

Engaging faculty in learning outcomes assessment through curriculum mapping and alignment

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Goal and Agenda

Goal

To provide an overview of a collaborative approach to curriculum mapping and decision making

- Molecular and Cellular Biology at Guelph
- Interactive process

Agenda

1. Context
2. Curriculum Mapping
 - Collecting, analyzing, synthesizing data
3. Inspiring collaborative discussion
4. Moving Forward
5. Reflections on the process

Curriculum is a bear!

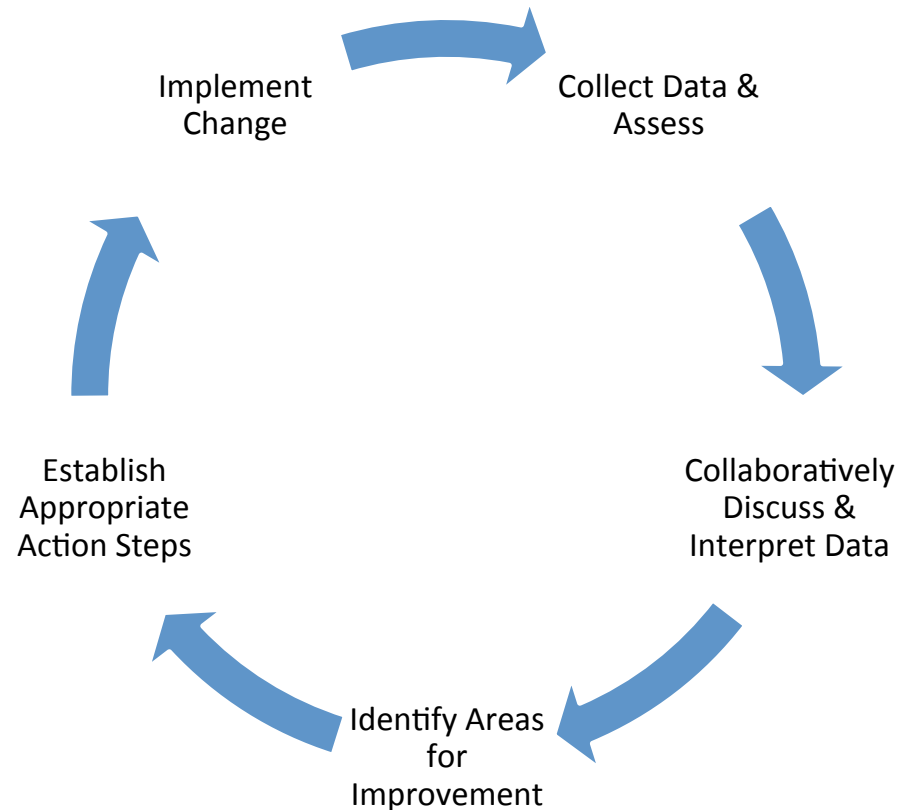
- It is complex
- It is messy
- It can be frustrating, overwhelming, time consuming, and resource intensive
- There is no one answer.....



Data Informing Conversation

*“Although much of the national conversations about assessment focus on measurement issues, encouraging the use of assessment data to guide change is much more about **collaboration with colleagues to decide what to improve...** Evidence forms the basis for these collaborations.”*

Banta and Blaich (2010, p.23)



Context MCB

- Overview of the Department
 - 42 faculty
 - Research-intensive
 - Independent
 - Formed in 2004
 - MCB Curriculum Committee formed in 2010 from 3 separate committees

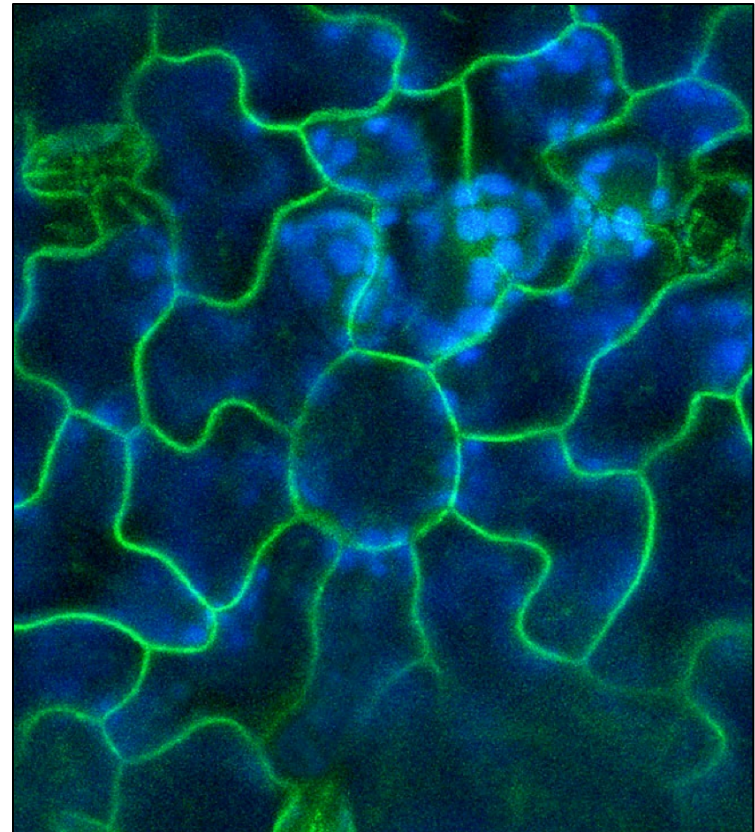
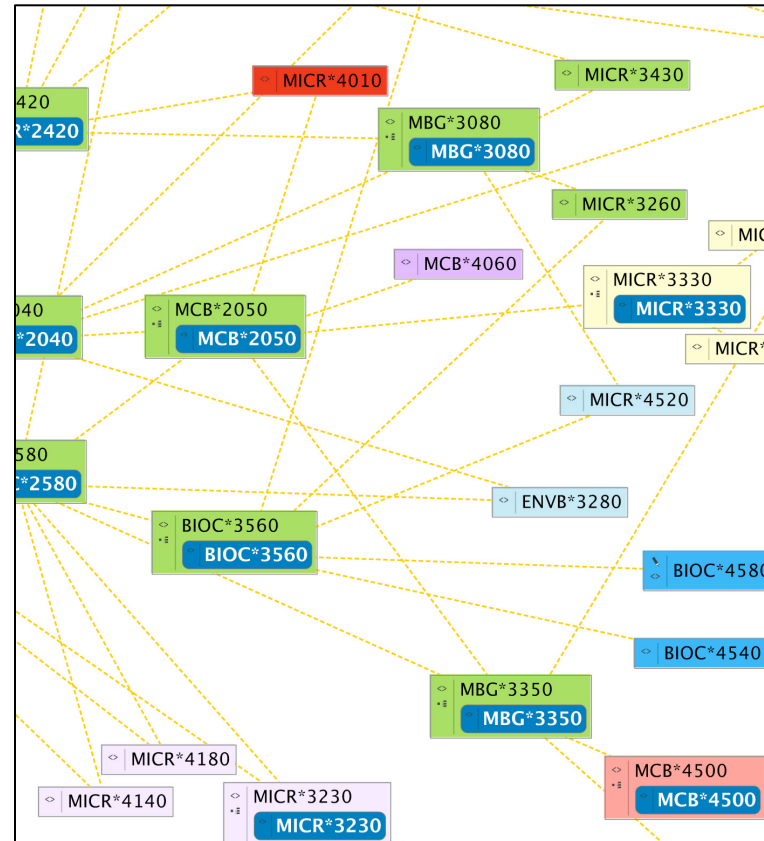


Image Courtesy Dr. Jaideep Mathur
Molecular and Cellular Biology, University of Guelph

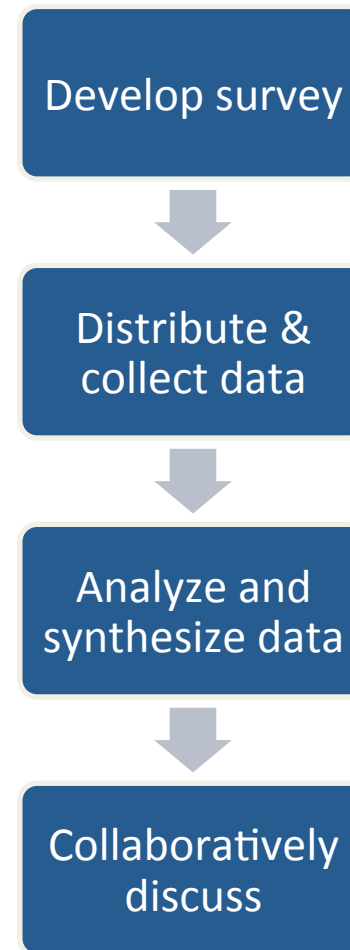
2012 Curriculum Review

- 2010 mandate to evaluate 3 majors
- Faculty-driven
- Embraced learning outcomes early on (one of first on campus)
- Defined learning outcomes
- Next step: Curriculum Mapping



MCB Curriculum Mapping

- 16 learning outcomes/5 categories
- n=54 courses
- n= 42 instructors
- On-line Survey (CurricKit)
- June – August, 2012
- Response rate: 94%
 - sabbatical, leaves



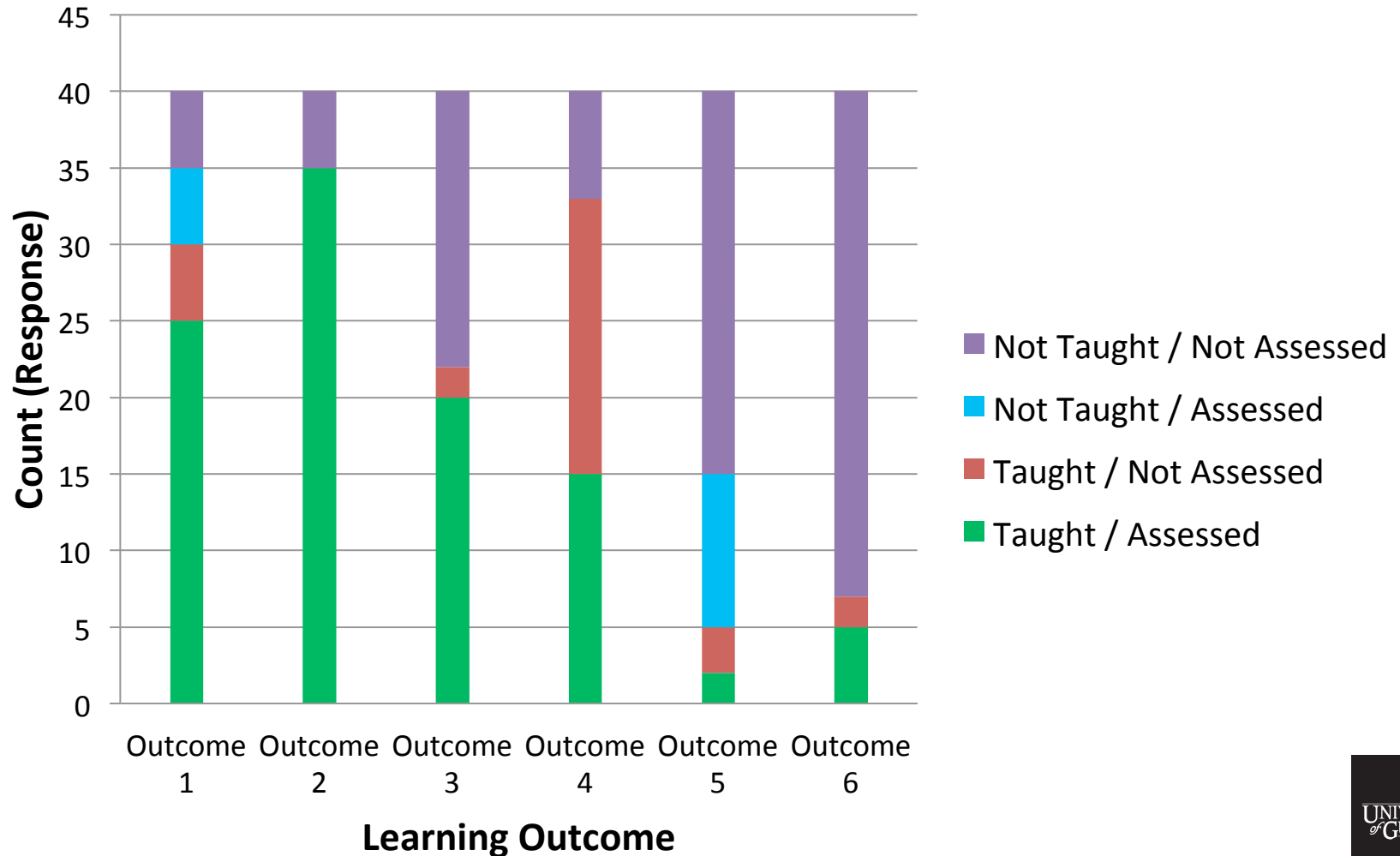
1. What methods of instruction do you use in this course?
2. What methods of assessment are used in this course?
3. Which of the following learning outcomes are developed in this course?
4. What level of complexity/depth is expected for each of the learning outcomes?
5. Please specify how each of the learning outcomes are taught and assessed in your course.

<http://www.uoguelph.ca/vpacademic/avpa/outcomes/>

MCB - Survey

- Added questions specific to the discipline and needs of the review
 - Writing skill development
 - Timing of workload for students
 - When assessment methods used
 - Proportion of assessment methods

Development of LOs

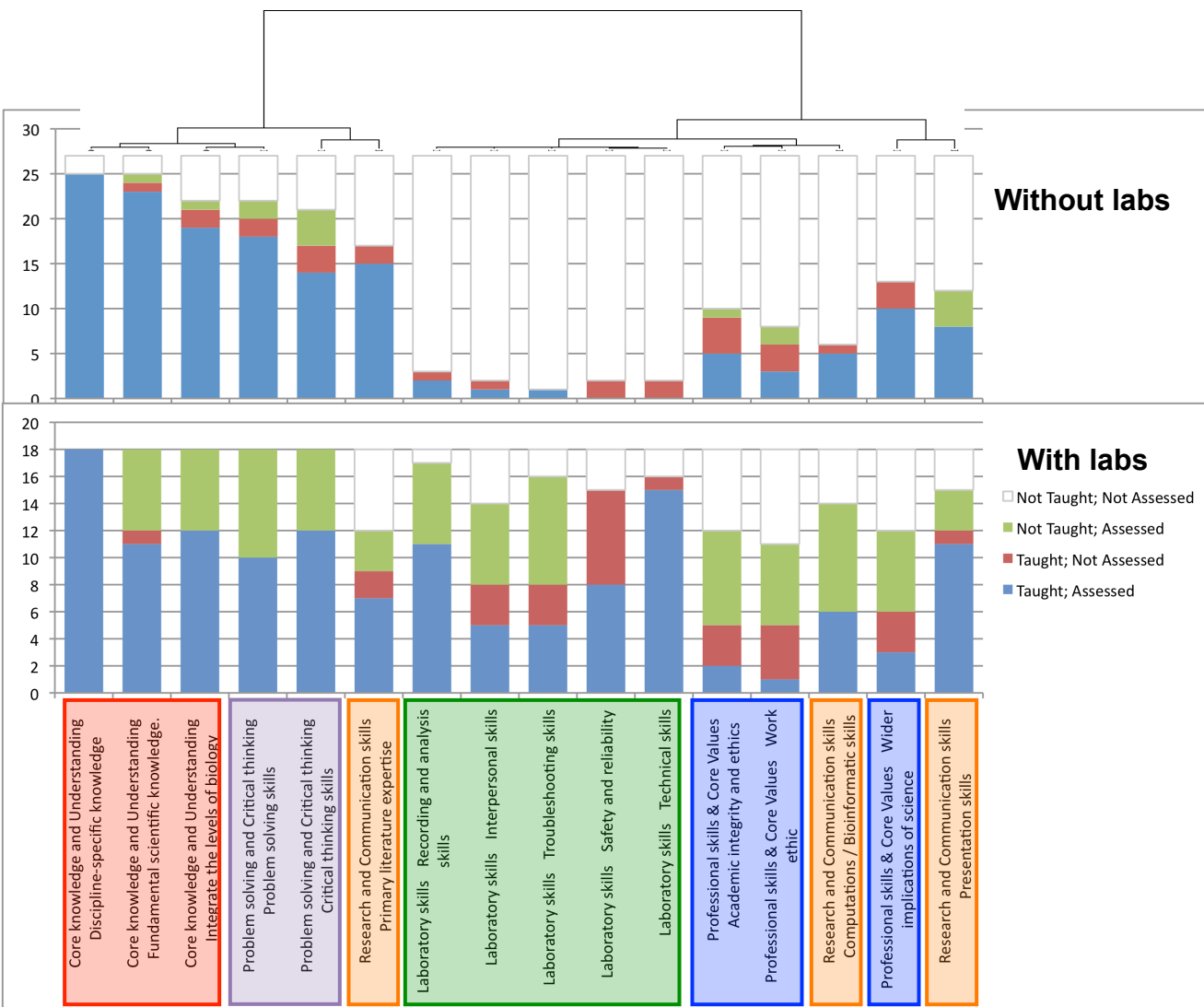


Analyzing the MCB data

- Analyze
 - Descriptive statistics
 - Cluster analysis
 - Queried by course type, year, delivery mode (lab/no lab)
- Synthesize
- Committee Presentation
- Defined most critical
- THE BIG PICTURE
 - Where LOs taught/assessed
 - Instructional/Assessment methods
 - Assessment Timing
- TIME AND RESOURCES
- Intense (1- week)
- Like writing a manuscript
- Feedback from the committee, this is WAY to much

Analyzing the MCB data

- Analyze
- Synthesize
- Present to Curriculum Committee
- Defining most critical
- Pulling together process for faculty meeting
- TIME AND RESOURCES
 - Intense (1-week)
 - Like writing a manuscript
 - Feedback from the committee, this is WAY too much



What factors limit our ability to have more courses with lab components?

Is there any way to introduce Laboratory skills into courses without lab components? What resources would be required?

What factors limit the teaching of the “softer” Learning Outcomes in our courses?

The Retreat – Interactive Activity

- Full-day annual retreat
- Curriculum discussion limited to 1 hour
- Overview of context
- Collaboratively analyzed and discussed data
 - 5 questions
 - 5 small groups
 - Report back
- Simple
- Focused
- Engaging
 - Break-out discussions
 - Break up the data into manageable chunks

Activity

- Discuss #4 Timing of Assessments
 - 10-15 minutes to discuss
 - Report back as an open group

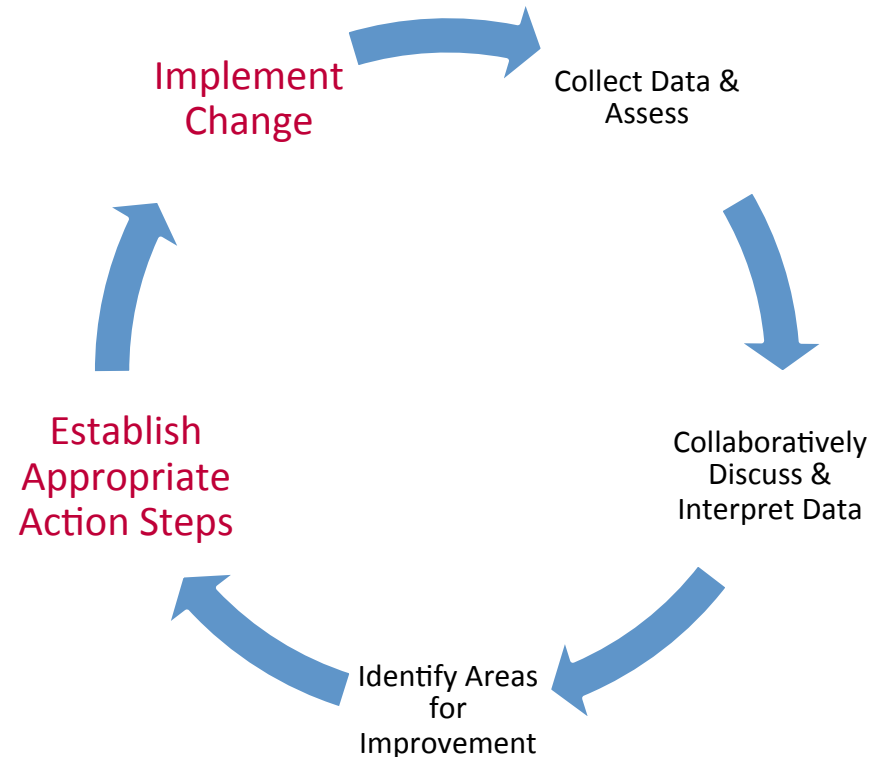
Now what?

Outcomes of processes

- Engagement
- Fun retreat activity
- Proud

Improvements identified

- Writing skills, how to incorporate effective feedback
- Professional development in “softer skills” (e.g. integrity, ethics, communication/presentation)



Summary

- Curriculum mapping is intensive
- Faculty-driven, collaborative
- Data-driven & evidence-based, not just gut feelings
- Focused and on-going process
- Elevated awareness of curriculum issues and learning outcomes

Questions?

<http://www.uoguelph.ca/vpacademic/avpa/outcomes/curriculummap.php>

References

Banta, T. W. and C. Blaich. Closing the assessment loop. *Change: The Magazine of Higher Learning* 43.1 (2010): 22-27.