CURRICULUM ALIGNMENT FRAMEWORK *Guide*

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When the process for curriculum reviews began evolving, we identified that the work being done at the program level needed to carry through to the course level. Why spend all this time reviewing and modifying a program curriculum to not change anything at the course level!? We recognized the immensity of the task of shifting an entire program course by course and knew that it wasn't something that should be done by curriculum specialists alone.

Lethbridge College

CURRICULUM ALIGNMENT FRAMEWORK

Guide

A Curriculum Alignment Framework (Framework) should be designed and developed collaboratively with various stakeholders—including industry and faculty representatives as identified by the chair—to integrate opportunities for learners to develop knowledge and skill-based competencies to achieve each outcome. Essential concepts and skills are addressed for each outcome. They're then aligned with relevant learning opportunities and authentic assessment strategies that reflect what learners will need to understand and do after they have completed the learning experience and are applying their newfound skills/knowledge in the real world.

Process

The creation of the Curriculum Alignment Framework reflects the vision of a learning experience or a bundle of learning experiences and is based on data collected from various stakeholders including industry, faculty, students, government, and K–12.
This is a fluid document that should be updated on a regular basis by faculty.

If you require assistance while making updates, a curriculum specialist from EET is happy to help.

eetlc.ca/support.html
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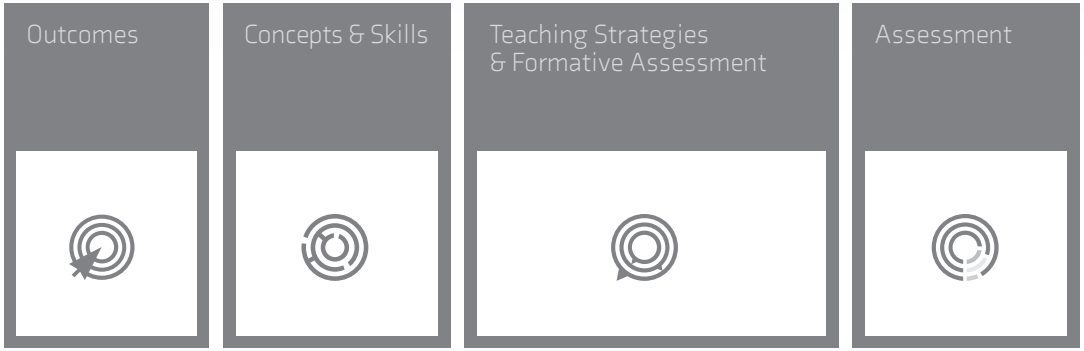
The process requires the expertise of the instructors, chairs, and industry partners who understand the intricacies of the subject matter. It results in a framework that's a communication tool between instructors, curriculum specialists, college leaders, and students so they can meaningfully discuss the instruction of the curricula.

The framework provides the essential categories for creating and aligning course curriculum. It can also be adapted to address individual program needs by adding other categories, such as industry competencies, accreditations, values, special materials, or resources key to planning (e.g. art, welding), and mapping assessment questions or criteria and 21st century skills to course and program outcomes to modular outcomes.

Follow the Curriculum Alignment Framework using the guide that follows.

(A blank template of the Curriculum Alignment Framework is available on the following page)



The Framework

Outcomes

What do learners need to be able to do as a result of the learning experiences in this course?

Concepts & Skills

Concepts: What should learners understand? What do students need to analyze, evaluate, or create?
Skills: What do learners need to be able to do?

Teaching Strategies & Formative Assessment

How can these concepts and skills be taught to promote deeper and more significant learning?

Assessment

What evidence can learners provide to demonstrate their ability to meet the intended outcome?

An editable Word document of the Curriculum Alignment Framework is available at
dl.dropboxusercontent.com/u/40284700/THE%20FRAMEWORK_F.docx

Outcomes

Each outcome should consist of at least one key assessment to measure a learner's ability to achieve that outcome. Once established, these two components drive the rest of the learning design process, including content, delivery, teaching, and formative assessment strategies.

Each statement should describe what learners should be able to do once they've completed an outcome, as a result of the learning experience(s).

Note:

Excellent resources for choosing the appropriate verbs are Fink's Taxonomy (2003) or the more common Bloom's taxonomy (1956). The University of New Mexico School of Medicine (2005) has a great resource that uses both Fink's and Bloom's taxonomies. If you want the perfect verb, start here:

ccoe.rbhs.rutgers.edu/forms/EffectiveUseofLearningObjectives.pdf

Using the Curriculum Alignment Framework template, start with the outcomes column. Otherwise known as "Backwards Design," (Wiggins, G., McTighe, J., 1998) this method starts by setting the goals or desired results of the learning experience first. Begin by asking yourself:

- **What do learners need to be able to do as a result of this learning experience?**
- **Are the outcomes connected to the program graduate roles and real-life contexts?**

In the row (under the outcomes column), write a statement that clearly describes what you intend for learners to be able to do outside of the learning environment as a result of the work they do inside the learning environment. You can include specific module titles, date ranges, or course-to-module outcomes mapping here. According to stiehl and Lewchuck (2012) each outcome should have the folowing characteristics:

Action	Written in an active voice using carefully chosen action words – e.g. explain, construct, distinguish, measure.
Context	Learner-focused and describe what you envision students will do immediately "after" and "outside" their educational experience.
Scope	The expectations are realistic and reasonable given available resources and timeframes.
Complexity	The statements are complex enough to drive a rigorous body of content and assessment strategies. They should focus on the application and integration of acquired knowledge and skills that may be used by the learner now and in the future.
Clarity	The outcome statements are short, well-constructed, clear, and easy-to-interpret sentences.

Who? + Does what? + To accomplish this... = A well written outcome

Checkpoint: Outcomes

Outcomes

What do learners need to be able to do as a result of the learning experiences in this course?

Apply project approach teaching and learning methods to the curriculum of an Early Childhood Education Program.

Concepts & Skills

Concepts: What should learners understand? What do students need to analyze, evaluate, or create?
Skills: What do learners need to be able to do?

Teaching Strategies & Formative Assessment

How can these concepts and skills be taught to promote deeper more significant learning?

Assessment

What evidence can learners provide to demonstrate their ability to meet the intended outcome?

At this point, your Curriculum Alignment Framework should look something like this.

Get feedback

Before moving on to the next section, share the statements you've developed with at least one other colleague (even if they don't teach the same subject), a curriculum specialist, or someone who works in industry. Have them provide written feedback if possible. In your discussions with colleagues, consider the learners' needs in the context of the entire program, as well as some of the different ways a learning experience could be bundled and delivered to meet different student needs. This might spark some ideas for the next step in developing your **Curriculum Alignment Framework - assessment.**

Assessment

After you've finished developing (or revising) the intended learning outcomes, jump to the end of the table and identify what evidence learners can provide to demonstrate their ability to meet the outcome.

In this Teaching Alignment Framework, the assessment section is for key assessments only. These are summative, meaning that they represent the sum of all learning experiences connected to a particular learning outcome. These key summative assessment tasks show little resemblance to quizzes and instructor made tests that assess only the learner's knowledge base (this isn't to say there isn't a place for quizzes! – We'll address those later in teaching strategies and formative feedback). Rather, they go beyond the test of knowledge to provide evidence of the learner's ability to meet the outcome.

Summative assessment as authentic

The key assessment tasks should demonstrate meaningful application of real-life knowledge and skills that are relevant to the roles learners will fill. These types of assessments can come in various forms depending on what the outcome states.

The following examples (Wiggins, G., McTighe, J., 1999) might spark some ideas as you create the assessments for each section. You could also ask learners to choose from various options, as long as what they choose provides the necessary evidence that they've met the outcome.

Written		Verbal	Visual	
Research report	Story	Podcast	Advertisement	Illustration
Infographic	Book report	Debate	Poster	Map
Game	Advertisements	Discussion	Cartoon	Presentation
Brochure	Student discussion	Interview	Collage	Storyboard
Editorial	Twitter feed	Newscast	Webpage	
Essay	Blog	Presentation	Animation	
Lab report	Webpage	Song	Video	
Magazine article	Obituary	Teaching a lesson	Infographic	
Position paper	Case study	Moderating a debate	Diagrams	

Assessment

The assessment description should include enough detail for anyone to understand what the expectations are and how it aligns with the intended learning outcome.

Assessments can also be weighted here (i.e. 25%) to clarify expectations and plan when and how much of the overall grade will be factored in at what point.

College policies, like the assessment policy, will help you determine when you need to assess students and how much you need to grade by what point to give appropriate feedback before a withdrawal deadline.

See College Policies: lethbridgecollege.ca/about-us/policies-procedures

Get feedback

Before moving on to the next section, share the assessment strategies you've developed with at least one other colleague (even if they don't teach the same subject), a curriculum specialist, or someone who works in industry. Have them provide written feedback if possible. In your discussions with colleagues, consider how this assessment strategy compares to other assessment strategies learners might encounter in their learning pathways. Are there synergies? Are there resources that could be accessed to help learners succeed and make their learning more significant? For example, if there are several research projects, how could the library help learners develop research skills on an on-going basis. Could services such as eTutor be integrated into the assessment criteria to help learners develop stronger essay writing skills?

Do your assessments test your outcomes? Is there clear criteria and an assessment tool (i.e. rubric, etc.) for the assessments?

What should they be able to do? → What evidence will they provide as proof that they can actually do it?

Checkpoint: *Assessment*

Outcomes

What do learners need to be able to do as a result of the learning experiences in this course?

Apply project approach teaching and learning methods to the curriculum of an Early Childhood Education Program.

Concepts & Skills

Concepts: What should learners understand? What do students need to analyze, evaluate, or create?
Skills: What do learners need to be able to do?

Teaching Strategies & Formative Assessment

How can these concepts and skills be taught to promote deeper more significant learning?

Assessment

What evidence can learners provide to demonstrate their ability to meet the intended outcome?

The project approach:
The student develops, employs, and evaluates a unit of curriculum using the project approach. The assignment is done in three phases, each with its own grading criteria and due date to ensure student success.

1. Webbing
2. Investigating
3. Sharing

21st century skill opportunity – collaboration and leadership (badge):
Students can request to be observed by an instructor or send a series of videos of them implementing their activity plans to demonstrate collaboration with coworkers or leadership in the classroom.

At this point, your Curriculum Alignment Framework should look something like this.

Concepts & Skills

At this point, you've identified the outcome and aligned it to an assessment strategy that'll provide the appropriate evidence. Now we return to the outcome and break it into parts (or modules). Think of these as building blocks or steps to achieving the outcomes. This is the section that'll guide the content, teaching, and formative assessment strategies. For every outcome, there might be several concepts and skills that the learner must achieve to be successful on the key assessment(s) and achieving the outcome.

Definitions: (Stiehl, R., Lewchuk, L. 2012. P. 107)

Concepts: Major ideas they need to understand, usually expressed in as few as 1–3 words. These usually don't begin with a verb. It is not necessary to write these as outcome statements.

Skills: Specific tasks they need to be able to do that are mastered through practice and feedback. These will usually start with a verb.

Here are some tips to follow when developing concepts (Stiehl, R., Lewchuk, L. 2012, p. 98):

A	Reduce the number of 'topics' taught
B	Remove unnecessary details from topics.
C	Limit technical vocabulary to essential terms (concepts)
D	Try to keep your concepts as just a couple of words that aren't verbs. (e.g. deviance, social norms)
E	Build/scaffold from simpler concepts (knowledge and comprehension) to higher level concepts (analysis, creation/synthesis, and evaluation - with verbs used if necessary)

In other words, rather than focus on unnecessary details and technical vocabulary, help your learners gain a deeper, more profound understanding by focusing on the important concepts and purging all the rest.
Do your concepts and skills support your outcome? Are any missing or disconnected from the others?

Note: Not all outcomes will require skills and concepts; some might be only concept based.

Get feedback

Before moving on to the next section, share the assessment strategies you've developed with at least one other colleague (even if they don't teach the same subject), a curriculum specialist, or someone who works in industry. Have them provide written feedback if possible. **Consider what the most important idea your outcome is trying to achieve and if the concepts and skills are aligned to both it and the assessment you designed previously.**

Note:

You may also choose to include college 21st century skills; program or course values such as safety or ethics; or program or industry outcomes, such as industry competencies, or hospital bedside manner (that need to be mapped in a course) if appropriate or needed.

Checkpoint: Concepts & Skills

Outcomes

What do learners need to be able to do as a result of the learning experiences in this course?

Apply project approach teaching and learning methods to the curriculum of an Early Childhood Education Program.

Concepts & Skills

Concepts: What should learners understand? What do students need to analyze, evaluate or create?
Skills: What do learners, need to be able to do?

Concept: Project approach

Concept: Adaptation method

Concept: Program curricula

Skill: Design learning activities within a variety of curricula

Skill: apply the learning activity
Skill: evaluate the learning activity

Teaching Strategies & Formative Assessment

How can these concepts and skills be taught to promote deeper more significant learning?

Assessment

What evidence can learners provide to demonstrate their ability to meet the intended outcome?

The project approach:
The student develops, employs, and evaluates a unit of curriculum using the project approach. The assignment is done in three phases, each with its own grading criteria and due date to ensure student success.
1. Webbing
2. Investigating
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21st century skill opportunity – collaboration and leadership (badge):
Students can request to be observed by an instructor or send a series of videos of them implementing their activity plans to demonstrate collaboration with coworkers or leadership in the classroom.

At this point, your Curriculum Alignment Framework should look something like this.

Teaching Strategies & Formative Assessment

Recognizing that each instructor brings his or her own flair to the classroom, this section is meant to be more suggestive than concrete. However, it's still important to align your teaching strategies and formative assessments to your outcomes and more specifically to the concepts and skills. For example, a concept will be taught differently from a skill. If the outcome requires them to "understand" something, then help build that concept through readings, providing visuals, and dialogues. Skills are taught through practice and feedback repetitions.

- Universal Design for Learning principles advise the use of variety in representation (like lecture or reading), action and expression (like writing or presentation), and engagement (like use of real-life examples or experiential learning), which usually influence choices in instructional strategies or assessment.

When developing formative assessment and teaching strategies, follow these universal design principles: (CAST, 2015; UDL on Campus, N.D.)

A	Present the content in different ways, and make connections between them (text, graphs, charts, images, videos, demonstrations, objects to manipulate, etc).
B	Provide multiple opportunities for students to express and take action (ongoing assessment and providing different ways for students to work with the information while demonstrating their progression of learning).
C	Provide multiple means of student engagement (stimulate interest, motivation, and persistence in learning; tap into what they already know or can do).

Get feedback

Before moving on to the next section, share the assessment strategies you've developed with at least one other colleague (even if they don't teach the same subject), a curriculum specialist ,or someone who works in industry. Have them provide written feedback if possible. In your discussions with colleagues, consider what the most important idea your outcome is trying to achieve and if the teaching strategies and formative assessment are aligned. Also, since this is the last section, take a moment to reflect on the alignment of each category. **Do all areas align with the outcome?**

Checkpoint: *Teaching Strategies & Formative Assessment*

Outcomes

What do learners need to be able to do as a result of the learning experiences in this course?

Apply project approach teaching and learning methods to the curriculum of an Early Childhood Education Program.

Concepts & Skills

Concepts: What should learners understand? What do students need to analyze, evaluate or create?
Skills: What do learners need to be able to do?

Concept: Project approach

Concept: Adaptation method

Concept: Program curricula

Skill: Design learning activities within a variety of curricula

Skill: apply the learning activity
Skill: evaluate the learning activity

Teaching Strategies & Formative Assessment

How can these concepts and skills be taught to promote deeper more significant learning?

Reading: Chapters 1,2,6–8 (required) and 3–5 (optional) from The Project Approach
Video: The Project Approach to Teaching
Feedback: Think-Pair-Share activities on the readings

Class lecture: The Adaptation Method (using stories and examples)
Reading: Chapters 3–4 (required) – The Adaptation Method
Feedback: Online discussion- Compare these two methods outlining their strengths and weaknesses. When would you use them in your practice?

Reading: Chapter 10 (required) and 3–5 (optional) from The Project Approach
Lecture using exemplars: Key Components to Curriculum
Feedback: Small group activity. Students develop a mini unit in teams using topics provided by the instructor. All projects are shared with class. Students must provide written feedback on each other's projects.
Feedback: Check your knowledge activities
Video: youtube.com/watch?v=viiEzpuL6pY
Graphic organizer: depicting the major concepts and their connection to the outcomes

Tips for success: tips offered throughout each learning experience on how to develop curricula using the project approach
Practice: Students plan and create learning activities using the project approach.
Feedback: Students develop an infographic that illustrates planned activities within a variety of curricula that clearly incorporates the project approach.
Show students examples of infographics and offer suggestions on how to create (i.e. Piktochart, easel.ly)

Practice & feedback: Scenarios: Students evaluate several learning activities and offer suggestions for improvement using project approach methodology

Assessment

What evidence can learners provide to demonstrate their ability to meet the intended outcome?

The project approach:
The student develops, employs, and evaluates a unit of curriculum using the project approach. The assignment is done in three phases, each with its own grading criteria and due date to ensure student success.
1. Webbing
2. Investigating
3. Sharing

21st century skill opportunity – collaboration and leadership (badge):
Students can request to be observed by an instructor or send a series of videos of them implementing their activity plans to demonstrate collaboration with coworkers or leadership in the classroom.

At this point your Curriculum Alignment Framework should look something like this.

Flexible Learning

Now that you've designed the main framework, consider the flexible learning needs of your learners and consider the best environment for knowledge and skill development to take place. Some concepts might be taught using a variety of online resources, such as videos and journals, while others might be more suitable in a classroom or lab environment. Sometimes, it helps to include multiple options so content is represented in multiple ways. A good first step to deciding what content could be posted online is to revisit the teaching strategies and formative assessment section and highlight the sections that could be taught online.

Teaching Strategies/ Formative Assessment

How can these concepts and skills be taught to promote deeper, more significant learning?

Reading: Chapters 1–2, 6–8 (required) and 3–5 (optional) from The Project Approach
Video: The Project Approach to Teaching
Feedback: Think-Pair-Share activities on the readings

Class lecture: The Adaptation Method (using stories and examples)
Reading: Chapters 3–4 (required) – The Adaptation Method
Feedback: Online discussion- Compare these two methods, outlining their strengths and weaknesses. When would you use them in your practice?

Reading: Chapter 10 (required) and 3–5 (optional) from the project approach
Lecture using exemplars: Key Components to Curriculum
Feedback: Small group activity. Students develop a mini unit in teams using topics provided by the instructor. All projects are shared with class. Students are expected to provide written feedback on each other's projects.
Feedback: Check your knowledge activities
Video: youtube.com/watch?v=viiEzpuL6pY
Graphic organizer: depicting the major concepts and their connection to the outcomes

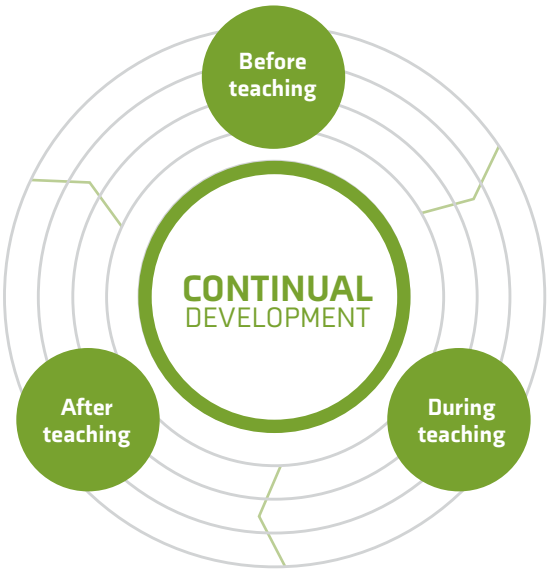
Tips for Success: tips offered throughout each learning experience on how to develop curricula using the project approach
Practice: Students plan and create learning activities using the project approach.
Feedback: Students develop an infographic that illustrates planned activities within a variety of curricula that clearly incorporates the project approach. Show students examples of infographics and offer suggestions on how to create (i.e. Piktochart, easel.ly)

Practice & feedback: Scenarios: Students evaluate several learning activities and offer suggestions for improvement using project approach methodology

Recommendations

Now that you've completed your curriculum alignment framework, it's time to move forward with implementing any changes you may have made to your course. The following checklist should guide you with reflecting on the steps you might take to pursue your professional development needs.

The first column provides information on the departments you might contact for assistance. The second column is a guided reflection on your continual development as an instructor.



Collaborative partnerships

Use this checklist to help you decide which departments, if any, you should contact for assistance.

Registrar's Office	**Yes**	**No**
Do you need a specified learning environment (e.g. active learning lab classroom)?	○	○

Educational Enhancement Team	**Yes**	**No**
Do you require training in any of the educational technology you identified in your instructional strategies section?	○	○
Do you require training in any of the teaching strategies or formative feedback you identified?	○	○
Do you require training in authentic assessment strategies?	○	○
Do you require help with any of the flexible learning options you identified?	○	○
Do you require help with blended (online and face-to-face) options for learning?	○	○

Accessibility Services	**Yes**	**No**
Do you require assistance in:		
Providing a host of instructional strategies and formative and summative assessment methods that offer multiple means of representation in content delivery	○	○
Providing a host of instructional strategies and formative and summative assessment methods that offer student accessibility	○	○
Providing multiple opportunities for students to demonstrate achievement of course outcomes by providing multiple means of action and expression (i.e. quizzes, discussion, demonstration).	○	○
Providing multiple methods to stimulate interest and motivation for learning (storytelling, scenarios, guest speakers)	○	○

Continual development

If you check yes to any of these questions, consult your chair, colleague, or a curriculum specialist for feedback.

Concepts and skills	**Yes**	**No**
Do you have new concepts that'll help students achieve the intended outcome(s) that you'd like to include?	○	○
Do you have new skills that'll help students achieve the intended outcome(s) that you'd like to include?	○	○
Will the inclusion of a new concept or skill align with the intended outcome(s)?	○	○
Should a new concept or skill replace or complement an existing concept or skill?	○	○
How does including a new concept or skill affect the flow of the current course?	○	○

Feedback and evaluation	**Yes**	**No**
Did you elicit any student feedback that suggests course changes are required?	○	○
While you taught the course, did you or a partner instructor note any required course changes?	○	○
Has industry feedback been elicited that suggests course changes are required?	○	○
Do you anticipate needing professional development or training to help you implement the changes?	○	○

Growing as an instructor and in your field	**Yes**	**No**
Have you identified any Scholarship of Teaching research opportunities related to your course?	○	○
Have you identified any possible opportunities for collaboration with industry related to your course?	○	○
Has industry feedback been elicited that suggests professional development or training is required on your part to continue providing excellence in instruction?	○	○

References

An editable Word document of the Curriculum Alignment Framework is available here: dl.dropboxusercontent.com/u/40284700/THE%20FRAMEWORK_F.docx

If you have any questions, a curriculum specialist from EET is happy to help.

eetlc.ca/support.html
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