

# Notes from the Life Sciences Carl Wieman Science Education Initiative

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## Surfin' the Net?

The CWSEI website is: <http://www.cwsei.ubc.ca/index.html>. There are lots of resources on teaching, and PDFs of papers and recent talks. You can also find out what the LS-CWSEI has been up to this past term by going to the Recent Updates and scanning down.

## Upcoming CWSEI events

### **1. April 15 11am-12pm MSL 102. Seminar: "The Transfer of Learning" Dan Schwartz, Stanford University**

At some point in their careers, most people who teach science or mathematics discover that many students seem to do well enough on tests, but then they fail to use their knowledge when they presumably should. This is known as the transfer problem. Students apparently know what they should, but they do not spontaneously use it for the situation at hand. In this talk, I will present a larger frame to help clarify what types of educational experiences are likely to support transfer; why these "inquiry" methods are often incorrectly seen as conflicting with the tenets of direct instruction and more recently cognitive load; and, how it is possible to find out if your students are on a trajectory that will support future transfer.

### **2. April 28 CWSEI End-of-Year Event. IK Barber Learning Centre 182.**

**Morning (9:00-12:00) Presentations by the Science departments on their CWSEI activities**

**Afternoon: Roundtable Discussions on :**

- **Instructional Labs:** What are the goals of labs? How best to achieve and assess these goals?
- **Math in the Science Curriculum:** How do students need to be able to use and understand math across the science disciplines? How can we meet and assess these goals?
- **TA Training:** What is needed? What are departments doing or planning? What is effective?
- **Statistics in the Science Curriculum:** How do students need to be able to use and understand statistics across the science disciplines? How can we meet and assess these goals?

## Writing learning outcomes for your course.

A tip we picked up from Michelle Smith at UC Boulder was that a good way to start is to write a "Study Guide for the Final Exam". This is a one to two page (single spaced) description of what a student will need to know (or be able to do) to get a good mark on the final exam (assuming that it is comprehensive). It's then easy to convert it to the learning outcome format ("After completing this course a student will be able to...followed by a set of action statements"). Need a consult on learning outcomes? We'll be delighted to help.

## **We're around.**

If you're interested in talking to us about your course(s), or teaching /learning, or have a potential project, feel free to contact anyone of your LS-CWSEI team: Tamara Kelly <[tljkelly@zoology.ubc.ca](mailto:tljkelly@zoology.ubc.ca)>, Jared Taylor <[jtaylor@zoology.ubc.ca](mailto:jtaylor@zoology.ubc.ca)>, Harald Yurk <[yurk@zoology.ubc.ca](mailto:yurk@zoology.ubc.ca)>, Gulnur Birol <[Birol@science.ubc.ca](mailto:Birol@science.ubc.ca)>, George Spiegelman <[spie@interchange.ubc.ca](mailto:spie@interchange.ubc.ca)>. .