<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:30 - 11:30am</td>
<td>Morning Session</td>
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<td>Warren Code: Overview</td>
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<td>Carl Wieman: <em>New ideas for how to evaluate and improve your teaching</em></td>
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<td>Faculty Panel: <em>Workloads and benefits of course transformations</em></td>
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<tr>
<td>11:30am - 1:30pm</td>
<td>Lunch &amp; Poster Session</td>
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<td>1:30 - 3:30pm</td>
<td>Workshops (here and ESB 5104)</td>
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Carl Wieman Science Education Initiative
Started 8 years ago → goal is widespread improvement in science education at UBC, focusing on department level.

CWSEI “Trinity” for each course

1st: Learning goals. (what should students be able to do?)

2nd: Good assessment

3rd: Improved teaching methods (research based, improve learning)
CWSEI influence at UBC

About 100 “Transformed” courses, plus ~50 more with some CWSEI and/or SCLT influence.

40% of “seats” are in Transformed courses; 67% in courses with at least some changes (both up about 3% over last year).

In almost all cases, methods are still in use in these courses, even though many projects finished years ago.
CWSEI and extension

• “Original” CWSEI funding still in four depts/programs for at least another year.

• **John & Deb Harris** donation, partnership with Faculty of Science and departments to fund STLFW work and paired teaching in EOAS, PHAS
Other initiatives in Science

• **Flexible Learning**: projects large & small
• **Vantage College**: first cohort started Fall 2014
• **Bay View Alliance**: CWSEI success as a model for other universities; interview visit to EOAS last Fall & “Faculty Teaching Practices Survey”
• **David Cheriton**: new donation for course development: Computational Thinking
Chemistry

STLFs: Elizabeth Gillis, Jane Maxwell, Kerry Knox (to York Dec 2014)
FLTLF: Amanda Musgrove

• Lab courses: lots of activity
• Two-stage *reviews* (not exams)
• Who becomes a Chemistry major?
• Flexible Learning: transforming 1st-yr courses
Computer Science

STLFs: Jessica Dawson, Hassan Khosravi

- “Mechanical TA” software for peer review
- Looking at ways to measure systematically across department: Foundations of Computing Concept Inventory, Computing Attitudes Survey, COPUS
Earth, Ocean and Atmospheric Sciences (EOAS)

STLFs: Tara Holland, Sarah Bean Sherman
FLTLF: Francis Jones

• Paired teaching study
• Flexible Learning: bringing classroom-based active learning to distance education
• Writing up the CWSEI experience, including major data collection in 2013-14 and focus groups with most of department as part of study last Fall
Life Sciences

STLFs: Megan Barker, Lisa McDonnell, Tammy Rodela, Natalie Schimpf; FLTLF: Erica Jeffery
Also Martha Mullally, Malin Hansen, Laura Weir who left in 2014

• Study of teaching across the Biology departments
• Research studies
• Flexible Learning: transforming 1st-yr courses
Mathematics

STLFs: Kseniya Garaschuk, Sandi Merchant, Wes Maciejewski (to NZ Jan 2015)

• Diagnostic testing
• Exam difficulty study
• WeBWorK use continues to grow
• Flexible Learning projects: Math Exam/Ed Resources wiki & student guide for calculus
Physics and Astronomy (PHAS)

STLFs: Jared Stang and Linda Strubbe

Many projects going on with the PHAS Education Research group: PHAS-ER

• Paired teaching study
• Major lab reforms in first year
• Learning Catalytics compared to iClickers
• Flexible Learning: distance labs, students as producers
• And more . . .
Statistics

- Paired teaching last Fall
- Study of exam difficulty
- WeBWorK use has also grown
- Flexible Learning: Introductory Statistics across campus; mainly planning and building network so far
“CWSEI Central”

• Now based in California, Sarah Gilbert and Carl Wieman maintain their connection and contribute as advisors to the CWSEI

• CWSEI more formally merged with the Science Centre for Learning and Teaching (SCLT)
Summary

• “Winding down” is still not a very accurate description

• Lots of new people (say hi today!)

• Thanks!
What would you like to see/do next in your teaching?

Discuss with a neighbour and please let us know about it!
Teaching benefits & workloads during & after course transformations

Faculty Panel:

Costanza Piccolo, Instructor, Mathematics
Ljerka Kunst, Professor, Botany (Life Sci.)
Jackie Stewart, Instructor, Chemistry
Ken Hickey, Assistant Professor, EOAS
• Costanza Piccolo, Instructor, Mathematics
• Ljerka Kunst, Professor, Botany (Life Sciences)
• Jackie Stew
• art, Instructor, Chemistry
• Ken Hickey, Assistant Professor, Earth, Ocean and Atmospheric Sciences
Thanks!

Next: Lunch and posters until 1:30pm

You feedback is much appreciated! See paper forms.

1:30-2:30pm Workshops
• Facilitating discussion - from small groups to large classes (up in 5014)
• Getting the most out of demonstrations and videos in lectures & labs (here in 1012)

2:30-3:30pm Workshops
• Collecting your own evidence to focus, improve, & document teaching effectiveness (up in 5104)
• Panel Discussion: Practical strategies to maximize productive engagement in class (here in 1012)
Also happening at UBC

• Flexible Learning Initiative ➔ Flexible Learning
• Teaching & Learning Enhancement Fund (TLEF) ➔ TLEF/Flexible Learning hybrid
• UBC MOOCs: Coursera ➔ edX
• Vovici/Verint Surveys ➔ FluidSurveys
• Vantage College’s first students
• Learning Tech Rovers!