

CURRICULUM ALIGNMENT FRAMEWORK GUIDE

2019 EDITION



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WHAT IS IT?

A Curriculum Alignment Framework (CAF) provides the structure and categories for creating and aligning course curriculum.

WHY USE IT?

The purpose of a CAF is to integrate opportunities for learners to develop both knowledge and skill-based competencies to achieve each outcome. Essential concepts and skills are addressed for each outcome. They are then aligned with relevant learning opportunities and authentic assessment strategies that reflect what learners will need to understand and be able to do after they graduate and are working in their respective field.

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PROCESS

This is a fluid document that should be updated on a regular basis by faculty.

If assistance is required while making updates, a Learning Experience Designer from LXD is happy to help.

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 is a communication tool between instructors, curriculum specialists, college leaders, and students so they can meaningfully discuss the instruction of the curricula. 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.)

OUTCOMES	CONCEPTS & SKILLS	TEACHING STRATEGIES & FORMATIVE ASSESSMENTS	ASSESSMENT
What do learners need to be able to do as a result of the learning experiences in this course?	Concepts: What should learners understand? What do students need to analyze, evaluate, or create? Skills: What do learners need to be able to do?	How can these concepts and skills be taught to promote deeper more significant learning?	What evidence can learners provide to demonstrate their ability to meet the intended outcome?

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THE FRAMEWORK

OUTCOMES	CONCEPTS & SKILLS	TEACHING STRATEGIES & FORMATIVE ASSESSMENTS	ASSESSMENT
What do learners need to be able to do as a result of the learning experiences in this course?	Concepts: What should learners understand? What do students need to analyze, evaluate, or create? Skills: What do learners need to be able to do?	How can these concepts and skills be taught to promote deeper more significant learning?	What evidence can learners provide to demonstrate their ability to meet the intended outcome?



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.

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 are looking for the perfect verb, start here:

https://www.mtsac.edu/fclt/docs/FINK_BLOOM_TAXONOMIES.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 following characteristics:

ACTION	Written in an active voice using carefully chosen action words – e.g. explain, construct, distinguish, measure.
CONTEXT	Learner focused and describe what is envisioned 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	CONCEPTS & SKILLS	TEACHING STRATEGIES & FORMATIVE ASSESSMENTS	ASSESSMENT
What do learners need to be able to do as a result of the learning experiences in this course?	CONCEPTS: What should learners understand? What do students need to analyze, evaluate, or create? SKILLS: What do learners need to be able to do?	How can these concepts and skills be taught to promote deeper more significant learning?	What evidence can learners provide to demonstrate their ability to meet the intended outcome?
Apply project approach teaching and learning methods to the curriculum of an Early Childhood Education Program.			



GET FEEDBACK

After each stage in the process—Outcomes, Assessment, Concepts & skills, and Teaching Strategies & Formative Assessments—and before moving on to the next section—get feedback.

Share the statements you have developed with at least one other colleague (even if they don't teach the same subject), a curriculum specialist or someone who is currently working in industry. Have them provide written feedback if possible. In your discussions, consider the following:

- What are learner's needs in the context of the entire program?
- What different ways could the learning experience be bundled and delivered?

This might spark some ideas for the next step in developing your Curriculum Alignment Framework.



ASSESSMENT

After you have 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 Curriculum 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 and are for marks. Though these key summative assessment tasks could be quizzes and instructor made tests, also consider some of the options in the table to the right. These assessments go beyond a 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 have met the outcome.

WRITTEN	VERBAL	VISUAL
Research Report	Podcast	Advertisement
Infographic	Debate	Poster
Game	Discussion	Cartoon
Brochure	Interview	Collage
Editorial	Newscast	Webpage
Essay	Presentation	Animation
Lab Report	Song	Video
Magazine Article	Teaching a Lesson	Infographic
Position Paper	Moderating a Debate	Diagrams
Story		Illustration
Book Report		Map
Advertisements		Presentation
Student discussion		Storyboard
Twitter Feed		
Blog		
Webpage		
Obituary		
Case Study		



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 (ie. 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: www.lethbridgecollege.ca/about-us/policies-procedures

GET FEEDBACK

In your discussions, consider the following:

- Do your assessments test your outcomes?
- Is there clear criteria and an assessment tool (ie. Rubric, etc.) for the assessments?
- How might this assessment strategy compare to other assessment strategies learners might encounter in their learning pathways?
- Are there synergies?
- Are there resources (The Learning Café, The Library) that could be accessed to help learners succeed and make their learning more significant?

WHAT SHOULD THEY BE ABLE TO DO?

**WHAT EVIDENCE WILL
THEY PROVIDE AS PROOF
THAT THEY CAN
ACTUALLY DO IT?**



CHECKPOINT: ASSESSMENT

OUTCOMES	CONCEPTS & SKILLS	TEACHING STRATEGIES & FORMATIVE ASSESSMENTS	ASSESSMENT
What do learners need to be able to do as a result of the learning experiences in this course?	<p>CONCEPTS: What should learners understand? What do students need to analyze, evaluate, or create?</p> <p>SKILLS: What do learners need to be able to do?</p>	How can these concepts and skills be taught to promote deeper more significant learning?	What evidence can learners provide to demonstrate their ability to meet the intended outcome?
Apply project approach teaching and learning methods to the curriculum of an Early Childhood Education Program.			<p>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.</p> <ol style="list-style-type: none">1. Webbing2. Investigating3. Sharing



CONCEPTS & SKILLS

At this point, you have identified the outcome and aligned it to an assessment strategy that will 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 will 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.

NOTE:

Not all outcomes will require both skills and concepts. Some might only be concept-based.

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

CONCEPTS: Major ideas they need to understand, usually expressed in as little as 1-3 words. These usually do not begin with a verb. Try not to write these as outcomes.

SKILLS: Specific tasks they need to be able to do which 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).

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?



GET FEEDBACK

In your discussions, consider the following:

- What is the most important idea your outcome is trying to achieve?
- Are the concepts and skills aligned to both it and the assessment you designed previously?



CHECKPOINT: CONCEPTS & SKILLS

OUTCOMES	CONCEPTS & SKILLS	TEACHING STRATEGIES & FORMATIVE ASSESSMENTS	ASSESSMENT
What do learners need to be able to do as a result of the learning experiences in this course?	<p>CONCEPTS: What should learners understand? What do students need to analyze, evaluate, or create?</p> <p>SKILLS: What do learners need to be able to do?</p>	How can these concepts and skills be taught to promote deeper more significant learning?	What evidence can learners provide to demonstrate their ability to meet the intended outcome?
Apply project approach teaching and learning methods to the curriculum of an Early Childhood Education Program.	<p>CONCEPT: Project Approach</p> <p>CONCEPT: Adaptation Method</p> <p>CONCEPT: Program Curricula</p> <p>SKILL: Plan and create learning activities within a variety of curricula</p> <p>SKILL: Apply the learning activity</p> <p>SKILL: Evaluate the learning activity</p>		<p>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.</p> <ol style="list-style-type: none">1. Webbing2. Investigating3. Sharing



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 is 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 is going to be taught differently than a skill. If the outcome requires them to “understand” something then you 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, action and expression, and engagement, 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

In your discussions, consider the following:

- Do the teaching strategies and formative assessments align to the most important idea your outcome is trying to achieve?
- Finally do all areas in each category align with the outcome?

CHECKPOINT: TEACHING STRATEGIES & FORMATIVE ASSESSMENTS



OUTCOMES	CONCEPTS & SKILLS	TEACHING STRATEGIES & FORMATIVE ASSESSMENTS	ASSESSMENT
What do learners need to be able to do as a result of the learning experiences in this course?	<p>CONCEPTS: What should learners understand? What do students need to analyze, evaluate, or create?</p> <p>SKILLS: What do learners need to be able to do?</p>	How can these concepts and skills be taught to promote deeper more significant learning?	What evidence can learners provide to demonstrate their ability to meet the intended outcome?
Apply project approach teaching and learning methods to the curriculum of an Early Childhood Education Program.	<p>CONCEPT: Project Approach</p> <p>CONCEPT: Adaptation Method</p> <p>CONCEPT: Program Curricula</p> <p>SKILL: Plan and create learning activities within a variety of curricula</p> <p>SKILL: Apply the learning activity</p> <p>SKILL: Evaluate the learning activity</p>	<p>READING: Chapters 1,2,6–8 (required) and 3–5 (optional) from <i>The Project Approach</i></p> <p>VIDEO: <i>The Project Approach to Teaching</i></p> <p>FEEDBACK: Think-Pair-Share activities on the readings.</p> <p>CLASS LECTURE: The Adaptation Method (using stories and examples)</p> <p>READING: Chapters 3–4 (required) – <i>The Adaptation Method</i></p> <p>FEEDBACK: Online discussion: Compare these two methods outlining their strengths and weaknesses. When would you use them in your practice?</p> <p>READING: Chapter 10 (required) and 3–5 (optional) from <i>The Project Approach</i></p> <p>LECTURE USING EXEMPLARS: Key Components to Curriculum</p> <p>FEEDBACK: (1) 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. (2) Check your knowledge activities.</p> <p>VIDEO: https://www.youtube.com/watch?v=viiEzpuL6pY</p> <p>GRAPHIC ORGANIZER: Depict the major concepts and their connection to the outcomes.</p> <p>TIPS FOR SUCCESS: Tips offered throughout each learning experience on how to develop curricula using the project approach.</p> <p>PRACTICE: Students plan and create learning activities using <i>The Project Approach</i>.</p> <p>FEEDBACK: (1) Students develop an infographic that illustrates planned activities within a variety of curricula that clearly incorporates the project approach. (2) Show students examples of infographics and offer suggestions on how to create (i.e. Piktochart, easel.ly).</p> <p>PRACTICE & FEEDBACK: Scenarios: Students evaluate several learning activities and offer suggestions for improvement using project approach methodology.</p>	<p>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.</p> <ol style="list-style-type: none"> 1. Webbing 2. Investigating 3. Sharing



FLEXIBLE LEARNING

Now that you have designed the main framework, you need to 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 more than one option 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.

EXAMPLES OF TEACHING STRATEGIES & FORMATIVE ASSESSMENT:

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: (1) 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. (2) Check your knowledge activities.

VIDEO: <https://www.youtube.com/watch?v=viiEzpuL6pY>

GRAPHIC ORGANIZER: Depict 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: (1) Students develop an infographic that illustrates planned activities within a variety of curricula that clearly incorporates the project approach. (2) Show students examples of infographics and offer suggestions on how to create (i.e. Piktochart, easel.ly).

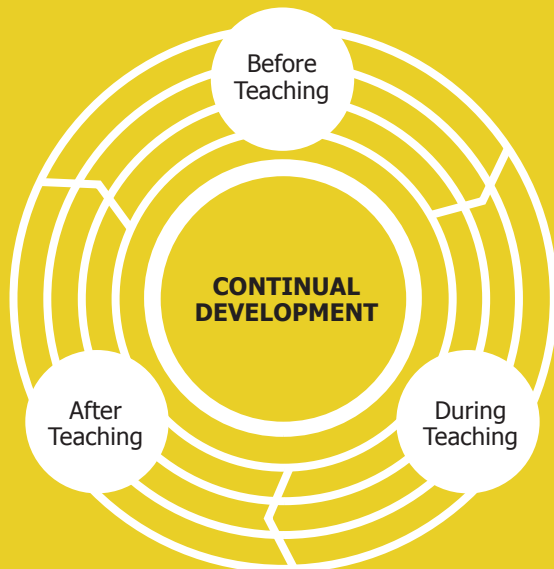
PRACTICE & FEEDBACK: Scenarios: Students evaluate several learning activities and offer suggestions for improvement using project approach methodology.



RECOMMENDATIONS

Now that you have 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	Y	N
• Do you need a specified learning environment (e.g. active learning lab classroom)?	<input type="checkbox"/>	<input type="checkbox"/>
CENTRE FOR TEACHING, LEARNING & INNOVATION	Y	N
• Do you require training in any of the educational technology you identified in your instructional strategies section?	<input type="checkbox"/>	<input type="checkbox"/>
• Do you require training in any of the teaching strategies or formative feedback you identified?	<input type="checkbox"/>	<input type="checkbox"/>
• Do you require training in authentic assessment strategies?	<input type="checkbox"/>	<input type="checkbox"/>
• Do you require help with any of the flexible learning options you identified?	<input type="checkbox"/>	<input type="checkbox"/>
• Do you require help with blended (online and face-to-face) options for learning?	<input type="checkbox"/>	<input type="checkbox"/>
LEARNING CAFE	Y	N
Do you require assistance in:		
• Providing a host of instructional strategies and formative and summative assessment methods that offer student accessibility?	<input type="checkbox"/>	<input type="checkbox"/>
• Providing multiple methods to stimulate interest and motivation for learning (storytelling, scenarios, guest speakers)	<input type="checkbox"/>	<input type="checkbox"/>

CONTINUAL DEVELOPMENT

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

CONCEPTS & SKILLS	Y	N
• Do you have new concepts that will help students achieve the intended outcome(s) that you would like to include?	<input type="checkbox"/>	<input type="checkbox"/>
• Do you have new skills that will help students achieve the intended outcome(s) that you would like to include?	<input type="checkbox"/>	<input type="checkbox"/>
• Will the inclusion of a new concept or skill align with the intended outcome(s)?	<input type="checkbox"/>	<input type="checkbox"/>
• Should a new concept or skill replace or complement an existing concept or skill?	<input type="checkbox"/>	<input type="checkbox"/>
• How does including a new concept or skill affect the flow of the current course?	<input type="checkbox"/>	<input type="checkbox"/>
FEEDBACK AND EVALUATION	Y	N
• Did you elicit any student feedback that suggests course changes are required?	<input type="checkbox"/>	<input type="checkbox"/>
• While you taught the course, did you or a partner instructor note any required course changes?	<input type="checkbox"/>	<input type="checkbox"/>
• Has industry feedback been elicited that suggests course changes are required?	<input type="checkbox"/>	<input type="checkbox"/>
• Do you anticipate needing professional development or training to help you implement the changes?	<input type="checkbox"/>	<input type="checkbox"/>
GROWING AS AN INSTRUCTOR & IN YOUR FIELD	Y	N
• Have you identified any Scholarship of Teaching & Learning (SoTL) opportunities related to your course?	<input type="checkbox"/>	<input type="checkbox"/>
• Have you identified any possible opportunities for collaboration with industry related to your course?	<input type="checkbox"/>	<input type="checkbox"/>
• Has industry feedback been elicited that suggests professional development or training is required on your part to continue providing excellence in instruction?	<input type="checkbox"/>	<input type="checkbox"/>

REFERENCES

An editable Word document of the Curriculum Alignment Framework is available here.



<https://storage.googleapis.com/lethbridgecollege/CAFTemplateLegal4.5.docx>

If you have any questions, a Learning Experience Design specialist from LXD is happy to help.

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Feel free to use and share this resource.

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