

TUNING THE CURRICULUM A GUIDE TO CURRICULUM REVIEW

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Quality of Curriculum Design

As part of program review, the program review team must complete a Self-Study Report. The Self-Study Report includes an assessment of the quality of the program's curriculum design (Chapter 3: Quality of Curriculum Design).

At the heart of any program lies its curriculum: a coherent curriculum is fundamental to meaningful learning and student success. A program review that aspires to have substance must conduct a detailed evaluation of the program's competencies and learning outcomes. Is the program's mandate in line with the institution's mission? Is the program sufficiently supported by viable and relevant course competencies and learning outcomes? Are learning outcomes specific, measurable and commensurate with the level of credential students are seeking to attain? How does the curriculum reflect the needs, changing demands and anticipated trends of the discipline/sector students expect to join? How is the curriculum preparing students for employment and/or further education? Does the curriculum make explicit the skills, knowledge and values students will be able to acquire through the program and, consequently, use to gain employment in the discipline/sector of their choice?

An in-depth curriculum review provides the program review team opportunities to link their curriculum to the realities of the world beyond the program and produce graduates who are equipped to thrive in a competitive employment market. Reinforcing the curriculum/career connection is vital, particularly to KPU students. In a recent KPU study, 67% of students surveyed stated they were attending KPU for job-related reasons (KPU Student Satisfaction Survey 2017, *Students' Decision to Attend KPU*). Reviewing a program's curriculum to ensure its discipline/sector relevancy is therefore imperative.

To conduct a curriculum review that links discipline/sector relevance to student learning, the program review team is required to develop and analyze the following assets:

- » Curriculum Profile
 - Overview of the Program
 - Competency Statements (specific and generic)
 - Measurable Student Learning Outcomes
 - Credential-Level Specifications
- » Discipline/Sector Competency Survey
- » Career Pathways Map

This document provides guidance on creating these assets.

About Tuning

Tuning the curriculum is a faculty-led curriculum review process. Through this process, faculty will clearly articulate the skills and knowledge students should demonstrate by the end of their program, and link those competencies to the requirements of the associated discipline/sector.

Tuning is faculty led because faculty are responsible for identifying, defining and assessing learning criteria within a program. Through Tuning, they will determine the competencies students should be able to achieve upon completion of each level of the program (e.g. certificate, diploma, associate degree, degree) and create clear, coherent pathways for students to navigate their educational experience. These pathways should reflect learning that is well sequenced and integrated across the program. Tuning does not, however, mandate specific instructional strategies within a course. Instructors have the freedom to deliver content in the way which best supports student learning outcomes.

Tuning has many benefits. By establishing transparent learning outcomes, it helps to specify the aims and objectives of the program to potential students, employers, the institution, and the larger community. By providing faculty with clear points of reference around which to discuss and assess a curriculum, Tuning engenders awareness of diverse instructional and delivery methods. By establishing transparent learning outcomes and pathways to program completion, it improves student retention. By aligning the program to the demands of the workplace, Tuning ensures a program's relevance.

While there are many different approaches to curriculum review, Tuning provides an accessible, practical and cohesive way of gauging the quality of a program's curriculum design. More importantly, it provides an intuitive system for connecting a program's curriculum to the communities and people KPU serves.

Curriculum Design Components

For the purpose of program review, three assets are required: a Curriculum Profile, a Discipline/Sector Competency Survey, and a Career Pathways Map. Descriptions and examples of each curriculum design component are provided below.

1. Curriculum Profile

The curriculum profile consists of the following: 1) an overview of the program; 2) specific and generic competency statements; 3) measurable learning outcomes; and 4) credential-level specifications.

Overview of the Program

The overview is a short (1-2 paragraphs), narrative description of the overarching nature, scope and goals of the program. Questions to consider when describing the program might include the following:

- » What are the focus, scope and values of the program?
- » What issues does it respond to and address?
- » How does the program contribute to human knowledge?
- » What are its epistemological roots?
- » How does it approach teaching, learning and assessment?

Here is an example of such a narrative:

"History is a set of evolving rules and tools that allows us to interpret the past with clarity, rigor, and an appreciation for interpretative debate. It requires evidence, sophisticated use of information, and a deliberative stance to explain change and continuity over time. As a profoundly public pursuit, history is essential to active and empathetic citizenship and requires effective communication to make the past accessible to multiple audiences. As a discipline, history entails a set of professional ethics and standards that demand peer review, citation, and toleration for the provisional nature of knowledge."

(The American Historical Association, 2013, para.2)

Competency Statements

A competency statement is a *general* description of the knowledge, skills and abilities students should gain through **successful completion of a program**. They are the building blocks of the program and provide graduates with the terminology to describe the capabilities they can bring to a workplace or place of further education.

Within the context of a KPU program review, each program will have a list of both *specific* and *generic* competencies. *Specific* competencies are competencies that are unique to the discipline.

Here are a few sample specific competency statements, developed by KPU programs as part of their program review:

Program	Sample Competency Statement		
Asian Studies	Apply knowledge gained in the Asian Studies program to specific		
	situations in our local communities.		
Economics	Identify, critically analyze and solve economic problems related to		
	business, behaviour or policy.		
Engineering	Apply engineering descriptive geometry to solve problems in three-		
	dimensional engineering geometry.		
English Language	Apply writing process skills to draft, edit, revise and format a guided		
Studies	research paper, essays, reports, and summaries.		
Fashion Marketing	Analyze and forecast fashion trends.		
Nursing	Provides nursing services and works with others to provide health		
	care services in the best interest of clients.		

Generic competencies, refer to the following:

- » Essential Skills
 - Written communication
 - o Oral communication
 - o Group collaboration
 - Critical analysis
 - o Problem resolution
 - o Learn on your own
 - o Reading and comprehension

Creating Competency Statements

Competency statements answer the following questions: 1) what knowledge, skill or ability will the student have upon completion of the program; and 2) how will the learner demonstrate this competency?

Follow these steps to create a competency statement:

STEP 1: Identify the HOW of the Competency Statement

Select a present tense, active verb that most clearly describes what students must do to demonstrate successful attainment of the competency. Avoid verbs that are vague or cannot be observed (e.g. "know," "learn" or "understand"). Pick verbs that are specific.

STEP 2: Determine the WHAT of the Competency Statement

Consider the "what" of the competency. What skill set, knowledge or ability will students be expected to walk away with upon completion of program? What assets will they be developing? To avoid overly vague or generalized competency statements, acknowledge the frame of reference within which the program operates or assessment will occur.

For example, here is a competency statement from KPU's Psychology program:

Compare and contrast the principles and methods of science-based disciplines.

Here is a break-down of the same statement:

Statement	Purpose
Compare and contrast	HOW
the principles and methods	WHAT
of science-based disciplines	FRAME of Reference

Learning Outcomes

While competency statements are broad, generalized and linked to an entire program, a learning outcome is a *specific* statement that describes exactly what students should be able to demonstrate **by the end of a lesson or course**. Each competency statement can generally be parsed out into several learning outcomes.

Learning outcomes should be SMART, i.e.:

Specific Communicate clear, succinct and direct statements

Measurable Include benchmarks for determining success

Attainable Aim for what's achievable rather than aspirational Relevant Reflect the needs of the student and program

Time Bound Acknowledge time, space and resource limitations

Here are a few learning outcome examples:

By the end of this course, students should be able to: Create a vivid and compelling protagonist. (For a Creative Writing course)

Apply appropriate marketing tools to develop a marketing plan. (For a Marketing course)

A useful way to select appropriate action verbs for learning outcomes is to refer to Bloom's Revised Taxonomy (2001). The Taxonomy lists six levels of cognitive (or knowledge-based) learning.

In ascending order of cognitive skill, these levels are:

- 1. Remember
- 2. Understand
- 3. Apply
- 4. Analyze
- 5. Evaluate
- 6. Create

The table on the next page includes examples of active verbs for each level of learning.

The Knowledge Dimension				
The Cognitive Process Dimension	Factual The basic elements students must know to be acquainted with a discipline or solve problems in it.	Conceptual The interrelationships among the basic elements within a larger structure that enables them to function together.	Procedural How to do something, methods of inquiry, and criteria for using skills, algorithms, techniques, and methods.	Metacognitive Knowledge of cognition in general as well as awareness and knowledge of one's own cognition.
Remember Retrieve relevant knowledge from long-term memory.	List Ex: list primary colours.	Recognize Ex: Recognize symptoms of exhaustion.	Recall Ex: Recall how to perform CPR.	Identify Ex: Identify strategies for retaining information.
Understand Construct meaning from instructional messages including oral, written, and graphic communication.	Ex: Summarize the main points of an article.	Classify Ex: Classify characters by physical features.	Clarify Ex: Clarify assignment instructions.	Predict Ex: Predict one's response from culture shock.
Apply Carry out or use a procedure in a given situation.	Respond Ex: Respond to frequently asked questions.	Provide Ex: Provide advice to minors.	Carry out Ex: Carry out PH tests of water samples.	Use Ex: Use techniques that match one's strength.
Analyze Break material into constituent parts and determine how parts relate to one another and to an overall structure or purpose.	Ex: Select the most complete list of activities.	Differentiate Ex: Differentiate Canada's government from America's.	Ex: Integrate a range of best practices into a particular task.	Deconstruct Ex: Deconstruct one's biases.
Evaluate Make judgements based on criteria and standards.	Check Ex: Check for consistency between sources.	Determine Ex: Determine relevance of results.	Judge Ex: Judge efficiency of sampling techniques.	Reflect Ex: Reflect on one's own progress.
Create Put elements together to form a coherent whole; reorganize into a new pattern or structure.	Generate Ex: Generate a log of daily activities.	Assemble Ex: Assemble a model of a complex system in a computer simulation.	Design Ex: Design an efficient project workflow.	Create Ex: Create an innovative learning portfolio.

This table was adapted, by Brianna Lewis (KPU student), from Anderson et al. (2014). A taxonomy for learning, teaching, and assessing: A revision of Bloom's. Essex: Pearson. It is available at https://our.kpu.ca/sites/committees/senate/vicechair/Course%20Outline%20Wiki/Learning%20Outcomes.aspx

Credential-Level Specifications

KPU offers a range of credentials ranging from citations to post-baccalaureate degrees. The level of proficiency students must demonstrate upon successful completion of their program must depend on the type of credential they are receiving. As a general rule, learning outcomes should be "scaled up" as the level of credential increases.

The learning outcomes for an advanced course – one that focuses on generating new forms of knowledge - will be different from that of a beginner-level course where students only need to memorize simple concepts. Identifying the level of proficiency students are to achieve helps ensure attainable and credential-appropriate learning outcomes.

Here is an example of expected learning outcomes in an English program that offers certificates, diplomas and degrees. While the competency statement might remain consistent throughout the program, the learning outcome might differ depending on the level of credential offered.

COMPETENCY STATEMENT:			
Rhetorical Kno	Rhetorical Knowledge		
Students should respond appropriately to a variety of rhetorical situations			
Certificate	Identify rhetorical appeals in assigned readings		
Diploma	Apply rhetorical appeals when writing a short (150-word) persuasive		
	essay		
Degree	Critique a writer's use of rhetorical appeals in long-form essays		

As the table demonstrates, the learning outcome increases in complexity depending on the credential level.

Curriculum Profile Template

There are several ways to create a curriculum profile that puts the Overview of the Program, Competency Statements, Learning Outcomes and Credential-Level Specifications together. The following page features one such template. Please modify the template depending on the needs of your program.

CURRICULUM PROFILE TEMPLATE

Overview of the Program

Competency S	tatement:
Credential	Learning Outcomes
Credential 1	Learning Gateomes
Credential 2	
Credential 3	
Etc.	
Competency S	tatement:
Credential	Learning Outcomes
Credential 1	Learning Outcomes
Credential 2	
Credential 3	+
Etc.	
	hatamant.
Competency S	
Credential Credential 1	Learning Outcomes
Credential 2	
Credential 2	
Etc.	
Competency S	
Credential	Learning Outcomes
Credential 1	
Credential 2	
Credential 3	
Etc.	
Competency S	tatement:
Credential	Learning Outcomes
Credential 1	
Credential 2	
Credential 3	
Ftc	

Note: Add as many competency statements and learning outcomes as necessary. Please remember to include all specific competency statements as well as any degree-level standards, essential skills, and core competencies that are relevant to the program.

2. Discipline/Sector Competency Survey

During the data-gathering phase of program review, members of the discipline/sector provide feedback to ascertain if a program is best preparing graduates for employment and/or further study. More specifically, discipline/sector representatives provide feedback on competency statements associated with the program.

Once the competency statements have been compiled, they are presented to discipline/sector representatives for feedback. KPU's Office of Planning & Accountability (OPA) department designs and administers this survey.

Here is a sample of the type of questions sent to discipline/sector representatives:

Considering the needs and expectations of your organization, how important is it for an entry-level employee to be able to demonstrate the following?

Competency	Not at all important	Somewhat important	Very important	Essential
Competency Statement 1	0	0	0	O
Competency Statement 2	O	0	O	O
Competency Statement 3	0	0	0	O
Competency Statement 4	•	0	•	O
Competency Statement 5	O	•	•	O

3. Career Pathways Map

A Career Pathways Map is a simple visual representation of the types of careers available to graduates of the program undergoing review. The Map benefits students in numerous ways. Because students often have difficulty aligning what they have learned with employment possibilities, the Map can provide students useful information about post-graduation options they may have never imagined. It may also clarify decision-making processes as students select electives, explore internships and embark on research projects as part of their employment preparation. The Map also aids prospective students as they choose programs, majors and begin to build towards their future.

The Career Pathways Map can also illuminate realities and/or identify possibilities that even faculty may not have considered. A recent *Forbes* article revealed a Liberal Arts degree - while generally not associated with a specific career trajectory – has become one of Silicon Valley's most sought-after degrees (Anders, 2015). The competencies the degree bestows upon graduates – the ability to think critically, communicate clearly, write persuasively, conduct data-driven research, and sift through opposing viewpoints – are manifold and can

offer a myriad of traditional and non-traditional career options. Being aware of these options can enable faculty to emphasize transferable competencies more effectively in their curriculum. A Career Pathways Map can shed light on graduate success stories as well as provide faculty fresh ways of making connections between the curriculum and employment.

For the purposes of program review, the Career Pathways Map should be developed in consultation with a range of stakeholders. These include, but should not be limited to, advisory boards, current and prospective employers, professional associations, alumni, discipline/sector leaders and employment databases. KPU's Office of Planning & Accountability (OPA) department is on hand to provide information on employment trends and projections. The Career Pathways Map could also include post-graduate programs. While these are not technically employment, they may include a vital next step for students and should be considered when assessing how well a program prepares its graduates for life beyond KPU.

The Career Pathways Map can take a variety of forms depending on a program's structure, aims and post-graduate options. The following examples were developed by two KPU programs as part of their program reviews.

EXAMPLE 1: Policy Studies

Policy Studies in Sustainability CAREER PATHWAYS

Your Passion You

Your Policy Studies Degree

Environmental Conservation
Sustainable Urban Planning
Participatory Democracy
Indigenous Sovereignty
Energy Alternatives
Climate Change Adaptation

Your Major Your Minor

Other certificates (like NGO)

Natural Resources Management Poverty and Income Inequality Social Justice

Food Security

Employment Opportunities

Positions In these SECTORS

Policy Analyst Local government (municipal/regional)

Advisor Provincial government Researcher The federal civil service

Data Analyst First Nations or Indigenous government

Policy Writer Social justice NGO
Program Coordinator Environmental NGO

Lobbyist Labour unions

Communications Post-secondary administration
Development Worker Project Manager Environmental consulting

Program Director

Consultant

Additional Career Pathways

More Education

More Advanced Positions

Law School Lawyer acher Education Teache

Entrepreneur

Teacher Education Teacher, Education Policy

Urban, Community & Regional Planning Professional Planner
Environmental Management Senior Analyst
Public Policy Graduate Program Senior Consultant

Public Administration Graduate Program Senior Researcher

Manager Director

EXAMPLE 2: Fine Arts

Industry or Sector	Possible Careers	Potential Next Steps
Self-Employment	-Professional Artist	Working in a Fine Arts or Craft discipline
Post-secondary	- Professor, Fine Arts	Entry-level position (for technician), all
Education	- Professor, Art History	other potential careers require further
	- Researcher	graduate training: MFA, MA, and/or
	- Technician	PhD depending on the discipline
	- Artist in residence,	and/or research area
	guest lecturer	
	- Archivist	
	- Librarian	
Digital Arts,	- Web Design	Entry-level Position, or specialized
Interactive Media	- Game Design	program
	- Concept Artist	
	- Digital Photographer	
Museum, Gallery,	- Curation	Entry-level Position, or specialized
Studio	- Public Programs,	program
	Education	
	- Preparator	
	- Artist Assistant	
	- Writing	
	- Exhibit Designer	
Na dalla	- Photographer	Falsa la al Bastita a accessibilità di
Marketing,	- Branding	Entry-level Position, or specialized
Advertising,	- Graphic Design	program
Publishing	- Publishing/Layout	
	PhotographerWriting	
	- Illustration	
Architecture	- Architect	Master of Architecture,
Architecture	- Landscape Architect	Master of Landscape Architecture,
	- Urban Design	Master of Urban Design,
	- Environmental Design	Master of Environmental Design
Education: K-12	- Teaching Assistant	Specialized program, B.Ed., or PDP
	- Teacher	
Film, TV, Theatre	- Set Design	Entry-level position,
Arts and Stagecraft	- Prop Design	apprentice/intern, or specialized
	- Production Design	program
	- Assistantship	
	- Photographer	
Art Therapy	- Art Therapist	Masters, or specialized program

Industry or Sector	Possible Careers	Potential Next Steps
	- Counseling	
Design	- Industrial Design	Entry-level, or specialized program
	- Product Design	
	- Interior Design	
	- Graphic Design	
Education: Other	- Private: Post-	Entry-level position, specialized
	Secondary Teaching	program, B.Ed., PDP, or Masters
	(e.g. Arts Institute)	
	- Civic: Recreation and	
	Community Arts	
	Teaching	
	- Public Secondary &	
	Post-Secondary:	
	Continuing Education	
	- Independent: Art	
	instruction	
Art Market	- Art Advisor	Entry-level positions with an MA in Art
	- Art Appraiser	Business or an Art Appraisal License
	- Estate Planning	

To access other Career Pathway Maps, learn more about competency statements crafted by other KPU programs, or read their program review Self-Study Reports, simply visit https://our.kpu.ca/sites/progrev/SitePages/Home.aspx. If you have questions, please contact Melike Kinik-Dicleli at melike.kinik-dicleli@kpu.ca.

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