Collected comments from "Beyond CWSEI" forum, April 20th, 2012

Transcribed by Grace Wood and categorized by Ido Roll, Sarah Gilbert, Gulnur Birol, and Francis Jones.

These are all the groups' comments, organized by categories that emerged by sorting to find commonalities among all comments. Ten categories were found; the order in the list below does NOT represent any sort of priority. Each comment has an item x/y/z indicating that it was a comment number "z" (1 − ~5), from group "y" (1 − 6), in response to question "x" (1 or 2).

See www.cwsei.ubc.ca/Files/EOY/EOY2012/BeyondCWSEI_summary.pdf for a description of the session and a summary of the discussion.

I. Supporting Faculty in Translating Principles to Practices

1. **Local expertise (8 comments)**
   a. Local support (at departmental level) from experts who can communicate evidence-based teaching and learning (item 1/1/1)
   b. Best practices take time. Need support with technical aspects of research and assessments (technologies, instructions on how to do surveys & interviews, formulating research questions) -education technology (item 1/1/3)
   c. Dedicated fulltime experts (like STLFS) at departmental level with central funding (item 1/2/1)
   d. STLF (like) consultants in the department helping to implement techniques on an individual basis and spread ideas. Give some kind of professional opportunities to these people such as teaching opportunities so that consulting is not all that they are doing. (item 1/4/1)
   e. IT support for all courses (like learning management system) - this may become more needed down the road. (item 1/4/4)
   f. Dedicated personnel at the departmental level who are tasked with developing and maintaining effective teaching and learning, such as STLF or someone who is permanently associated with the department (tenure-line person). (item 1/5/1)
   g. Maintain some level of funding from outside department for STLFs or specialized lecturers. (item 1/6/1)
   h. Make these STLFs/specialized lecturers permanent faculty positions in each department to focus on department area education. (item 1/6/2)

2. **Science education research (12 comments)**
   a. Encouraging TAs, graduate, and undergraduates students to be involved in educational projects (item 1/1/4)
   b. Research in science education and leadership in science education (item 1/2/4)
   c. Promoting research and publication. Build a community of practice. (item 1/3/1)
   d. Have a research person to assist - someone who is an expert in education research (item 1/3/2)
   e. Funding for projects (item 1/3/3)
   f. Enable, facilitate, reward science education/research at the scholarly level. Teaching and learning research at same footing as their research in faculty of science. (item 2/1/4)
   g. Science education research should be equivalent to other field of research. (item 2/2/2)
   h. Have graduate program in science education research. (item 2/2/3)
   i. Development and encouragement of professor of teaching-type positions. Counting education research time spent by faculty equally as their research program (bigger problems of funding issue). (item 2/3/3)
   j. Continue to collect data and objective evidence to help identify best practices. For effective teaching 1) continue to present UBCs results at teaching conferences 2) keep UBC at forefront of this field worldwide, 3) helps to bring awareness of best practice elsewhere back to UBC. (item 2/5/5)
   k. Include science education research as recognized research (ex. NSERC) (item 2/6/2)
   l. Proper graduate training in science education. May be a PhD area? Better TA training and TA buy in (get TAs to take science education seriously). (item 2/6/5)

3. **Instruction, assessment, & curriculum (11 comments)**
   a. Evaluation and data collection, assessment of individual courses. (item 1/2/3)
   b. Periodic alignment/assessment of learning goals in courses to make sure that they are aligned with the curriculum. (item 1/3/4)

    c.   Independent assessment of students learning and attitude (such as surveys) (item 1/4/2)

    d.   Maintain best practices/implementation/techniques/ preserve the culture (departmental and central). (item 1/6/3)

    e.   Make learning goals (including at the lecture level) and outcomes officially required. (item 1/6/5)

    f.   Define learning goals at the curriculum level. (item 2/1/3)

    g.   Big picture, evaluate courses overall (item 2/2/6)

    h.   Accountability in terms of student learning not only attitudes, not only grades, not only self-reported learning but measurable improvements in knowledge. (item 2/4/2)

    i.   Curriculum development both for individual courses as well as alignment of entire programs (item 2/4/4)

    j.   Institute mechanisms to mandate and enforce best practices in teaching (evidence based) (item 2/5/3)

    k.   Improve the labs, transform labs, studio teaching (i.e. labs and tutorials) and measure the goals and learning attributes we want our students to have. (item 2/6/3)

II. Student Involvement

4. Student voice and participation (5 comments)

    a.   Encouraging TAs, graduate, and undergraduates students to be involved in educational projects (item 1/1/4)

    b.   Give, enable, and train the student voice - allowing them to share their experiences and perceptions. Train students to demand better teaching. Allow students to critique teaching (ex. a student complained to a professor why they don't have learning goals).   Perhaps focus on 1st year, new pathways and initiatives.   (item 2/1/1)

    c.   Address the diversity of student needs. Are the techniques being used serving everyone? (ex. introverts vs. extroverts) (item 2/1/5)

    d.   Create a student channel that is active and encouraged for may be focus groups or student responses (item 2/4/5)

    e.   Generate a culture of active involvement in learning for both student and instructors. Goal - students have an expectation that they will be actively engaged in their learning in every course (item 2/5/2)

5. Teaching Assistant development (4 comments)

    a.   Professional development support (graduate TA training, CLTL/TAG/Skylight alike support, tech support, research support) (item 1/2/5)

    b.   Professional development and workshops for grad students, TAs, and faculty (look at it as a perk rather than a punishment) (item 2/2/5)

    c.   Training of graduate students and TAs for this type of teaching and learning - important for sustainability (item 2/4/3)

    d.   Proper graduate training in science education. May be a PhD area? Better TA training and TA buy in (get TAs to take science education seriously). (item 2/6/5)

6. Graduate program (3 comments)

    a.   Encouraging TAs, graduate, and undergraduate students to be involved in educational projects (item 1/1/4)

    b.   Have graduate program in science education research. (item 2/2/3)

    c.   Proper graduate training in science education. May be a PhD area? Better TA training and TA buy in (get TAs to take science education seriously). (item 2/6/5)

III. Institutional Support and Culture

7. Structure and Culture (8 comments)

    a.   Formal cohort/high level organization to reinforce importance. (item 1/3/5)

    b.   Culture and community - offering workshops (hands on) on how to implement, what evidence-based methods are at their platform for discussion (may be a web presence/blog/reading group). Also go abroad to conferences to share. (item 1/4/3)

    c.   Some kind of central "entity" at the faculty level to provide professional development, communication between the individuals in various departments (ex. reading groups, repository for best practices) (item 1/5/3)

    d.   Maintaining regular events at the faculty and departmental levels that promote evidence based teaching and teaching research, like reading groups and workshops. (item 1/5/4)

    e.   Maintaining, creating, and developing a culture that values evidence based teaching and making sure that this culture permeates through all levels of the university up to and including the president. (item 1/5/5)

    f.   Maintain best practices/implementation/techniques/ preserve the culture (departmental and central). (item 1/6/3)

g. Generate a culture of active involvement in learning for both student and instructors. Goal - students have an expectation that they will be actively engaged in their learning in every course (item 2/5/2)
h. Provide support and training for faculty and instructors in applying best practices. Mechanisms for disseminating best practices. Mentoring. (item 2/5/4)

8. **Incentives for improving instruction (12 comments)**
   a. Funding for projects (item 1/3/3)
   b. Access to funding to support these activities and also to offer incentives to faculty to participate (course buyouts), preferably contributed by both faculty and department. (item 1/5/2)
   c. Buy-out for faculty (money, credits or for more student to help) (item 1/6/4)
   d. Encourage, make, and support faculty visits/observe their peers' teaching or engage in research together especially across departments. (item 2/1/2)
   e. Peer review of teaching & objective data collection and rigour (item 2/2/1)
   f. Tenure contingent on effective teaching (evidence based teaching addressed in the review process) (item 2/2/4)
   g. Reviewing existing performance appraisal (promotion, tenure, etc) to encourage taking risks and making changes to encourage buy-in. Provide incentives and rewards for faculty. (item 2/3/2)
   h. Evidence of evidence-based methods adapted/adopted and monitoring how it's going as a requirement for tenure (item 2/4/1)
   i. Accountability in terms of student learning not only attitudes, not only grades, not only self-reported learning but measurable improvements in knowledge. (item 2/4/2)
   j. Ongoing assessment of courses and teaching based on review of teaching effectiveness. Accountability. Performance based metrics. (item 2/5/1)
   k. Institute mechanisms to mandate and enforce best practices in teaching (evidence based) (item 2/5/3)
   l. Make good teaching and learning processes part of the promotion and tenure process - not enough research professors currently buy into science education research. (item 2/6/4)

9. **Professional development for faculty (5 comments)**
   a. Professional development support (graduate TA training, CLTL/TAG/Skylight alike support, tech support, research support) (item 1/2/5)
   b. Culture and community - offering workshops (hands on) on how to implement, what evidence-based methods are at their platform for discussion (may be a web presence/blog/reading group). Also go abroad to conferences to share. (item 1/4/3)
   c. Some kind of central "entity" at the faculty level to provide professional development, communication between the individuals in various departments (ex. reading groups, repository for best practices) (item 1/5/3)
   d. Professional development and workshops for grad students, TAs, and faculty (look at it as a perk rather than a punishment) (item 2/2/5)
   e. Provide support and training for faculty and instructors in applying best practices. Mechanisms for disseminating best practices. Mentoring. (item 2/5/4)

IV. Collaboration and Communication
10. **Collaboration and communication (6 comments)**
    a. Establishing a culture that encourages and values mentoring, coaching, innovation, and communication in education (item 1/1/2)
    b. Collaboration within and across departments and at outside UBC (item 1/2/2)
    c. Foster and improve communication of best practices within and between departments and universities (dissemination of what's developed beyond university level through publication, web-based communication) (item 2/3/1)
    d. As STLF presence recedes, foster collaborations with other institutions (regional ones such as SFU) as well as visit other institutions and have visiting instructors.   (item 2/4/6)
    e. Continue to collect data and objective evidence to help identify best practices. For effective teaching 1) continue to present UBCs results at teaching conferences 2) keep UBC at forefront of this field worldwide, 3) helps to bring awareness of best practice elsewhere back to UBC. (item 2/5/5)
    f. Improve communication and marketing of science education to all parties (students, depts., and society). UBC branding worldwide. (item 2/6/1)