



How can YOU benefit from your colleagues' course transformations work?

~

Proactive ways to benefit from colleagues' initiatives

- **Visit a colleague, and/or a class in action:** No instructor we know of has ever said “no” when asked if we can sit in to see how a class is run, but do ask some days in advance. Please ask your colleagues, or contact an STLF to set up an optimal time to visit within EOS, or outside in other UBC FoS departments to observe classes in action. Or you might simply want to talk about how they do it. Examples of teaching strategies being used in EOS that you might like to discuss or observe include:
 - Use of clickers in introductory or upper level courses.
 - Worksheets being used in a class.
 - Combining several active learning strategies (eg worksheets and clickers).
 - Team work, involving either ad-hoc groups or more formal “Learning Teams”.
 - Group exams.
 - Poster or oral presentations with peer assessment at the 2nd year or 3rd / 4th year levels.
 - Just in Time Teaching.
 - Diagnostics for assessing preparedness & helping students catch up on pre-requisite knowledge.
 - Discussion boards, or other on-line techniques (including any use of Vista)
 - Others? Give us a call.
- **Engage your Teaching Assistants** with your efforts to improve a course. It doesn't have to be much. For example, meet regularly so that everyone knows what's happening in each aspect of the course, from lectures and labs, to marking, website management, and content delivery.
- Talk about education with your **graduate students**. Many will have taken (or are taking) eos516 and they are keen!
- **Ask an STLF** – contacts below ... anytime!

Archiving the wisdom & materials from course transformations

Each department supported by CWSEI is accumulating work in their own ways for their own use. EOS-SEI has a website with public information at <http://www.eos.ubc.ca/research/cwsei/>; explore the left hand menu, especially “Resources” and “Research”. There is also an **internal only** section where many documents and data sets about courses, undergraduates & education are being collected. Most EOS faculty have contributed in some form or another, and the data or documentation are archived for your benefit. Use them to avoid re-inventing the wheel ☺ !

See <http://www.eos.ubc.ca/internal/cwsei/index.html> *within EOS only*. Contents include:

<i>Department</i>	<i>Courses</i>	<i>EOS-SEI</i>
1. Curriculum Data & Discussions	5. Course Transformation Documentation	8. EOS-SEI Documents & Discussions
2. Service Course Data & Policies	6. Course Learning Goals AND Data	9. Research Presentations & Articles
3. Student Attitudes (SAESS) Data	7. Examples of teaching strategies & tools	10. "Concept" question sets
4. Teaching Eval'ns, Assignments & TAs		

The SEI Course Archive

The **SEI Course Archive** is a major component of CWSEI's mandate to foster sustainable changes to undergraduate science education. See <http://www.sei.ubc.ca/>. Materials & teaching strategies for undergraduate science courses at the **University of British Columbia** and the **University of Colorado** are stored here, as well as notes on the purpose and design of the courses and the use and effectiveness of the materials. EOS courses that have archived resources and wisdom include:

Course	Title	Comments
EOSC 114	The Catastrophic Earth - Natural Disasters	<ul style="list-style-type: none">• EOS Courses that should be included "soon" include: eosc111, eosc112, eosc220, eosc322, eosc355, eosc372, eosc373, eosc472.• All courses supported with CWSEI funding will eventually be included in the archive.
EOSC 210	Earth Science for Engineers	
EOSC 212	Topics in Earth & Planetary Sciences	
EOSC 221	Introductory Petrology	
EOSC 252	Introduction to Experimental Geophysics	
EOSC 332	Tectonic Evolution of North America	

Note the archive's current "**Terms of Use**" can be seen using the little link at the bottom of every Archive page. Also, each archived course does have a password protected space for private information such as exams, proprietary information, etc.

Computer Science, Math and Physics & Astronomy are other UBC Departments that have contributed course content so far; other departments are being "encouraged" to contribute. Courses in **geosciences** at University of Colorado that have content contributed so far include:

Course	Title
GEOL 1010	Introduction to Geology 1
GEOL 1020	Introduction to Geology 2
GEOL 1030	Introduction to Geology Laboratory 1
GEOL 2100	Environmental Geology
GEOL 3070	Introduction to Oceanography
GEOL 3410	Paleobiology
GEOL 4500	Critical Thinking: Rates and Dates in Earth
Geology 3010	Mineralogy
Geology 3120	Structural Geology

The completeness, organization, and quantity of learning resources and corresponding supporting documentation varies significantly, but everyone is still figuring out how to use the system's features to generate the most useful collection possible.

One challenge has been to incorporate the "how to use it" information; i.e. the wisdom gained during development and initial implementation. Effective use of someone else's assignments, in-class activities and so on requires some background and recommendations. The archive requests such information when materials are first stored, and the materials themselves should include some documentation about what worked, what didn't work so well, and corresponding recommendations.

In short, the SEI Archive is an experiment in improving the effectiveness and efficiency of the way well-designed courses are transferred from designer to new teachers. Check it out, and send questions and comments, including suggestions, to the EOS-SEI contacts below.

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