

Multiscale/Multi- institution Labs

**University of Victoria, Mount Royal University, University
of Alberta**

Multi-institution Experiment (Across Alberta)

- **Looking at implementing a province-wide experiment. Data acquisition done at various institutions and data are entered into a central database.**
- **Students gain experience with large database.**
- **Encourages collaboration between institutions**

- **SCI 100 at University of Alberta currently runs a lab on water hardness where students sample from a variety of locations, run analyses, and then enter data on database.**
 - **Students engaged--using their own samples.**
 - **Part of a team effort**
 - **See problems with good and bad data.**

- **Obstacles to implementation are mostly in the planning/collaboration stage**
 - Course (10X, 2XX?)**
 - Experiment development/agreement**
- Alberta Chemistry Educators (ACE)—use as a platform for ideas on common experiments/favorite experiments**

Multi-institution Experiments

- **Chemistry is expensive to teach and there are limited resources for some.**
- **Outreach to high schools in rural areas where students come to campus to do laboratory work.**
- **Outreach to small campuses (with no senior-level Chemistry) where students visit to do instrument/resource intensive work (The Center for Authentic Science Practice in Education—CASPIE at Purdue)**