### All those surveys you've been helping us collect ... (with thanks!)

### **Data Sets**

With the help of all instructors in EOAS, we will have Student Learning Experiences Survey (SLES) data from:

- ~2600 students in EOSC, ENVR, ATSC courses taught Fall 2013 and Spring 2014.
- 28 of 30 suitable undergraduate courses in Fall; 29 of 33 suitable courses in spring.

## Early conclusions

Student perceptions relate to motivation. By asking specific questions we learn which of our instructing strategies students are most likely to respond to in productive ways.

A few examples of questions worth considering:

- How are specific strategies perceived in your course?
- Are new strategies perceived by students as more helpful for their purposes than "traditional" strategies?
- Are there correlations between perceptions about information, classroom, homework and other aspects?
- How do student perceptions relate to 3<sup>rd</sup> party observations, learning outcomes, teaching practices, etc.?

# Examples of Fall 2013 results.

For a colour version see http://eos.ubc.ca/research/cwsei/eossei-times.html

Here are only a few preliminary results - out of many possible interpretations, correlations and recommendations. Each instructor will receive a custom report for their course with an opportunity to discuss ideas that might emerge. Courses are hidden in these example figures so that feedback can be tailored to suit the needs of instructors.

### What information provided to students do they find "helpful for learning in this course"? (9 questions)

**Example:** Do students perceive learning goals (LGs) related to (a) skills and knowledge and (b) attitudes, scientific thinking or professionalism as helpful?

**Answer:** Yes – for most but not all courses, and for "skills/knowledge" more than "attitudes".

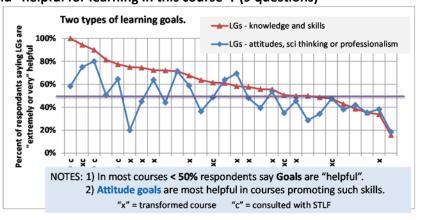
**Implications**? Consider increasing clarity, purposefulness and visibility of learning goals in at least ~10 courses.

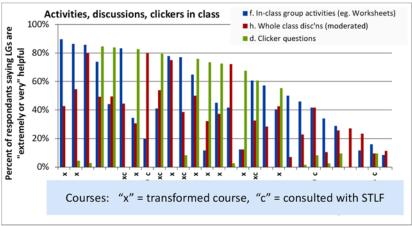
# Which classroom practices are considered helpful in this course? (13 questions)

**Example:** 1) Are active strategies considered helpful? 2) Which of three active class strategies is most helpful (group activities, moderated class discussions or clickers)?

**Answers:** 1) Yes. 2) Depends on the course - BUT in 19 of 28 classes, >50% respondents say active classes are "extremely" or "very" helpful.

**Implications**? Students "endorse" active classrooms. Practicing such pedagogies is worth it.





Labs: In which courses do students "agree":

- 1) most learning is done in labs; and
- 2) lab workloads are "too much" for corresponding benefits?

#### **Answers:**

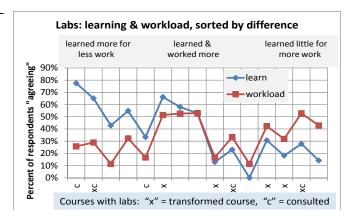
- 1) In six of fifteen courses with labs, >50% students agree labs are where most learning happens.
- 2) In some labs students "agree" work is heavy for benefits gained. In others, students "disagree" workloads are heavy.

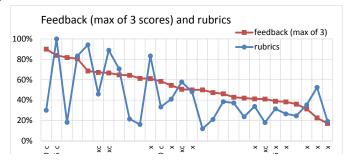
Implications? Maybe consider the balance and relationships between class and lab work.

### What homework is considered helpful? (18 questions)

Example: 1) is feedback (3 types) useful? 2) Are rubrics provided useful?

Answers: 1) Yes in ~10-15 of 28 courses. Others may consider enhancing useful-ness of feedback (central to learning). 2) Rubrics: variable "helpfulness". These could be used more often & effectively.





15%

10%

5%

0%

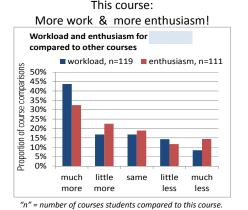
much

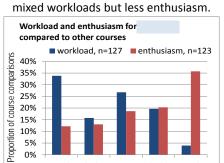
more

Are workloads in THIS course more, similar or less than workloads in EACH other course you took this term?

How does your "enthusiasm" for THIS course compare to EACH of the other courses you took this term?

**Implications:** Results speak volumes about motivation and "buy-in", with strong implications for willingness to devote time to "deliberate practice", which is a key to effective learning.





This course:

"n" = number of courses students compared to this course.

more

same

little

less

much

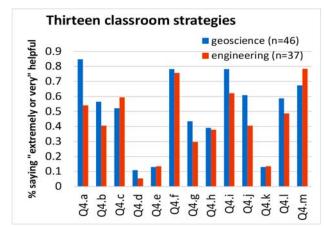
### Do engineering (BASc) students perceive helpfulness of strategies differently from geoscience (BSc) students?

**Answer**: Both groups respond with very similar patterns. Engineers may be slightly less "strong" in most responses.

# **Upcoming Priorities:**

- 1. Package SLES, teaching practices and 3<sup>rd</sup> party class observations, and provide as feedback to individual instructors.
- 2. Interview some instructors about "changes" resulting from adopting Research Based Instructional Strategies (RBIS).
- 3. Prioritize questions to identify most significant results for publication.

Does any of this raise your interest? Contact us (below) to discuss these data or any other questions about learning.



FINALLY – attend the CWSEI End-of-Year event, Fri. Apr. 11th, 9:30, ESB 1012, with presentations, posters, workshops...