

Student Evaluations of Teaching: How have EOS-SEI* courses fared?

(pretty well)

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Student evaluations of teaching are one metric used by UBC to gauge course success. While student evaluations likely include myriad influences and are not measures of student learning, comparative data reveal insights into the success of courses “transformed” with the CWSEI, in Earth & Ocean Sciences.

* EOS-SEI = Earth & Ocean Sciences – Science Education Initiative

CONTEXT: General decline in EOS evaluations

(including all courses in the department)

In Earth & Ocean Sciences, average student responses to Question 6 on the University module have declined since 2004 (Figure 1).

EOS-SEI and the electronic student evaluation system both began in Fall 2007. This boundary, however, does not coincide with any particular decline in Q6 evaluations. *Various Q6 wording in italics.*

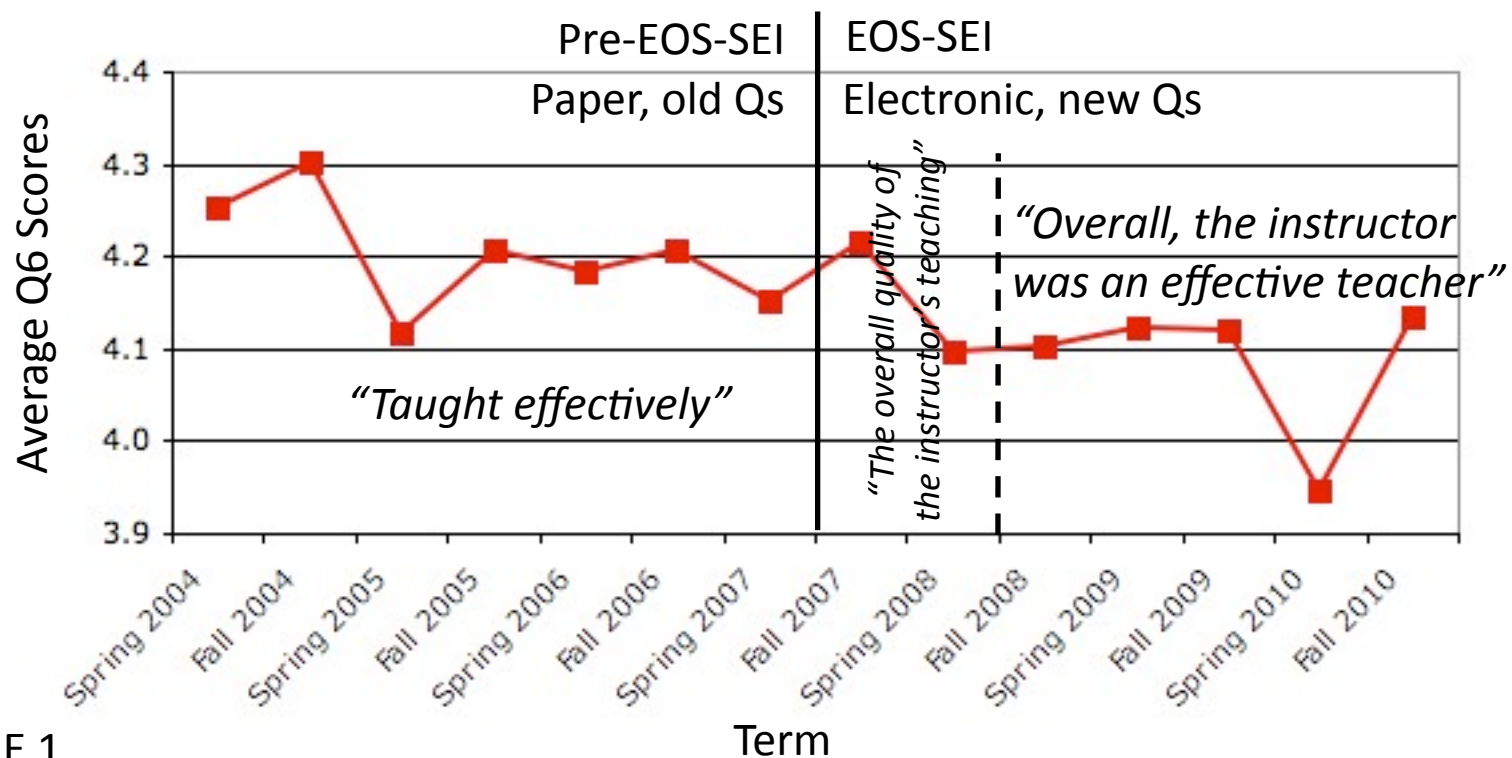


FIGURE 1

COMPARISON: EOS-SEI vs. non-EOS-SEI Courses Over Time

Criteria for the two groups:

1. All data consistently track the same instructor through the same course
2. Each course-instructor pair has at least one evaluation available between Spring 04 and Spring 07 (Pre-EOS-SEI)
3. Each course typically has >15 students enrolled.

EOS-SEI

(transformed w/STLF help)

4. At least one evaluation available after the transformed course was taught for the **second** time.

n=13

1st year: 6
2nd year: 5
3rd year: 2
4th year: 0

Non-EOS-SEI

(not transformed, no help)

4. At least one evaluation available between Spring 08 and Fall 10.

n=43

1st year: 6
2nd year: 5
3rd year: 14
4th year: 18

EOS-SEI courses are holding ground compared to non-EOS-SEI courses

On average, the EOS-SEI courses that have completed at least two “transformed” teaching terms, now have similar Q6 scores to their averages from Spring 04-Spring 07, while the non-EOS-SEI courses in the comparison group now have lower Q6 scores (Figure 2).

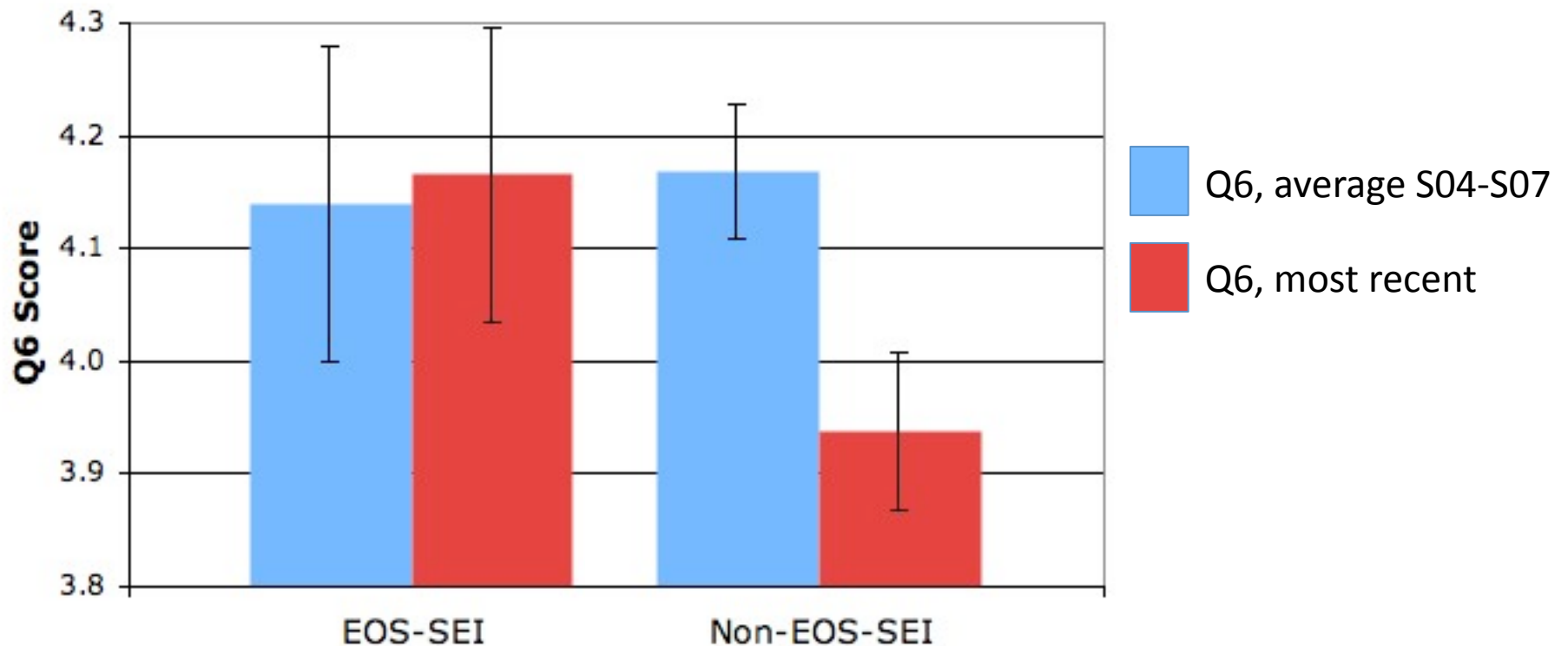


FIGURE 2

Majors' courses make the greatest gains in Q6 scores (Figure 3)

- Four of 13 EOS-SEI courses (30%) have greater gains than any non-EOS-SEI courses
- Six of 43 (14%) non-EOS-SEI courses have greater losses than any EOS-SEI courses
- The EOS-SEI courses that show the greatest losses are 1st year service courses
- The EOS-SEI courses that show the greatest gains are 2nd and 3rd year majors' courses

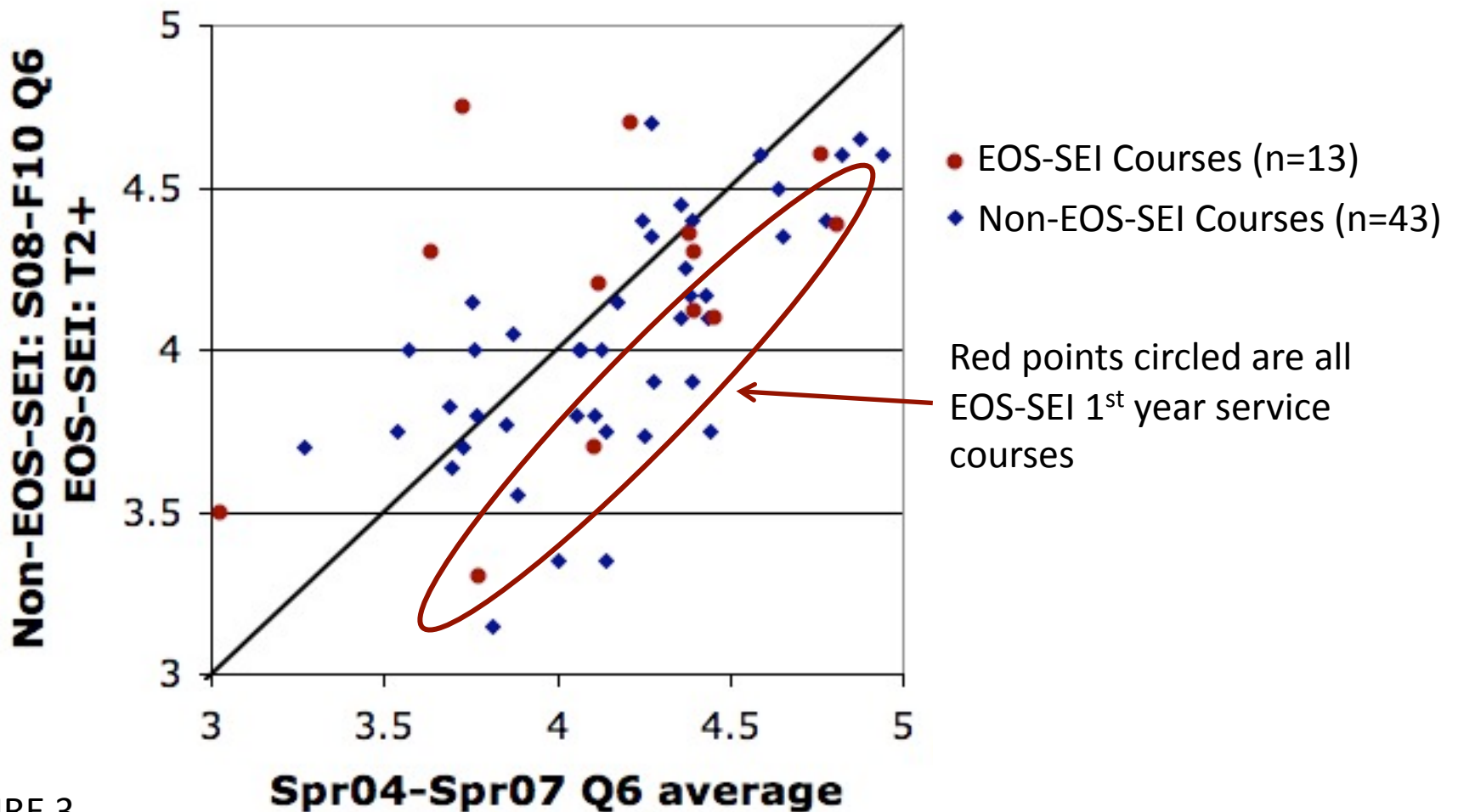


FIGURE 3

EOS-SEI courses (more) UP

Averages from EOS-SEI Courses

YEAR	S04-S07 Q6	Most recent Q6	UP/DOWN
1 st	4.32	3.94	DOWN
2 nd	3.78	4.24	UP
3 rd	4.49	4.65	UP
4 th	N/A	N/A	N/A

Averages from Non-EOS-SEI Courses

YEAR	S04-S07 Q6	Most recent Q6	UP/DOWN
1 st	4.12	3.80	DOWN
2 nd	4.28	4.00	DOWN
3 rd	4.01	3.92	DOWN
4 th	4.28	3.98	DOWN

PROGRESS over time: Iteration helps

EOS-SEI courses (those that have undergone transformation with the help of a Science Teaching and Learning Fellow) typically get worse Q6 scores the first time the transformed course is taught, and better Q6 scores in subsequent offerings (Figure 4). GOOD NEWS.

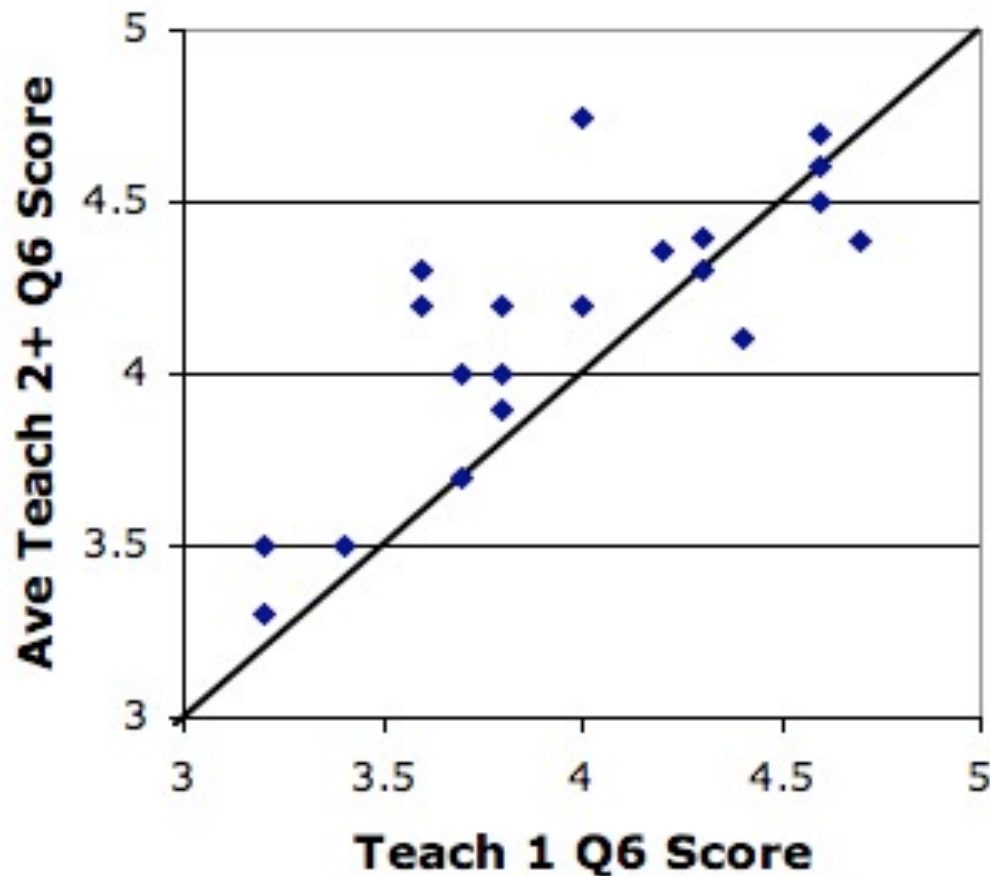


FIGURE 4 (In this case n=20. Some of these have no Spr 04-Spr 07 evaluations.)

CONCLUSIONS

- While department-wide average student evaluations have decreased, **courses transformed with help from Science Teaching and Learning Fellows have generally rebounded to pre-Spring 2007 average scores.**
- Lower evaluations can be expected the first time a transformed course is taught (not a surprise).
- Evaluations in 2nd and 3rd year transformed courses for majors appear to have made the greatest gains.
- Evaluations in 1st year transformed service courses show declines from pre-Spring 2007 average scores. Are we regressing?