

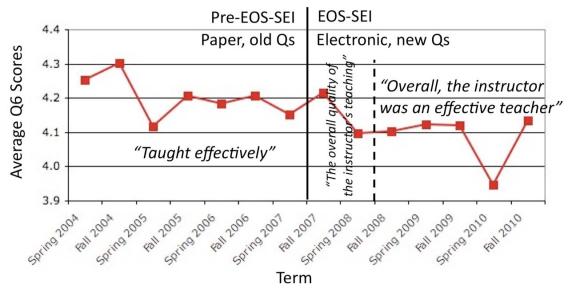
Student Evaluations of Teaching How have courses transformed with EOS-SEI (CWSEI) fared? (pretty well)

"Check out what they did with the course [EOS-SEI course well along in the process]...I was taking this course this term and it was THE BEST run course I've taken at UBC and that's all due to how they utilized vista, clickers, and constant feedback. AND because of the Wieman Initiative. Seriously, take a peek at their notes!"

-Student response to a survey in an EOS-SEI course that's just starting transformation

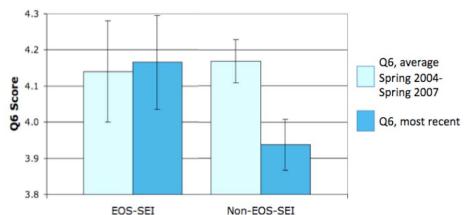
Student evaluations of teaching are one metric used by UBC to gauge course success. While student evaluations likely include myriad influences and are not measures of student learning, comparative data reveal insights into the success of courses "transformed" with the CWSEI, in Earth & Ocean Sciences.

OUR CONTEXT: Slight decline in average evaluations across all EOS courses. Data below are average Q6 scores for all courses taught by tenured & tenure-track faculty. Wording for Q6 in different terms is in italics.



Courses transformed with the help of a Science Teaching and Learning Fellow (EOS-SEI courses) are faring somewhat better than non-EOS-SEI (not transformed) courses.

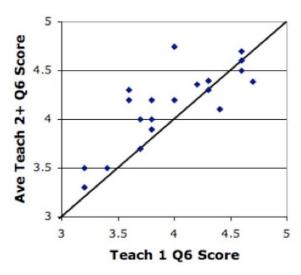
The figure below compares average Q6 scores between two groups in two time periods. The groups are (1) EOS-SEI courses transformed and taught for 2 or more terms with the same instructor (n=13) & (2) non-EOS-SEI courses (n=43). All courses included are taught by tenured or tenure-track faculty members, have typical enrolments >15 students, and have evaluations for the **same** instructor both for the time period Spring 2004-



Spring 2007 (pre-EOS-SEI), and for the time period Spring 2008 to present (after the first EOS-SEI course was taught in its transformed version for the second time). EOS-SEI courses have similar Q6 scores in both time periods, while non-EOS-SEI courses Q6 scores have decreased on average. Note: This difference cannot be explained by the "Olympics" dip in Spring 2010.

PROGRESS OVER TIME: Iteration helps.

EOS-SEI transformed courses typically get better Q6 scores after two or more terms of teaching the transformed version (vertical axis) compared to Q6 scores the first time the transformed course is taught (horizontal axis). The few exceptions are instructors who had initially very high Q6 scores in particular courses. Points above the line indicate improvement in the second and subsequent offerings. *This is GOOD NEWS.*



Majors' courses achieve the greatest gains in Q6 scores.

- 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

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

IN SUMMARY: By one metric used by UBC to evaluate teaching (Q6 scores), work with CWSEI and the Science Teaching and Learning Fellows appears beneficial in the long run (although lower Q6 scores can be expected the first time a transformed course is taught).

Contact EOS-SEI: To talk about your course(s) or teaching and learning in general, visit EOS-South 361, or contact Francis Jones (<u>fjones@eos.ubc.ca</u>), or Sara Harris (<u>sharris@eos.ubc.ca</u>). See also http://www.eos.ubc.ca/research/cwsei/.