Introduction to Curriculum Review

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Curriculum Review at the University of Calgary

Definition of Curriculum Review (CR):

Curriculum review is:

An academic, staff-led critical examination of each undergraduate and course-based master’s program for the purpose of optimizing the learning outcomes of that program. (University of Calgary, 2013, p. 3).

At the University of Calgary, curriculum reviews are a formative component of the overall quality assurance strategy and are focused on the continuing development of students’ learning experiences. The curriculum review process will generate an action plan for improving the program, and the impact of the review will be determined by evidence of implementation success (University of Calgary, 2013, p. 2).

Benefits of Curriculum Review:

- Improve the Student Learning Experience
  - Articulate the strengths of the program
  - Identify specific actions to address gaps within an academic program
  - Improve teaching and learning practices
  - Provide an opportunity for critical reflection on the program's curriculum
  - Provide evidence to drive decision making within the program
Guiding Principles of Curriculum Review at the University of Calgary

The curriculum review process at the University of Calgary is guided by the belief that the process will be faculty–led, evidence informed, focus on improving student learning, encompass a program level perspective, and an on-going effort to continuously improve the program.

**Contributions from and Collaboration among Instructors**
- Faculty-led investigation
- Contributions from and collaboration among instructors

**Evidence-informed**
- Several data sources used to inform discussion on the curriculum
- Data sources may include - standard report from OIA, curriculum mapping data, student surveys

**Focus on Student Learning**
- Frame the discussion to put the focus on enhancing the student learning experience

**Program Level Perspective**
- Examines the program as a whole
- Considers the learning experience of students throughout the program

**Continuous Improvement**
- Iterative process to be conducted every 5-7 years
- Action plan to guide the implementation of changes over time
Curriculum Review Process

Curriculum review at the University of Calgary is an iterative process that involves the components highlighted below:

Identifying Guiding Questions for the Review

Different faculties will be interested in exploring different aspects of their curriculum, from broad encompassing questions, to specific curricular concerns. Identifying questions to guide the curriculum review process provides a focus for the entire process.

Guiding questions will:
- Define the programs investigation
- Support the identification on the type of data to collect during the process
- Structure the action plan of the report
- Form the foundation of the interim report
Examples of guiding questions may include:

**Program**
- What are the strengths of the program?
- How are program-level learning outcomes addressed in specific courses within the program? Are there any gaps? Redundancies? Is there misalignment?
- How can we make our program more innovative?
- Are we preparing our students for future experiences?
- Student engagement:
  - How are we providing feedback to students across the program?
  - How are we fostering collaborative work in our courses?
  - What high-impact educational practices are implemented in our program, and where?

**Courses**
- Do we have the right core (required) courses in the program?
- Are our pre-requisite courses preparing students for upper-level courses?
- To what extent do teaching and learning activities scaffold student learning? Is more diversity needed in the strategies being used?
- To what extent do student assessment strategies support and capture student learning? Is more diversity needed in the assessment strategies being used?
- Learning technologies:
  - What practices exist in our program regarding the flipped classroom model?
  - What opportunities exist to expand our online course offerings?
- What approaches are different instructors taking to multiple sections of the course? How consistent are course outcomes, student learning experiences, and student assessments? Are there issues especially in courses that are prerequisites for other courses?
Learning Outcomes

A learning outcome is “an intended effect of the program educational experience that has been stated in terms of specific, observable, and measurable student performance” (Veltri, Web, Matveev & Zapatero, 2011). They define the knowledge, skills, and attitudes that students should be able to attain by the end of a unit of study.

Example of Learning Outcomes

- **Graduate attribute**: Communication
- **Program-level learning outcome**: Students will be expected to write an evidence-based research paper.
- **Course Outcome**: Students will be expected to evaluate the literature and select appropriate sources to support their arguments.
- **Lesson Objective**: Students should be able to use a standard citation style in their written work.

Program-level Learning Outcomes

Program-level learning outcomes state the intended knowledge, skills, and abilities that students are expected to meet in an academic course of study. They are statements that communicate what is critical, intentional, and special about the program. For example, a program-level learning outcome might be

   By the end of the program, students will be expected to write a paper that incorporates academic literature.
Course Outcomes

Course outcomes are statements of what students should be able to accomplish after completing the course. They state the knowledge, skills, and attitudes that students should be able to attain by the end of the course. They are generally more specific than a program-level learning outcome, but not as granular as a lesson objective, however they should be in alignment with both. An example of a course outcome that will map directly back to the program–level outcome above will be:

By the end of the course, students should be able to find appropriate peer-reviewed academic articles to use in their written work.
Curriculum Mapping

Curriculum mapping is the process of associating course outcomes with program-level learning outcomes and aligning elements of courses with a program, to ensure that it is structured in a strategic, thoughtful way that enhances student learning (Adapted from Harden, 2001). It provides an effective strategy for articulating, aligning, and integrating learning outcomes across a sequence of courses, and explicitly identifying to students, instructors, administrators and external stakeholders how student learning outcomes are delivered within a degree program (Uchiyama and Radin, 2009).

What is being mapped:
- Course outcomes to program-level learning outcomes
- Student assessments to course outcomes
- Teaching and learning activities to course outcomes
- Optional: Program committees can identify other things they want to map, such as faculty initiatives or a strategic focus. For example, they might want to map where writing skills are being developed throughout the program

Sample curriculum map

<table>
<thead>
<tr>
<th>TLA’S</th>
<th>Program–level Outcome #1</th>
<th>Program–level Outcome #2</th>
<th>Program–level Outcome #3</th>
<th>Program–level Outcome #4</th>
<th>Program–level Outcome #5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Outcome #1</td>
<td>Lecture, readings</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Outcome #2</td>
<td>Case-study Reflection</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Outcome #3</td>
<td>Lecture, reading</td>
<td>*</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Course Outcome #4</td>
<td>Reading Discussion</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Outcome #5</td>
<td>Lecture</td>
<td>*</td>
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</tr>
</tbody>
</table>
Benefits of Curriculum Mapping

- Enhance standards of excellence in student learning
- Align the courses within a program with the program-level learning outcomes, teaching and learning activities, and assessment
- Ensure graduates have opportunities to acquire desired knowledge, skills and abilities
- Evidence-based means of evaluating programs
- Account for program quality and for accreditation purposes
- Foster discussions about curriculum within a faculty or department
- Articulate tacit understandings about a program
- Promote continuous improvement approach
- Document program strengths (Uchiyama & Radin, 2009; University of Calgary, 2013; Wolf, 2008)
- Identify specific actions to address gaps within an academic program

Data Sources for Curriculum Review

Various sources of data can be used to inform decisions made during the curriculum review process at the University of Calgary.

Mandatory:

- Standard Report from the Office of Institutional Analysis (OIA)
  - Demographic information
  - NSSE engagement indicators and responses (%) for specific questions
- Output of curriculum mapping
- Data from students (such as surveys, focus groups)

Other potential data:

- Alumni data
- Instructor data
- Literature review
- Potential employer data
- Other data source as identified by the Review Lead
Analysis and Discussion
During the analysis phase of the curriculum review process, data collected from the curriculum mapping process, OIA, NSSE, and students’ survey/interviews, are discussed. These discussions guide decisions on what direction the faculty or department would take to address findings from the data.

Action Plan
Recommendations from the analysis phase is documented in an action plan which documents the steps that must be taken by the faculty or department to achieve set goals. The action plan identifies action that should be taken, roles responsible for the action, and the time frame required to achieve the goals set by the faculty or department. The action plan defines a road map for the faculty or department’s curriculum for the next five years. A sample action plan is shown below:

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Action Item</th>
<th>Timeline</th>
<th>Responsibility</th>
</tr>
</thead>
</table>
| Focus on written communication in the program | • Limit class sizes to 30 students for adequate feedback to occur.  
• Increase the number of teaching assistants assigned to the writing course to give formative feedback.  
• Ensure an assessment of students prior knowledge of written communication is done at the start of each course | Fall 2017  
Immediately  
Ongoing | Department head  
Program coordinator  
All instructors |

Rationale:
• The program’s curriculum mapping data (chart 3), shows a gap in achieving our written communication program goals.
• Data from the student survey indicate a need to increase the amount of formative feedback being given within the program.

Final Report
*(p. 8 of QA Handbook, Curriculum Reviews)*

A final report will be prepared for use within the program and for submission to the Provost’s Office. It will be accompanied by an approval form that is signed by the dean or designate, and in the case of a review of a Master’s level program, the form will also be signed by the Dean of Graduate Studies.
Roles and Responsibilities
*(p. 3 of QA Handbook, Curriculum Reviews)*

**Review Lead:**
- Is a faculty member
- Acts as a project manager
- Makes decisions about the review process
- Tracks the progress of the review
- Delegates responsibilities

**Review Team:**
- Includes all full-time faculty teaching in the program; sessional instructors are invited to participate
- Provide feedback on program-level learning outcomes
- Maps the curriculum for courses they teach
- Can assist with data analysis and generating the action plan

**Unit Lead:**
- Department Head or Associate Dean responsible for the unit
- Makes decisions
- Approves the CR internal and public reports
- Supports the process as needed

**Curriculum Development Specialist:**
- From the Educational Development Unit of the Taylor Institute for Teaching and Learning
- Provides guidance through consultations when needed
- Supports the process with resources and templates
- Gives presentations and facilitates working sessions as time permits
Roles and Responsibilities (contd.)

<table>
<thead>
<tr>
<th>Your Role</th>
<th>Our Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make decisions, eg. data collection strategy</td>
<td>Provide guidance and strategies</td>
</tr>
<tr>
<td>Arrange workshops and set agenda</td>
<td>Provide options for curriculum mapping</td>
</tr>
<tr>
<td>Support curriculum mapping</td>
<td>Advise, provide templates, instructions for your customization</td>
</tr>
<tr>
<td>Write the CR report</td>
<td>Provide feedback</td>
</tr>
<tr>
<td>Implement the action plan</td>
<td>Facilitate a session to introduce the process or discuss the review</td>
</tr>
</tbody>
</table>

Dissemination and Curriculum Reviews

- Faculty or Department: Check with your Associate Dean of Teaching and Learning
- CFREB: Get ethics approval or certificate of exemption

Issues:
- Secondary use of data
- Using student data? What sort of data?
- How have people been informed about process and dissemination?
- Are the data publicly available? For example, are course outlines posted online? Expectations of privacy? Impact on professional aspects?
- Data presented in aggregate or individual?
- Use of proprietary data (faculty, department)

Curriculum Review and Dissemination: Helpful Links

Research Activities Exempt from CFREB Review:

http://www.ucalgary.ca/research/files/research/150130-cfreb_research_exempt_from_review.pdf

Mount Royal University Guidelines for Differentiating between Quality Assurance and Research:


Patti Dyjur, PhD
Frances Kalu, PhD
References:


For more information:

Provost and Vice-President (Academic): Quality Assurance Reviews
http://www.ucalgary.ca/provost/activities/reviews


Articles, resources and curriculum mapping templates:
http://curriculummapping.weebly.com/
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