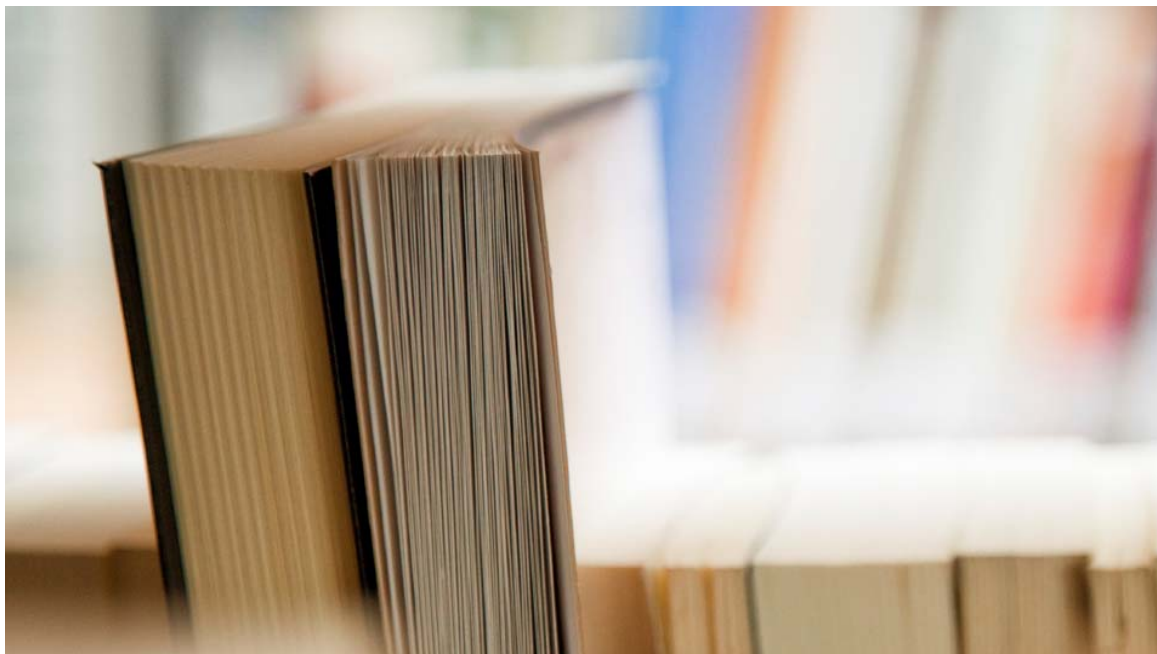


# Introduction to Curriculum Review



**UNIVERSITY OF CALGARY**  
Taylor Institute for Teaching and Learning  
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# Curriculum Review at the University of Calgary

## Understanding Curriculum

Curriculum, with Latin roots – ‘currere’ means running of the course (Pinar, 2011), a racecourse. In an academic environment, our curriculum – the race course, becomes prescribed and described as the program of study, made up of a series of individual courses. Toombs & Tierney (1993) also describe curriculum as ‘an intentional design for learning negotiated by faculty in the light of their specialized knowledge and in the context of social expectations and student’s needs.

However, curriculum is not static, but remains fluid and dynamic, ever changing. With learning being interpreted and experienced differently by diverse participants, making it important that we develop an awareness of our curriculum as constructed everyday by participants in our educational program. How are our participants experiencing the ‘race course’ – what is their lived experience? Are we meeting identified program learning outcomes? How best can we enhance the learning experience of our participants?

## Definition of Curriculum Review (CR)

The curriculum review process provides an evidence-based means to answer questions we may have about our program. At the University of Calgary, curriculum review is defined as:

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, 2015, 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, 2015, 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

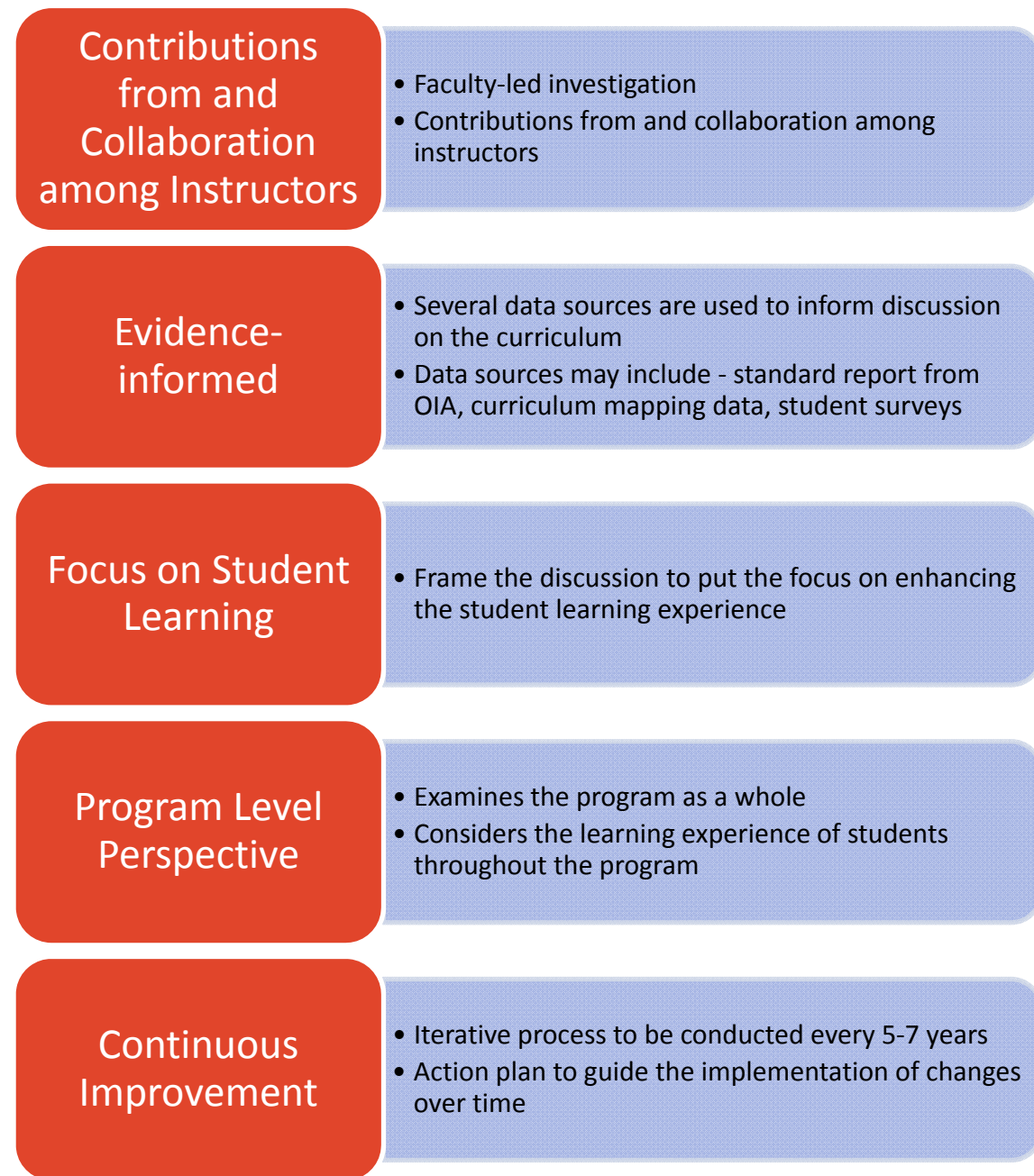
Provide an opportunity for critical reflection on the program's curriculum

Provide evidence to drive decision making within the program

Understand the relationship among courses within a program

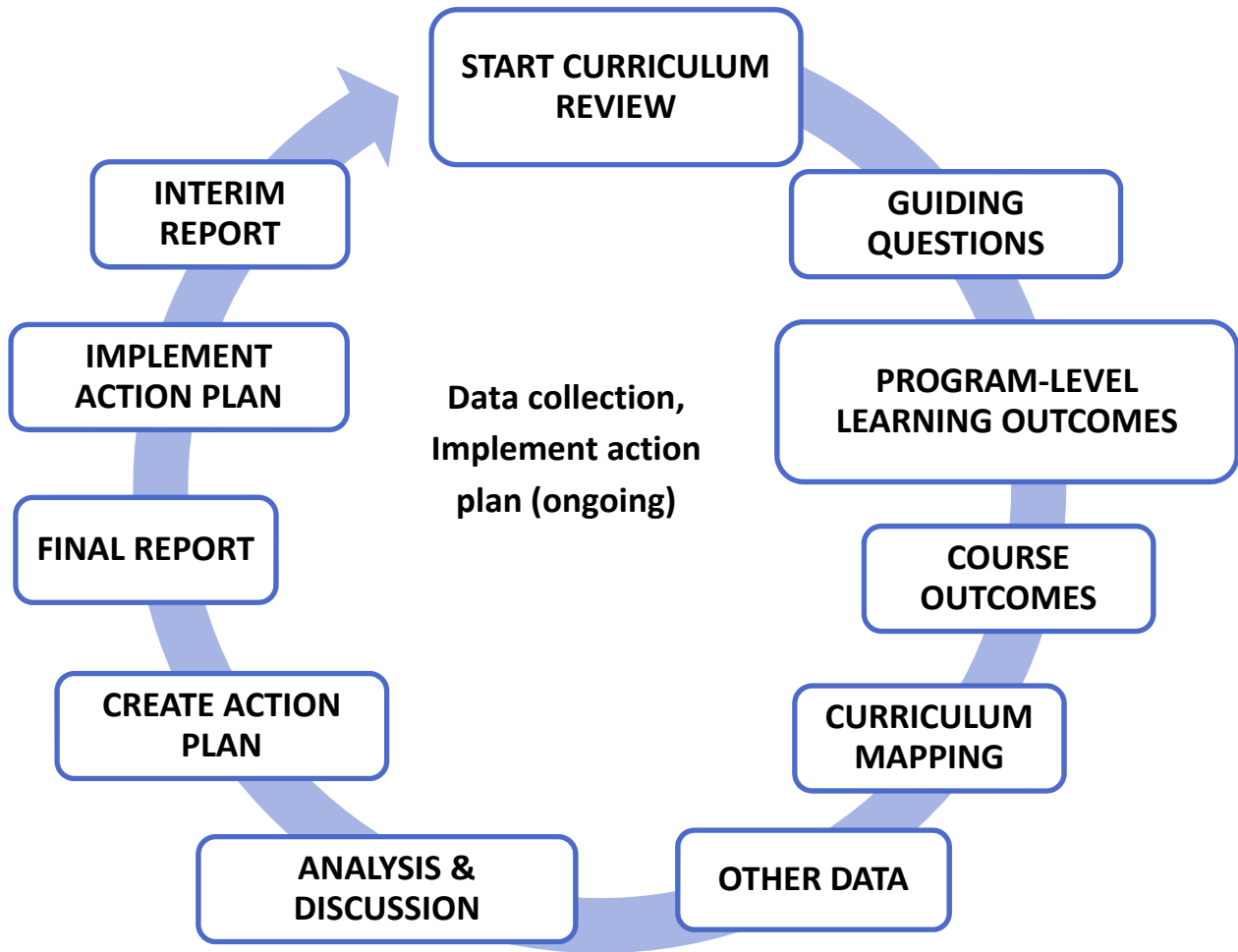
# Guiding Principles of Curriculum Review at the University of Calgary

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.

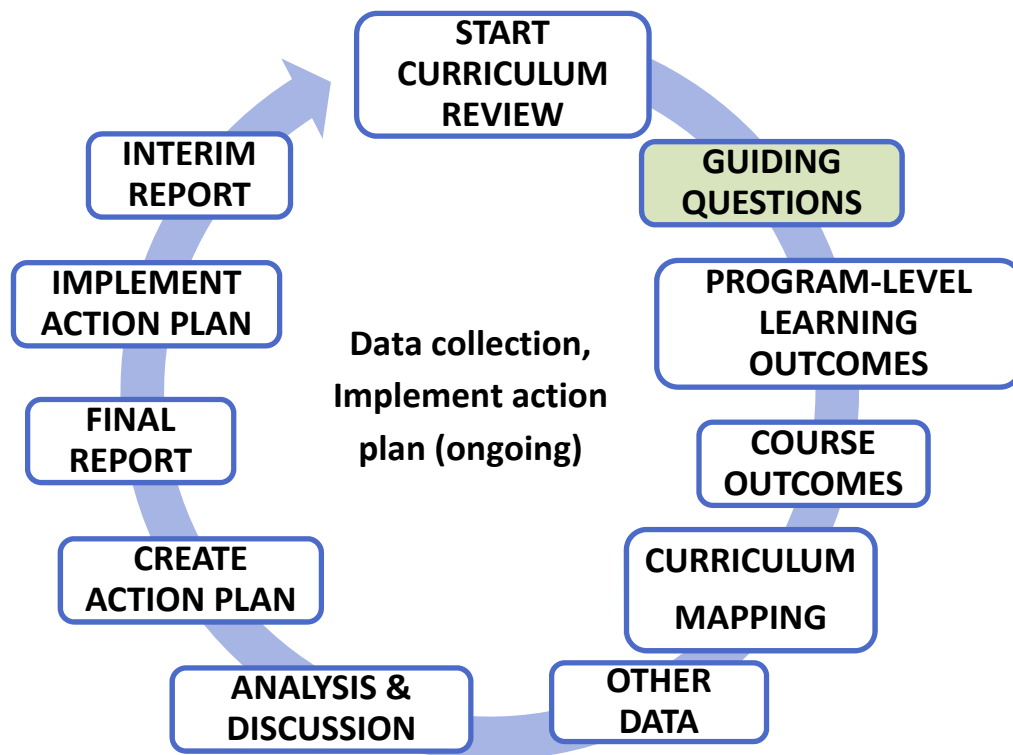


# Curriculum Review Process

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



## Guiding Questions



The curriculum review process University of Calgary

### What are Guiding Questions?

Guiding questions are critical questions or concerns that guide the curriculum review process (University of Calgary, 2015). 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 in the curriculum review process will:

- Define the programs investigation
- Support the identification of 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

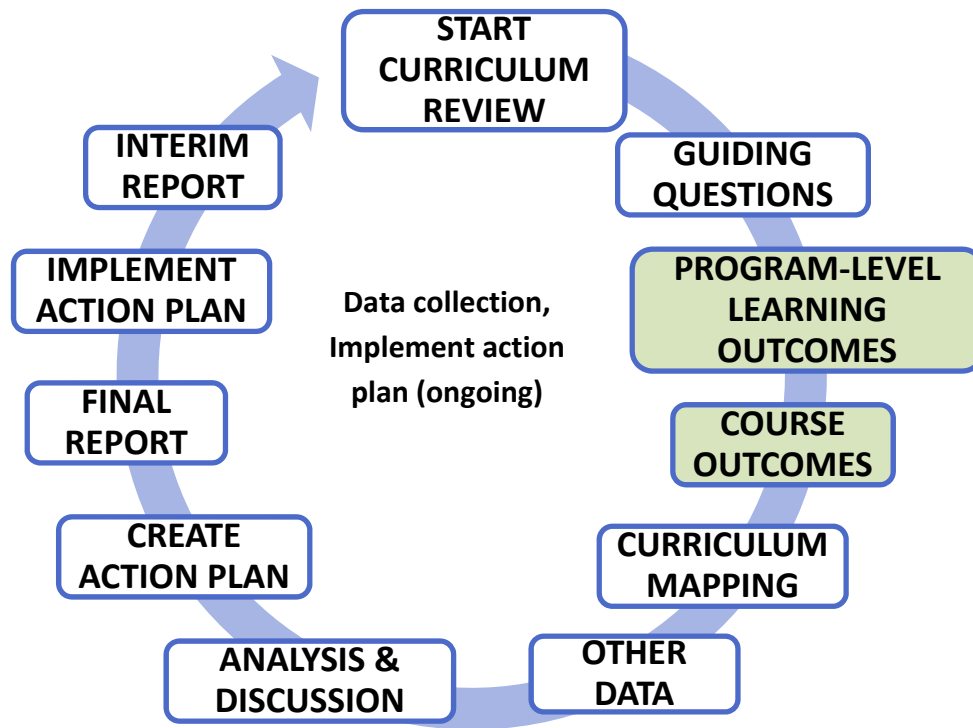
### Questions about the Program

- 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?
- Are the entry requirements adequate?
- What kinds of long-term independent accomplishments are desired?
- In what ways do our program level learning outcomes reflect 21<sup>st</sup> century skill development?
- 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?

### Questions about 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?
- How does each course contribute to the overall program experience?
- 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?
- Should anything be changed with regards to sequencing or laddering of the courses or other learning experiences?

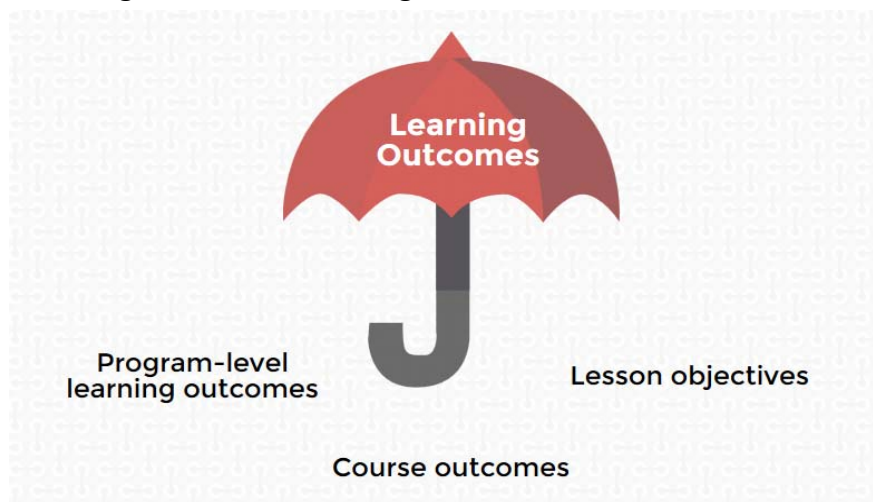
# Learning Outcomes



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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, Webb, 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.

## An Example of Learning Outcomes for a Program



- **Graduate attribute:** Communication
- **Program-level learning outcome:** Students will be expected to write an evidence-based research paper.
- **Course Outcome:** Students should be able 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 by the end of a program. 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.

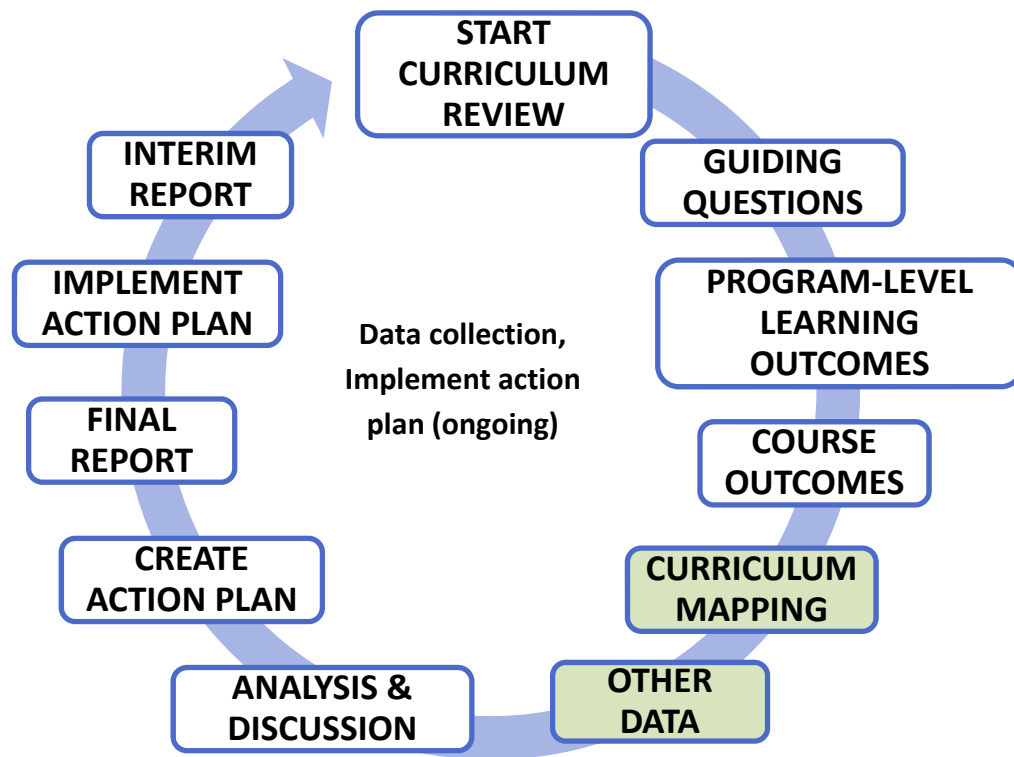
## Course Outcomes

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



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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). Borin (2010) adds that as a visual approach, curriculum mapping can be used to analyze the underlying framework of a program.

### 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

	TLA'S	Program– level Outcome #1	Program– level Outcome #2	Program– level Outcome #3	Program–level Outcome #4	Program– level Outcome #5
Course Outcome #1	Lecture, readings	*	*			
Course Outcome #2	Case-study Reflection	*				
Course Outcome #3	Lecture, reading	*			*	
Course Outcome #4	Reading Discussion	*				
Course Outcome #5	Lecture	*	*	*	*	

### 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
- Faculty are more engaged in discussions about the overall program goals when they see how their courses fit into the program (Metzler, Rehrey, Kurz & Middendorf, 2017)
- Articulate tacit understandings about a program
- Promote continuous improvement approach
- Document program strengths (Uchiyama & Radin, 2009; University of Calgary, 2015; Wolf, 2008)
- Identify specific actions to address gaps within an academic program

## Other Data Sources for Curriculum Review

In addition to data from the curriculum review process, various sources of data can be used to inform decisions made during the curriculum review process at the University of Calgary.

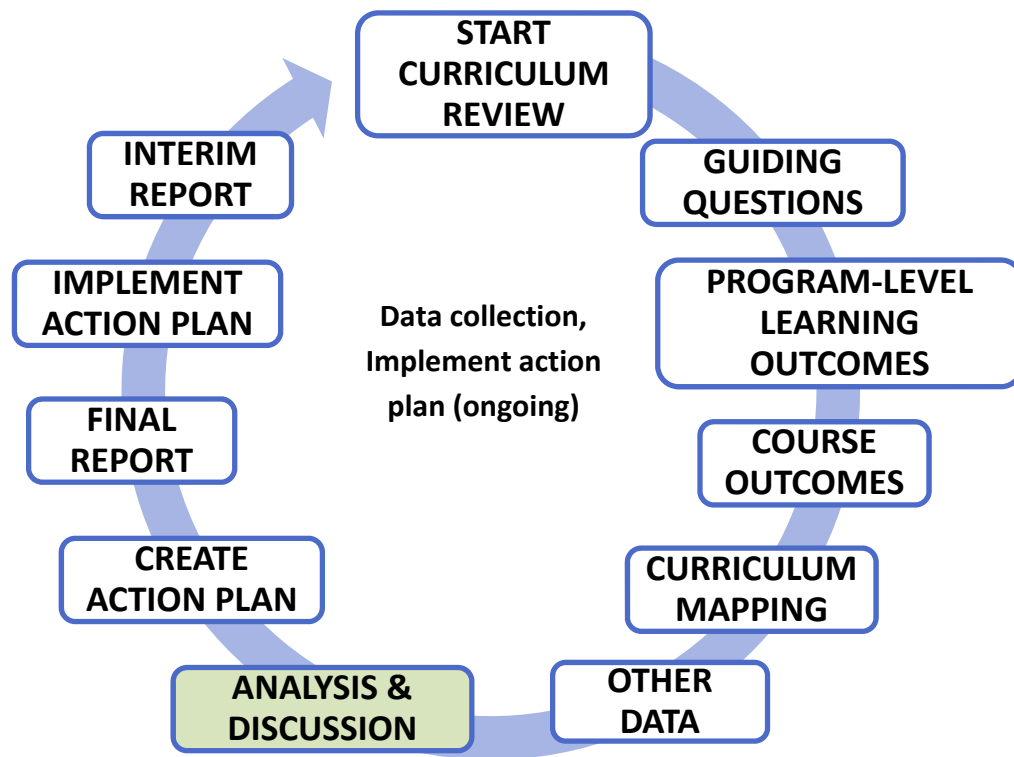
### **Mandatory**

- 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 data from surveys, focus groups)

### **Other potential data sources**

- Canadian Graduate and Professional Student Survey (CGPSS)
- Alumni data
- Instructor data
- Literature review
- Potential employer data
- Environmental scan
- Program documentation
- Feedback or report from an external reviewer
- Past reviews
- Other data source as identified by the review lead

## Analysis and Discussion

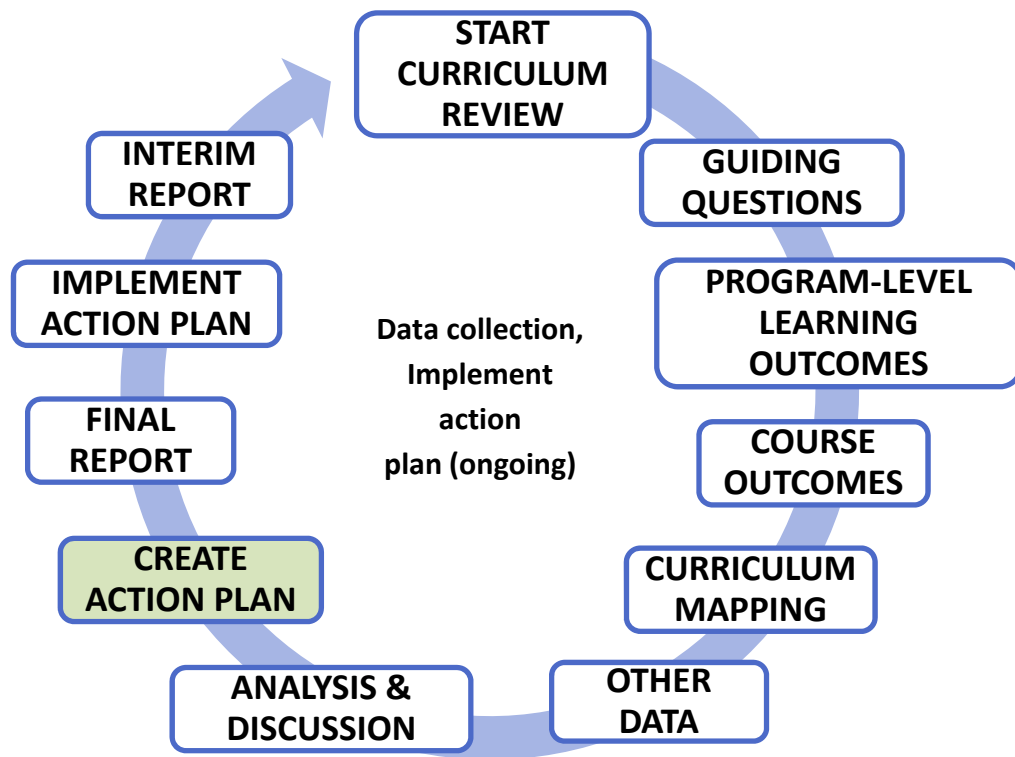


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The success of the curriculum review process is not about collecting perfect sets of data, but about using the data collected to inform meaningful, collaborative discussions to inform decisions made about the program (Kenny, 2014).

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



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Recommendations from the analysis phase are documented in an action plan which outlines 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.

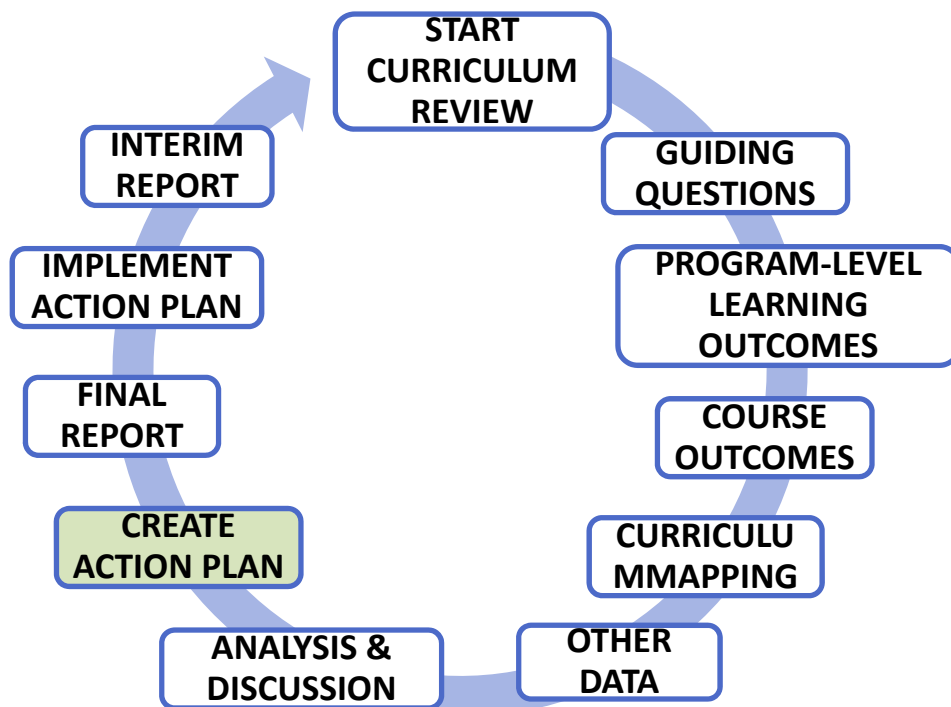


A sample action plan is shown below:

Recommendation	Action Item	Timeline for Implementation	Lead Responsibility
Focus on written communication in the program	Invite a guest presenter from the Student Success Centre at strategic points in the program to present on writing skills	1 year	Program Coordinator, Instructors
	Find room in the budget to allot one teaching assistant to the writing-intensive courses at the 300-level	2 years	Department Head
	Diversify assignments in courses that do not have any written assignments other than the midterm and final exam	1 year	Instructors
<p>Rationale:</p> <ul style="list-style-type: none"> <li>• The program’s curriculum mapping data (chart 3) shows a gap in achieving our written communication program goals.</li> <li>• Data from the student survey indicate a need to increase the amount of formative feedback being given to students in the program.</li> </ul>			

## Final Report

(p. 8 of QA Handbook, Curriculum Reviews)



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A final report will be prepared for use within the program and for submission to the Provost's Office. This will include:

### **Curriculum Review Internal Report**

Written by the Review Lead in consultation with the review team, the internal report will include a summary of the program context, a checklist of the process followed, and the findings and action plan emerging from the Curriculum Review, including points of alignment with the University of Calgary Academic Plan.

### **Curriculum Review Public Report**

The Curriculum Review Public Report will include a summary of the program context, the guiding questions, and the action plan emerging from the Curriculum Review (University of Calgary, 2015, p. 3).

The final report 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

### Students

Students can be involved in curriculum review in a variety of ways, such as the following suggestions:

- Use a survey, interviews or focus groups to gather data on student perceptions of the program
- Include student representatives on the review team (undergraduate and graduate, different specializations, etc.)
- Hire an RA to do work such as implementing surveys and focus groups
- If you have a student council or committee, get feedback from them at strategic points of the process and input into the action plan

## Curriculum Development Specialists

- From the Educational Development Unit of the Taylor Institute for Teaching and Learning
- Provides consultative expertise when needed
- Supports the process with resources and templates
- Provides facilitative leadership for working sessions as time permits

## Roles and Responsibilities (contd.)

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

## 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](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:

<http://research.mtroyal.ca/wp-content/uploads/2015/01/QAguidelines.pdf>

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- Wolf, P., & Christensen Hughes, J. (Eds.). (2008). *Curriculum development in higher education: Faculty-driven processes & practices*. San Francisco: Jossey-Bass.

## **For more information:**

Provost and Vice-President (Academic): Quality Assurance Reviews

<http://www.ucalgary.ca/provost/activities/reviews>

Council of Ministers of Education. (2007). *Ministerial statement on quality assurance of degree education in Canada*. Retrieved from

<http://www.cmec.ca/Publications/Lists/Publications/Attachments/95/QA-Statement-2007.en.pdf>

Articles, resources and curriculum mapping templates:

<http://curriculummapping.weebly.com/>

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