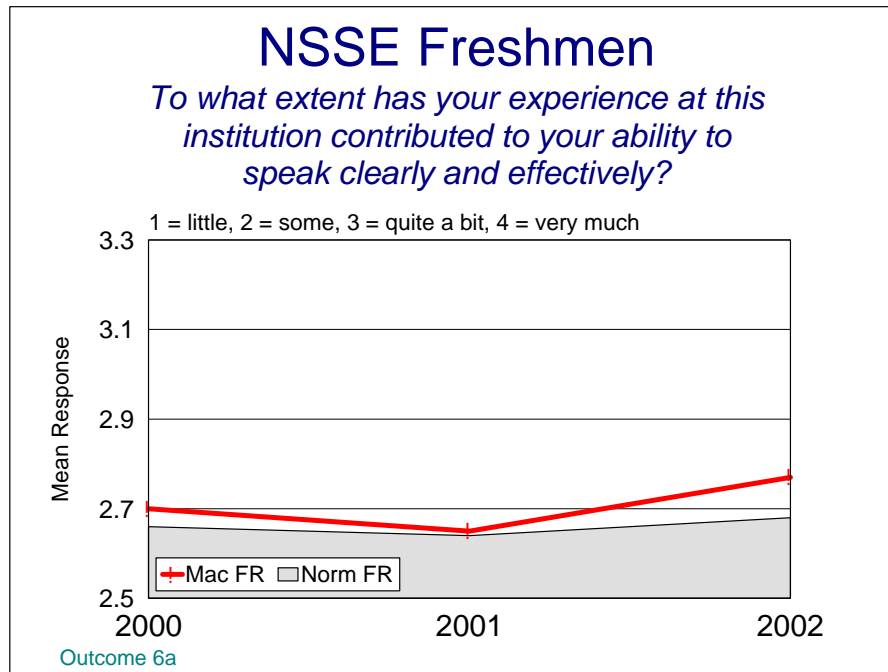
NSSE 8 – To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in terms of speaking clearly and effectively? (Very much (4), quite a bit (3), some (2), little (1))

NSSE Year	Mac FR Mean	Norm FR Mean	Mac SR Mean	Norm SR Mean	'Change' in Mac Mean
2000	2.70	2.66	3.06	3.17	+ 0.36
2001	2.65	2.64	3.21	3.12	+ 0.56
2002	2.77	2.68	3.21	3.13	+ 0.44

Analysis:

Oral communication skills do not have high visibility in the Macalester curriculum. Despite this, Macalester students appear to indicate that their education is helping them become adept in this area. The Conversations item from the CSEQ seems to be an adequate stand-in for the many oral communication items that appear on these surveys. In 1998 Macalester students describe themselves as being persuasive in their arguments with other students at significantly higher levels than students at other private liberal arts colleges. This difference disappears on the 2003 CSEQ survey due to the increases in the responses from these students. The Alumni survey item shows little difference between Macalester students and HEDS colleges students on the oral communication item but the response to this item from Macalester alumni in 2000 is significantly higher than the Macalester alumni response five years earlier. The NSSE survey item shows small differences between the mean Macalester response and the mean response from students from the norm group of colleges for both freshmen and seniors in almost every year of the survey's administration. In each NSSE survey year, seniors indicate substantially more development in these skills than freshmen. This difference along with the improvement in the alumni response may be due to the oral presentations that are often part of the capstone requirement in each major.

Outcome 6a: Students should express themselves well in oral forms.



Outcome 6b: Students should express themselves well in written forms.

CSEQ Writing Experiences— In your experience at your college during the current school year, about how often have you consciously and systematically thought about grammar, sentence structure, paragraphs, word choice, and sequence of ideas or points while you were writing? (Very often, often, occasionally, never)

CSEQ Year	Mac % v often + often	Norm % v often + often	Mac % very often	Norm % very often
1998	75.2 %	79.7 %	41.2 %	45.6 %
2003	89.8 % ↓	89.4 % ↓	57.5 % ↓	59.1 % ↓

HEDS Senior 12 – Indicate the extent to which the ability to write effectively was enhanced by your undergraduate experiences. (Greatly, moderately, a little, not at all)

Survey Year	Mac % greatly	HEDS Peers % greatly
1997	43 %	52 %
2001	51.1 %	61.5 % ↓

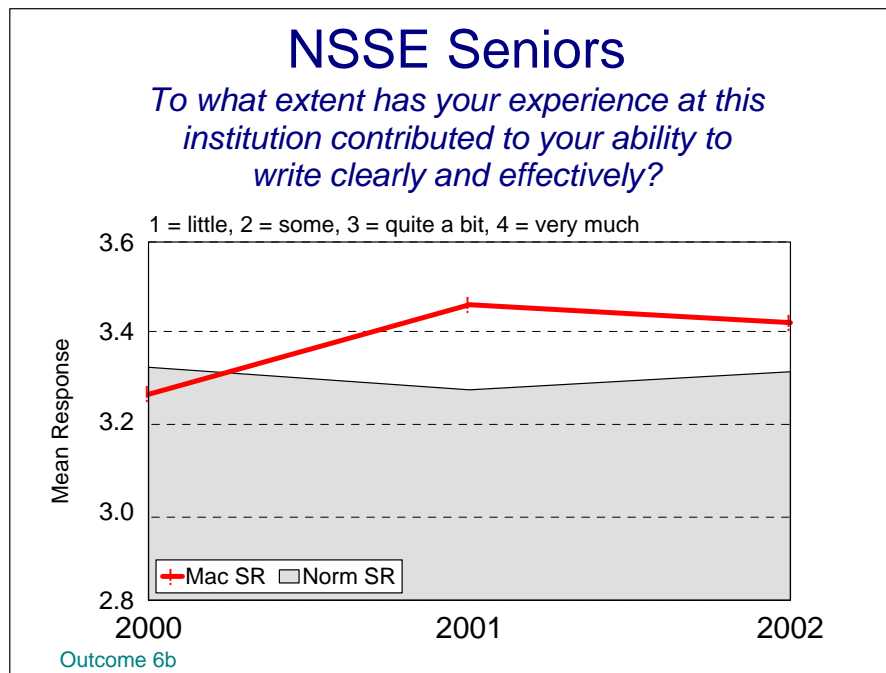
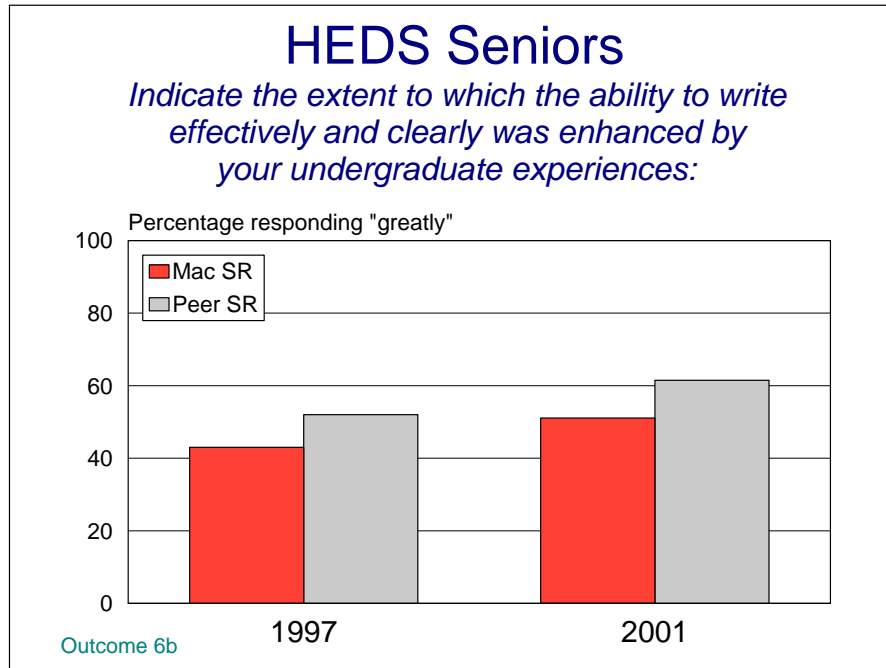
NSSE 8 – To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in terms of writing clearly and effectively? (Very much (4), quite a bit (3), some (2), little (1))

NSSE Year	Mac FR Mean	Norm FR Mean	Mac SR Mean	Norm SR Mean	‘Change’ in Mac Mean
2000	3.04	3.04	3.26	3.32	+ 0.22
2001	2.87	3.01	3.46	3.27	+ 0.59
2002	3.10	3.05	3.42	3.31	+ 0.31

Analysis:

Each of these surveys provide students with an opportunity to self-assess or describe their ability to write. The Writing Experiences item from the CSEQ was selected for analysis because it asks students to describe their experiences in a particularly detailed manner without directly asking about writing well or effectively. The results in 1998 show that this is one of the few survey items used throughout this entire analysis where the responses of Macalester students are lower than those of the students in the norm or comparison groups. On the 2003 survey these differences disappear with the gains made over 1998 being larger at Macalester than those at the norm colleges. In contrast, both administrations of the HEDS Senior Survey show that the percentage of Macalester seniors indicating that they felt their ability to write effectively was enhanced greatly while undergraduates is lower than the corresponding percentage of students from HEDS colleges. (Note: the shading indicates differences only horizontally between cells at the 95% confidence level.) The NSSE results are not as negative because in two-thirds of the comparisons made, the mean Macalester response is equal to or greater than the mean response from students at the norm colleges. These differences are not significant. These results indicate that Macalester should continue to look for ways to do more to enhance the ability of its students to write effectively.

Outcome 6b: Students should express themselves well in written forms.



Outcome 7: Students should be prepared to take responsibility for their personal, social, and intellectual choices.

CSEQ Estimate of Gains – In thinking over your experiences in college up to now, to what extent do you feel you have gained or made progress in developing your own values and ethical standards? (Very much (4), quite a bit (3), some (2), very little (1))

CSEQ Year	Mac Mean	Norm Mean	Mac % very much	Norm % very much
1998	2.97	2.92	30.7 %	27.0 %
2003	3.25	3.10	45.6 % ↑	38.3 % ↑

HEDS Senior 12 – Indicate the extent to which the ability to understand myself: abilities, interests, limitations, and personality was enhanced by your undergraduate experiences. (Greatly, moderately, a little, not at all)

Survey Year	Mac % greatly	HEDS Peers % greatly
1997	47 %	54 %
2001	51.1 %	56.5 %

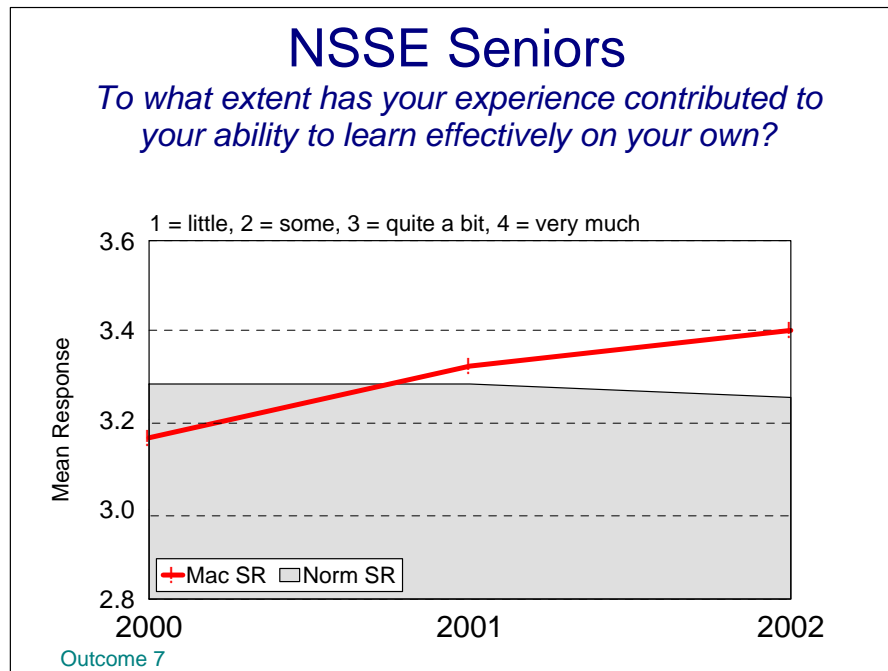
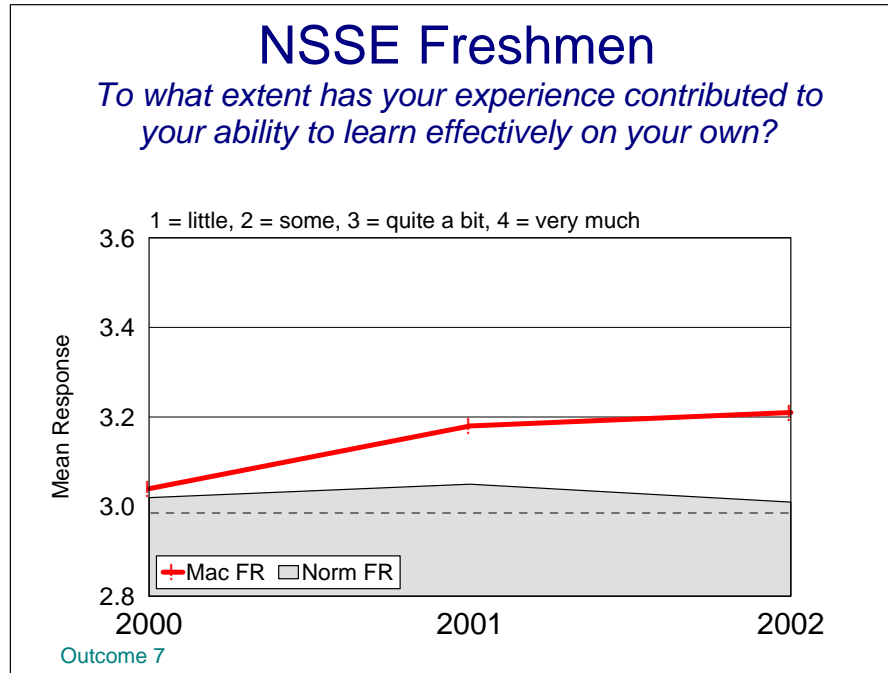
NSSE 8 – To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in terms of learning effectively on your own? (Very much (4), quite a bit (3), some (2), little (1))

NSSE Year	Mac FR Mean	Norm FR Mean	Mac SR Mean	Norm SR Mean	‘Change’ in Mac Mean
2000	3.04	3.02	3.16	3.28	+ 0.12
2001	3.18	3.05	3.32	3.28	+ 0.14
2002	3.21	3.01	3.40	3.25	+ 0.19

Analysis:

None of the items on the surveys exactly matches the wording of this expected outcome. Each of these three was selected because it felt like a suitable stand-in for an item that is an exact match. On both the CSEQ item and the NSSE items the responses from Macalester students are slightly higher than the norm group responses in nearly every case but the differences are neither large nor significant with one exception. In 2003, the CSEQ “very much” responses were significantly higher than those of students at the norm colleges. For both groups of students the 2003 responses were significantly higher than the 1998 responses but the increase among Macalester students outpaced that of students at the norm colleges. The annual differences between freshman and senior responses on the NSSE item are not as large as on other items. On the HEDS Senior Survey item selected, the response of Macalester seniors is lower than the corresponding response from HEDS seniors in both survey years. The differences are roughly the same in both years and not large enough to be significant. All of the data taken together indicate that Macalester is doing slightly better than comparable colleges in helping students achieve this outcome.

Outcome 7: Students should be prepared to take responsibility for their personal, social, and intellectual choices.



Outcome 8: Students should develop into individuals who make informed judgments and interpretations of the broader world.

CSS 17 – Compared to when you entered college as a freshman how would you now describe your understanding of social problems facing our nation? (Much stronger, stronger, no change, weaker, much weaker)

CSS Year	Mac Seniors % much stronger	Non-Sectarian, 4-year, Private College Seniors % much stronger
1996	33.9 %	24.2 %
1999	31.3 %	24.3 %

HEDS Alumni – Please indicate the extent to which your ability to evaluate and choose between alternative courses of action was enhanced by your undergraduate experiences at your alma mater. (Greatly, moderately, very little, none)

Year of '5 Year Out' Alumni Survey	Mac % greatly or moderately	HEDS Peers % greatly or moderately
1995	59 %	Not available
2000	76.3 % ↓	79.1 %

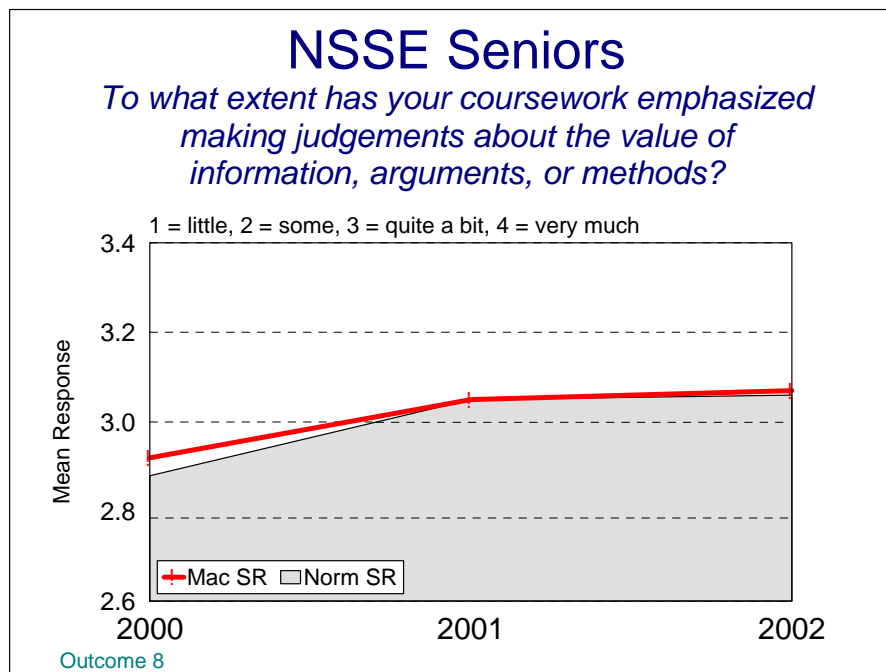
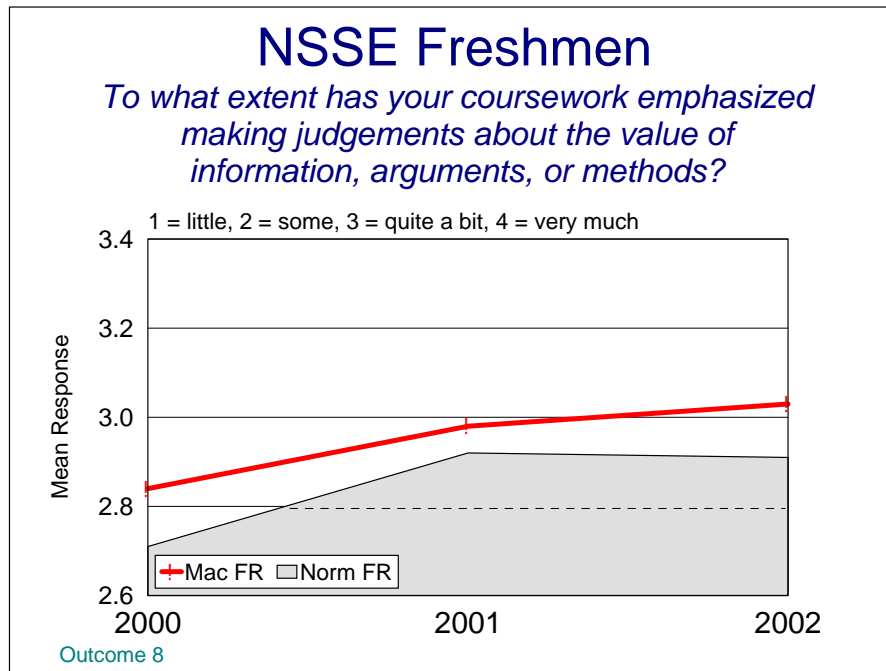
NSSE 2 – During the current school year, to what extent has your coursework emphasized making judgments about the value of information, arguments, or methods such as examining how others gathered and interpreted data and assessing the soundness of their conclusions? (Very much (4), quite a bit (3), some (2), little (1))

NSSE Year	Mac FR Mean	Norm FR Mean	Mac SR Mean	Norm SR Mean	'Change' in Mac Mean
2000	2.84	2.71	2.92	2.88	+ 0.08
2001	2.98	2.92	3.05	3.05	+ 0.07
2002	3.03	2.91	3.07	3.06	+ 0.04

Analysis:

Once again the wording of this expected outcome does not match up very well with items from these five surveys. The survey items selected seem to be suitable stand-ins for the outcome but any conclusions drawn should reflect the inability to find a good match between survey items and outcome statement. The item from the CSS shows that responses from Macalester seniors are higher than the normed responses in both years that the survey was administered. The differences in both years are substantial and are likely significant but limitations in the data prevent a statistical test from being formally made.. The alumni survey data indicate that the alumni surveyed in the most recent year feel that their ability to evaluate and choose between alternatives had been enhanced much more than it had for the alumni from five years earlier. The difference between the Macalester alumni response and the HEDS colleges alumni response in 2000 is small. Finally, the NSSE item shows that there is little difference between the responses of Macalester students and those at similar colleges when it comes to recognizing that their coursework emphasizes skills and experiences that should enhance their ability to meet this expected outcome. Overall, the survey results are mixed on this outcome but Macalester is doing at least as well as other institutions in accomplishing it.

Outcome 8: Students should develop into individuals who make informed judgments and interpretations of the broader world.



Outcome 9: Students should choose actions or beliefs for which they are willing to be held accountable.

CSEQ Experiences With Faculty – In your experience at your college during the current school year, about how often have you asked your instructor for comments and criticisms about your work? (Very often, often, occasionally, never)

CSEQ Year	Mac % v often + often	Norm % v often + often	Mac % very often	Norm % very often
1998	30.7 %	23.8 %	8.6 %	5.0 %
2003	27.6 %	27.8 % ↓	8.7 %	9.2 % ↓

CSEQ Estimate of Gains – In thinking over your experiences in college up to now, to what extent do you feel you have gained or made progress in becoming aware of the consequences (benefits/hazards/dangers/values) of new applications in science and technology? (Very much (4), quite a bit (3), some (2), very little (1))

CSEQ Year	Mac Mean	Norm Mean	Mac % very much	Norm % very much
1998	2.20	2.10	12.8 %	9.0 %
2003	2.40	2.37	15.5 %	14.6 % ↓

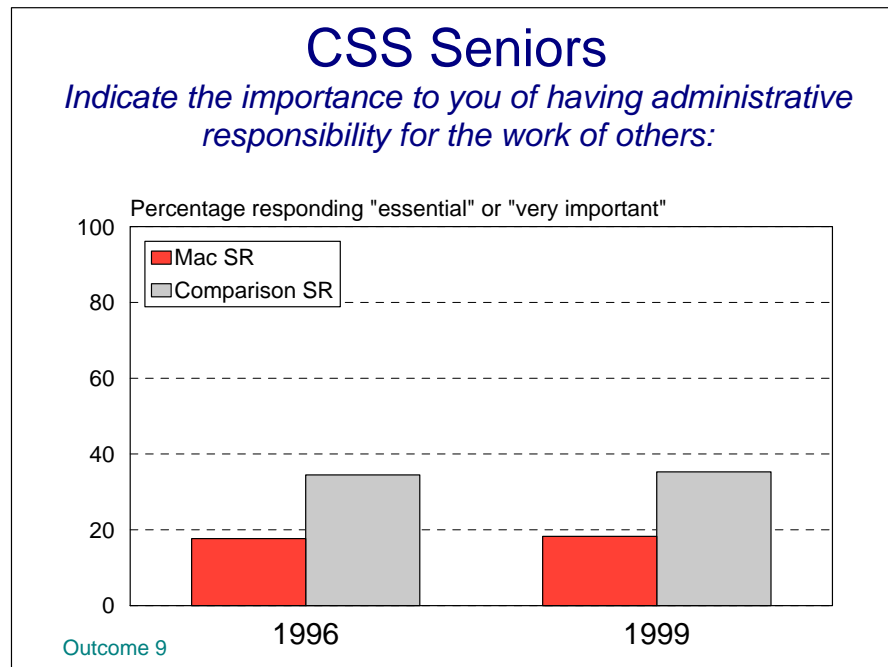
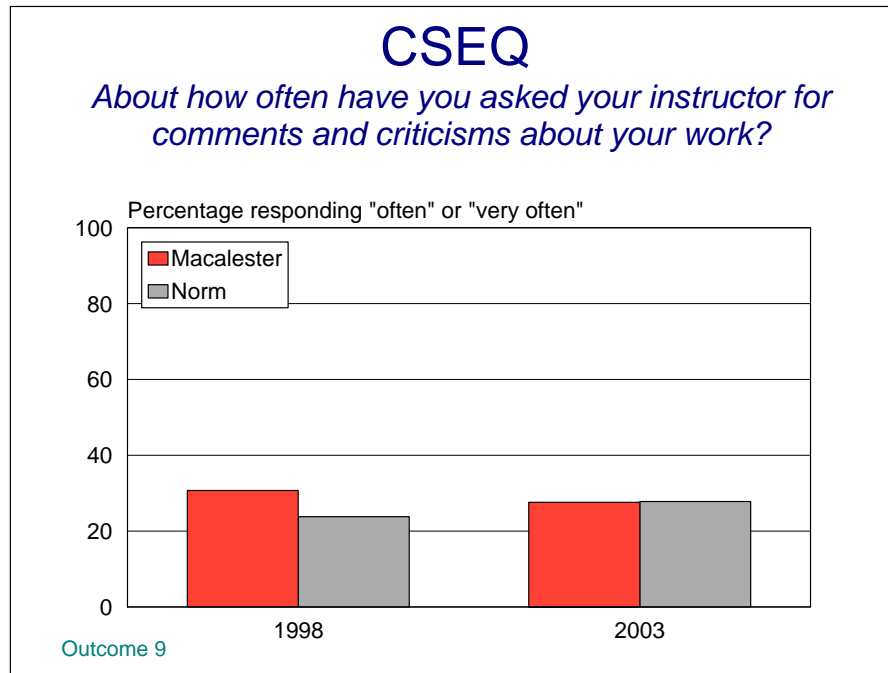
CSS 18 – Indicate the importance to you personally of having administrative responsibility for the work of others. (Essential, very important, somewhat important, not important)

CSS Year	Mac Seniors % essential/very important	Non-Sectarian, 4-year, Private College Seniors % essential/v imp
1996	17.7 %	34.5 %
1999	18.3 %	35.3 %

Analysis:

Although none of the three survey items selected to assess this outcome addresses it directly each involves accountability in some way: for what has been done in the classroom, for advances in science that society has accepted, and for the work of others. For the two items from the CSEQ, the significantly higher responses from Macalester students in 1998 disappear in the 2003 CSEQ administration. This is as likely due to the differences in the colleges making up the two norm groups as it is due to anything else. Whatever the reason, however, the data show that Macalester is doing at least as well on these measures as comparable liberal arts colleges. For the CSS item the results seem to be the opposite although there is insufficient data available to compute confidence intervals around the percentages shown for each CSS administration. Given the sample sizes involved it is likely that the differences are statistically significant. The differences are however large and likely due to the association of “administrative responsibility” with traditional business structure and organization. In such situations Macalester students have not shown an inclination to be as comfortable as other students and these results seem to confirm this. Nevertheless, the data from all three items seem to indicate that Macalester is effectively helping students achieve this outcome particularly if it is not in a traditional organizational structure.

Outcome 9: Students should choose actions or beliefs for which they are willing to be held accountable.



Outcome 10: Students should develop the ability to seek and use knowledge and experience in contexts that challenge and inform their suppositions about the world.

CSEQ Conversations – In conversations with other students at this college during the current school year, about how often have you changed your opinion as a result of the knowledge or arguments presented by others? (Very often, often, occasionally, never)

CSEQ Year	Mac % v often + often	Norm % v often + often	Mac % very often	Norm % very often
1998	30.4 %	31.6 %	7.7 %	7.7 %
2003	39.7 %	37.3 % ↓	13.0 % ↓	10.4 % ↓

CSEQ Estimate of Gains – In thinking over your experiences in college up to now, to what extent do you feel you have gained or made progress in becoming aware of different philosophies, cultures, and ways of life? (Very much (4), quite a bit (3), some (2), very little (1))

CSEQ Year	Mac Mean	Norm Mean	Mac % very much	Norm % very much
1998	3.10	2.84	36.6 %	24.2 %
2003	3.26	2.98	45.2 % ↓	31.1 % ↓

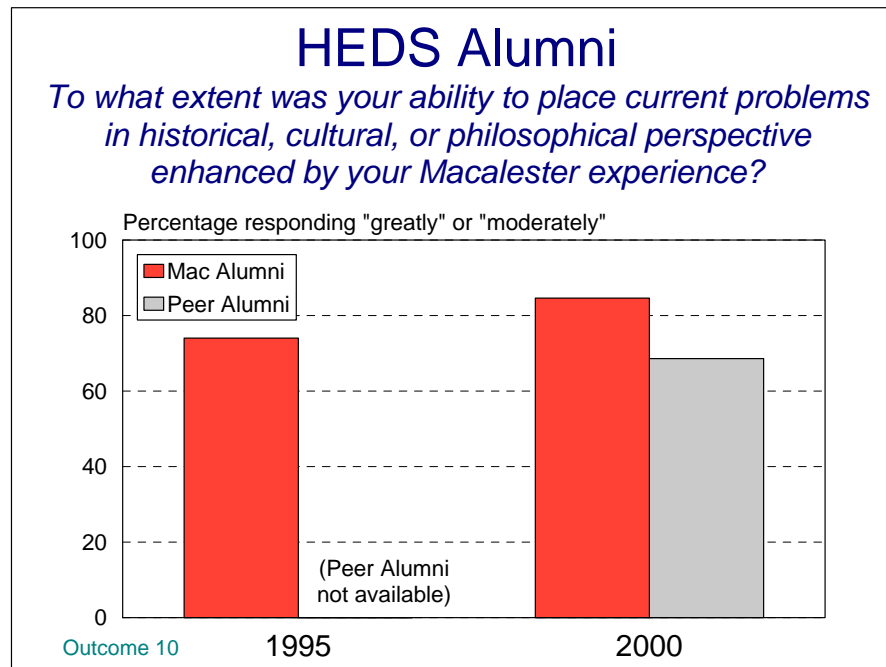
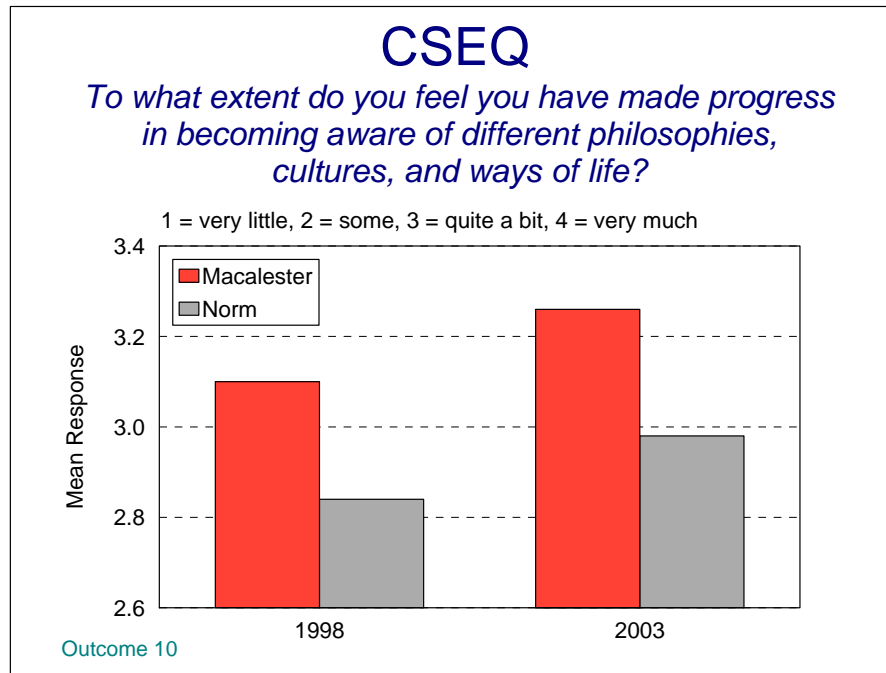
HEDS Alumni – Please indicate the extent to which your ability to place current problems in historical/cultural/philosophical perspective was enhanced by your undergraduate experiences at your alma mater. (Greatly, moderately, very little, none)

Year of '5 Year Out' Alumni Survey	Mac % greatly or moderately	HEDS Peers % greatly or moderately
1995	74 %	Not available
2000	84.6 %	68.6 %

Analysis:

The first item from the conversations section of the CSEQ illustrates a situation where students are in a situation of having to confront ideas and arguments that challenge their own positions. The results indicate that Macalester students change their opinions in such situations as frequently as students from the norm colleges. The second item also is taken from the CSEQ. In this case, Macalester students are more likely to describe a high degree of progress in becoming aware of differences in the world than students from other colleges. Students in both categories responded more favorably to this item in 2003 than they did in 1998 and the spread between the responses from Macalester students and those from other colleges remained about the same. In the last item, a much higher percentage of Macalester alumni describe their skills in this area to have been enhanced than do students at other colleges. All of these data seem to indicate that Macalester is doing an excellent job in helping students broaden their perspective of the world around them by providing them with the knowledge and experience necessary to be able to do so.

Outcome 10: Students should develop the ability to seek and use knowledge and experience in contexts that challenge and inform their suppositions about the world.



Outcome 11: Students should grow intellectually and personally.

CSEQ Estimate of Gains – In thinking over your experiences in college up to now, to what extent do you feel you have gained or made progress in understanding yourself – your abilities, interests, and personality? (Very much (4), quite a bit (3), some (2), very little (1))

CSEQ Year	Mac Mean	Norm Mean	Mac % very much	Norm % very much
1998	3.09	3.06	35.3 %	33.3 %
2003	3.29	3.25	44.6 % ↓	42.7 % ↓

CSS 18 – Indicate the importance to you personally of developing a meaningful philosophy of life. (Essential, very important, somewhat important, not important)

CSS Year	Mac Seniors % essential/very important	Non-Sectarian, 4-year, Private College Seniors % essential/v imp
1996	72.1 %	63.5 %
1999	70.3 %	62.9 %

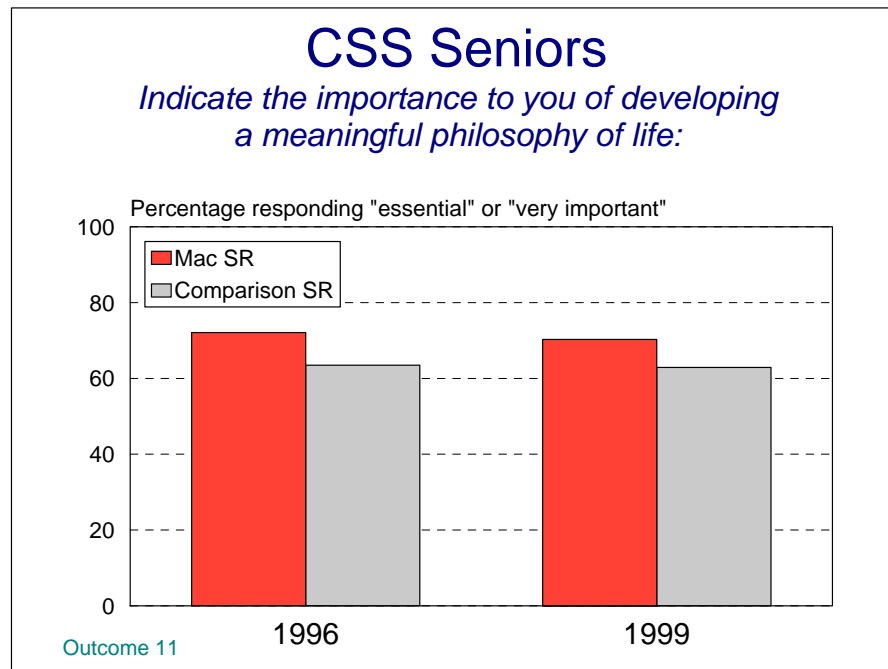
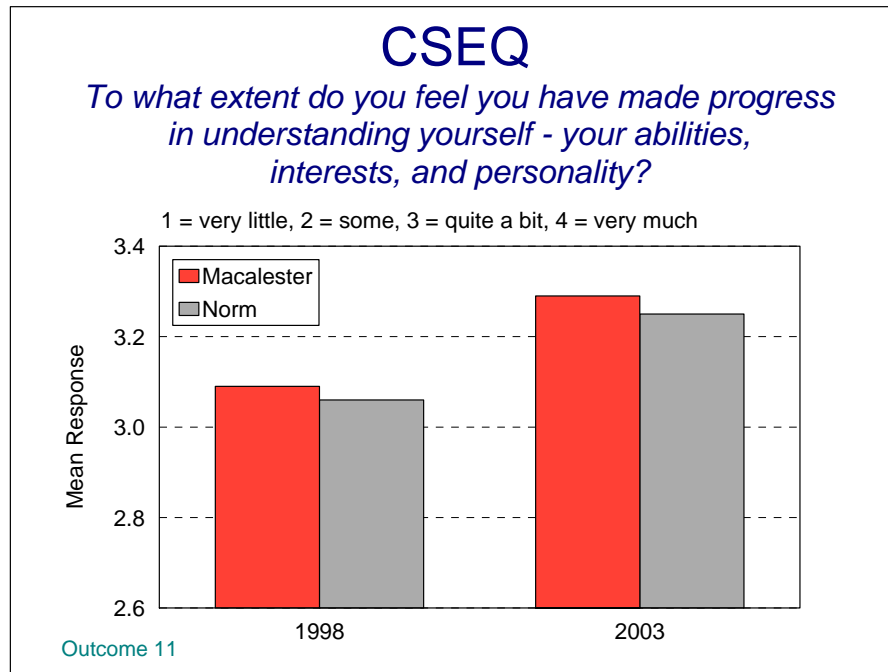
NSSE 1 – In your experience at your institution during the current school year, about how often have you discussed ideas from your readings or classes with others outside of class (students, faculty members, co-workers, etc)? (Very often (4), often (3), sometimes (2), never (1))

NSSE Year	Mac FR Mean	Norm FR Mean	Sig diff p < .001	Mac SR Mean	Norm SR Mean	Sig diff p < .001	‘Change’ in Mac Mean
2000	3.24	2.87	*	3.06	3.01		- 0.18
2001	3.21	2.94	*	3.15	3.05		- 0.06
2002	3.28	2.91	*	3.26	3.01	*	- 0.02

Analysis:

Because this outcome is such a general and all-encompassing one it is difficult to find even stand-in survey items to use in assessing it. The CSEQ item and the CSS item above were selected because they seem to get close to the idea of the “personal” development portion of the expected outcome. On the CSEQ item the responses of Macalester students are higher than students from other colleges but the differences are small and are not significant. The Macalester responses are also higher on the CSS item and are probably significant although this can not be formally tested. The NSSE item was selected because it would seem reasonable to expect a fairly well “intellectually” developed student to be willing to take ideas from class and discuss them elsewhere not only with other students but with faculty and co-workers. If this is a fair assumption, then the data indicate that Macalester students, particular freshmen, engage in this activity more than students at the norm colleges and, as a result, are well along in their intellectual development. It is of interest to note that this is the only NSSE item selected for this analysis where the mean response from seniors in each survey year is lower than the mean response from freshmen. The same is not true of the freshman to senior differences at the norm colleges so something unique seems to be going on among Macalester students on this item. Once again, the data overall indicate that Macalester is doing at least as well (and probably better) than other colleges at achieving this outcome.

Outcome 11: Students should grow intellectually and personally.



Appendix A – a description of the 5 surveys used in the analysis of student outcomes

- **NSSE** – The National Survey of Student Engagement (NSSE) collects information from undergraduates at four-year colleges and universities across the country to assess the extent to which students engage in a variety of good educational practices. The NSSE Project is grounded in the proposition that the frequency with which students engage in activities that represent effective educational practice is a good proxy for collegiate quality.
- **CSEQ** – The College Student Experiences Questionnaire (CSEQ) provides institutions with information about the extent to which students are using the institution’s learning resources by assessing student behaviors and aspects of the institution’s environment that are related to a host of positive outcomes of college. Data generated by the CSEQ can be used to evaluate both institutional and student performance.
- **CSS** – The College Student Survey (CSS) is a survey designed by the Higher Education Research Institute (HERI) to be used in conjunction with and as a follow-on to the Freshman Survey administered during new student orientation at colleges and universities. The CSS provides students with an opportunity to describe their experiences in college, to assess the quality of their undergraduate experiences, and to describe their own attitudes and goals.
- **HEDS Senior Survey** – The Higher Education Data Sharing (HEDS) consortium is a group of selective private colleges and universities that has developed a Senior Survey to be used by its members to learn more about the undergraduate experiences and future plans of their students. The survey includes sections on future plans, evaluation of the undergraduate experience, the undergraduate work experience, and the financing of college.
- **HEDS Alumni Survey** – The Higher Education Data Sharing (HEDS) consortium is a group of selective private colleges and universities that has developed an Alumni Survey to be used by its members to learn more about the educational, occupational, and citizenship “outcomes” of their alumni. The survey includes sections on the evaluation of the undergraduate experience, financial information, and post-baccalaureate activities.

Appendix B – identification of institutions that make up the various groups of comparison colleges used in this report

1. 1997 CSEQ Norms: the following colleges are included in the revised norms for selective liberal arts colleges: Carleton, Concordia, Gustavus Adolphus, Hastings, Macalester, Virginia Wesleyan, Willamette
2. 2003 CSEQ Norms: the following colleges are included in the revised norms for baccalaureate liberal arts colleges: Adrian, Alma, Barnard, Bridgewater, Carleton, Concordia, DePauw, Goshen, Hampshire, Hanover, Millsaps, Mount Holyoke, Oberlin, Smith, Swarthmore, Tougaloo, Univ Hawaii at Hilo, Wellesley, Wesleyan College, Wesleyan University, Williams.
3. 1997 HEDS Senior Survey Comparison Group: Colorado, Grinnell, Pomona, Wellesley, Wesleyan
4. 2001 HEDS Senior Survey Comparison Group: Bates, Beloit, Franklin & Marshall, Grinnell, Hamilton, Haverford
5. 2000 5 Year Out Alumni Survey Comparison Group: Colorado, DePauw, Dickinson, Gettysburg, Hamilton, Kenyon
6. 2000 NSSE Baccalaureate Colleges – Liberal Arts: the following 18 are among the 43 institutions included in the national norms: : Beloit, Bucknell, Colgate, College of Wooster, Connecticut, Denison, DePauw, Franklin & Marshall, Gustavus Adolphus, Lafayette, Lake Forest, Lawrence, Macalester, Occidental, St Lawrence University, University of the South, Ursinus, Wabash
7. 2001 NSSE Baccalaureate Colleges – Liberal Arts: the following 18 are among the 64 institutions included in the national norms: Allegheny, Bucknell, Colgate, College of the Holy Cross, College of Wooster, Colorado, Connecticut, DePauw, Franklin & Marshall, Hamilton, Harvey Mudd, Macalester, St Olaf, University of the South, Ursinus, Vassar, Wabash, Whitman
8. 2002 NSSE Baccalaureate Colleges – Liberal Arts: the following 21 are among the 70 institutions included in the national norms: Allegheny, Beloit, Bryn Mawr, College of the Holy Cross, College of Wooster, Connecticut, Denison, DePauw, Dickinson, Franklin & Marshall, Hamilton, Kalamazoo, Knox, Macalester, Ripon, St Lawrence University, University of the South, Vassar, Wabash, Washington & Lee, Willamette

Appendix C – Macalester College Statement of Purpose and Belief

At Macalester College we believe that education is a fundamentally transforming experience. As a community of learners, the possibilities for this personal, social, and intellectual transformation extend to us all. We affirm the importance of the intellectual growth of the students, staff, and faculty through individual and collaborative endeavor. We believe that this can be best achieved through an environment that values the diverse cultures of our world and recognizes our responsibility to provide a supportive and respectful environment for students, staff, and faculty of all cultures and backgrounds.

We expect students to develop a broad understanding of the liberal arts while they are at Macalester. Students should follow a primary course of study in order to acquire an understanding of disciplinary theory and methodology; they should be able to apply their understanding of theories to address problems in the larger community. Students should develop the ability to use information and communication resources effectively; be adept at critical, analytical, and logical thinking, and express themselves well in both oral and written forms. Finally students should be prepared to take responsibility for their personal, social, and intellectual choices.

We believe that the benefit of the educational experience at Macalester is the development of individuals who make judgments and interpretations of the broader world around them and choose actions or beliefs for which they are willing to be held accountable. We expect them to develop the ability to seek and use knowledge and experience in contexts that challenge and inform their suppositions about the world. We are committed to helping students grow intellectually and personally within an environment that models and promotes academic excellence and ethical behavior. The education a student begins at Macalester provides the basis for continuous transformation through learning and service.

-- page 6, 2003-2004 Macalester College Catalog

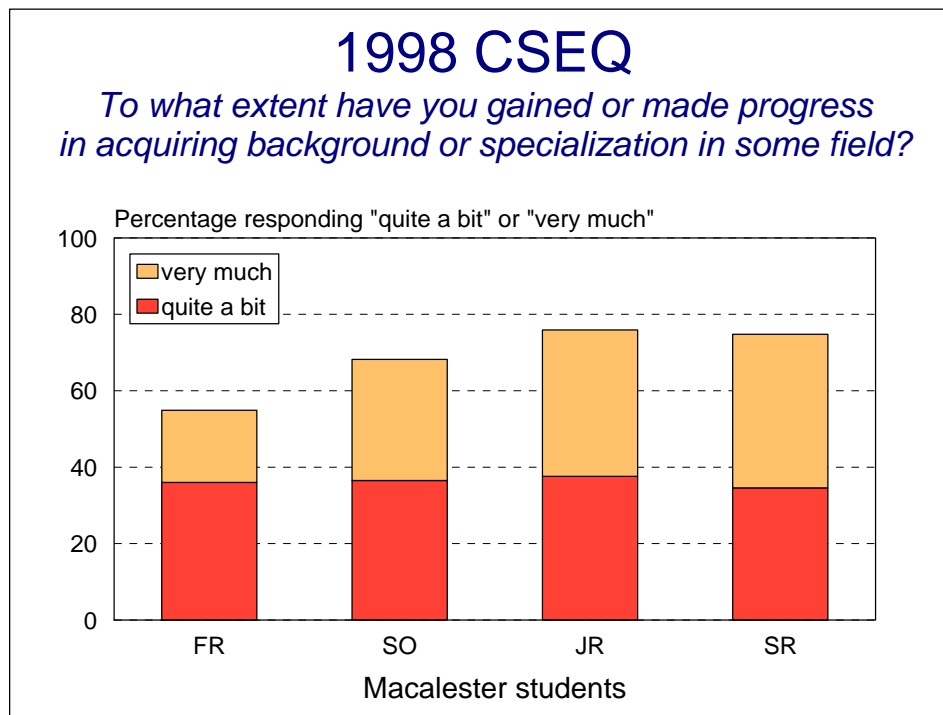
Odds and Ends – a collection of graphical displays to describe some of the outcomes appearing in this report

OUTCOME 2 EXTRA:

Students should follow a primary course of study in order to acquire an understanding of disciplinary theory and methodology.

CSEQ Estimate of Gains – To what extent do you feel you have gained or made progress in acquiring background or specialization for further education in some professional, scientific, or scholarly field?

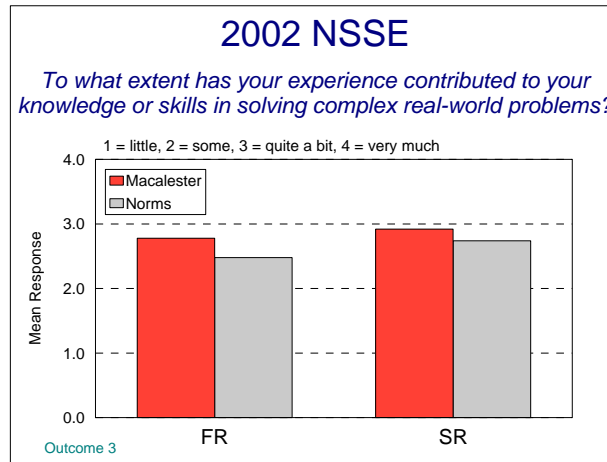
	Mac % Very much	Mac % Quite a bit	Mac % Combined
FR	18.9	36.0	54.0
SO	31.7	36.5	68.2
JR	38.3	37.6	75.9
SR	40.2	34.6	74.8



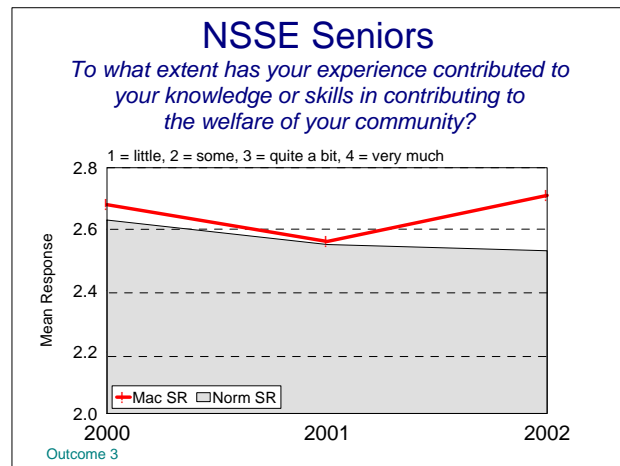
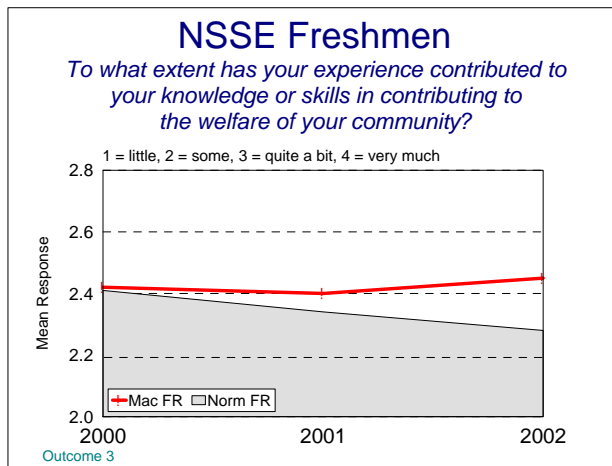
OUTCOME 3 EXTRA:

"Students should be able to apply their understanding of theories to address **problems in the larger community.**"

NSSE 8m – To what extent has your experience at this institution contributed to your knowledge or skills in solving complex **real-world problems**?



NSSE 8o – To what extent has your experience at this institution contributed to your knowledge or skills in contributing to the **welfare of your community**?



OUTCOME 4 EXTRA:

"Students should develop the ability to use **information and communication resources** effectively."

NSSE 8g – To what extent has your experience at this institution contributed to your ability to use computer and **information** technology?

