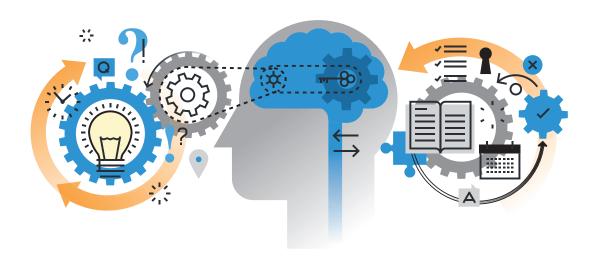
Capstone

The capstone is a rigorous learning opportunity that allows students to reflect and share in personally meaningful ways, and is a requirement for Career-Life Connections and for graduation. The purpose of the capstone is to let students demonstrate the knowledge, competencies, and passion(s) that they can offer the world, as they integrate personal interests, strengths, and new learning with preferred future possibilities. It is a deeper learning experience that supports the student's continued learning journey into post-graduation possibilities, and provides an opportunity to reflect and synthesize as well as showcase and celebrate.

The capstone includes, but is not limited to, three components:

- 1. Self-assessment and critical analysis: Students reflect on experiences in school and out of school, assess development in the Core Competencies, and share highlights of their learning journey and preferred next steps.
- 2. Process and representation: Informed by their critical analysis, and connecting to their plans for post-graduation, students engage in a deeper learning process with intent as they design, assemble, and share their capstone representation.
- 3. Showcase and celebrate: Students present their learning journey, including plans for post-graduation, to a relevant audience.

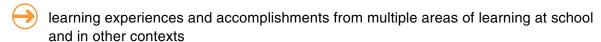
The capstone components are an opportunity for students to further develop and showcase their strengths, passions, and learning journey to a relevant audience. As a celebration of their learning journey, the capstone is a place where students are encouraged to share successes both in school and out of school, including their reflections on Core Competency development, their contributions and aspirations, and their plans for post-graduation. The capstone can take many different forms, depending on student needs and interests and the opportunities available in local school communities.





In order to determine what format students will use as a deeper learning process to connect their strengths and interests to plans for post-graduation, and to determine how they would like to represent themselves and their learning journey to a relevant audience, students engage in two preparation experiences under the guidance of their mentor: self-assessment of Core Competency development and critical analysis.

Students reflect on their Core Competency development and identify key insights about their learning journey (past, present, and possible futures) by drawing from the following:



career-life development conversations with their mentor(s)

ollected demonstrations of authentic career-life experiences and supporting evidence

reflections about Core Competency development

areer-life exploration – substantive experiential learning experience

assignments, peer collaborations, inquiry learning, and other activities, pursued during Career-Life Education and Career-Life Connections coursework

Learning Experience	Description
Self-assessment of the Core Competencies	As lifelong learners, students will take stock of where they are in their learning journey at this transitional time. They can reflect on their growth as a learner by reviewing their collected demonstrations of learning and reflections about their growth in Core Competency development across the years. As they review their learning journey so far, students can gain clarity about their competency growth in areas that are personally meaningful and contemplate ways to apply this self-knowledge to next steps they hope to pursue in this journey post-graduation.

It is crucial for students to have ownership of their Core Competency self-assessment in order to honour their identity as lifelong learners. Mentors can encourage students by focusing feedback on how well students support their self-assessment with relevant demonstrations and articulate their thinking. For example, formative prompting questions – such as "Can you describe the specific ways in which this artifact supports the Core Competency profile that you have chosen as a self-assessment?" – can guide students in refining their explanations and choices.



Learning Experience

Description

Critical Analysis of the Learning Journey

As part of the critical analysis of their learning journey (past, present, and possible futures), students will make sense of their experiences and identify key insights. Key insights are personally meaningful observations and may include "aha!" moments, learning milestones, struggles, dilemmas, uncertainties, and breakthroughs. Students are encouraged to select insights that best represent their learning journey to eventually share with a relevant audience. In addition, through the critical analysis of their learning journey. students can determine how to approach their capstone and its. representation with intent.

Purposeful career-life development for young people includes reflecting on what has been learned from experiences in educational, work-related, and personal life contexts, as well as connecting personal career-life interests and aspirations with future possibilities. It is important for students to know that lifelong learners are not supposed to be creating the perfect story about what they have done, but sharing who they are, what is important to them, how they have learned from their struggles and mistakes, and who and how they hope to be in the future.

Note: Mentors can support students in this process by helping them recognize key insights during check-in conversations across the secondary years as they arise. In addition, when educators share their own learning journey insights with students and how these helped to shape who they are today, students can become better able to recognize these insights for themselves.

2. Capstone process and representation

Students are encouraged to select a capstone development process that aligns with their interests and strengths, their community connections, and learning areas they would like to explore more deeply in order to support their plans for post-graduation. They are also encouraged to select a representation that aligns with their hopes and aspirations. The representation may take many forms, including a product (e.g., a robot for a student interested in engineering projects), a performance (e.g., a videotaped monologue for a student seeking to join a theatre group), and/or a service (e.g., a series of early learning activities that the student applies with children in a local StrongStart Centre). It is important for this capstone component to be student-driven and future-oriented, with the intent to connect personal strengths and interests with plans for post-graduation and community opportunities.



Learning Experience	Description
Capstone Process	The capstone process can be a deeper learning opportunity that enables the student to further develop competencies and skills that are transferrable to preferred post-graduation options. The structure of the process and topics included will vary, depending on student interests, preferred plans for post-graduation, and areas for further growth. For more ideas about deeper learning process options, see the recently added section entitled "A closer look at capstone process and representation" in Appendix A.
Design and Assemble Capstone Representation	The capstone representation synthesizes the students' lifelong learning journey, informed by the critical analysis and deeper learning process stages. It can focus primarily on a particular area of interest related to plans for post-graduation or include a range of relevant experiences and topics. Students will create this representation, integrating the self-assessment of the Core Competencies and key insights, and including plans for next steps in this journey.
	There are multiple ways to approach this representation. Students are encouraged to select an approach that aligns with their interests and strengths, as well as the ways in which they would like to represent themselves to a relevant audience. For example, representations may include an animated video posted online, an exhibit for display, a written

It is important for the capstone deeper learning options to be both student-driven and future-oriented. Student choice and alignment with personal plan for post-graduation is key. Teacher-mentors can support students with their choices by noticing what they are focusing on, grappling with, and hoping for during check-in conversations and the critical analysis stage of capstone preparation, and then reflecting those ideas back to students.

Evaluation: The capstone is assessed by a teacher as part of the summative mark provided for CLC. Criteria for evaluation depend on the type of representation selected. Co-construction of criteria with students is one way to encourage ownership of learning and confirm understanding of expectations. (See capstone examples on page 20 for more detail about assessment criteria.)

report, oral storytelling, or spoken word poetry.

3. Capstone presentation - Showcase and celebrate the learning journey

The capstone is an opportunity for students to showcase their strengths, passions, and learning journey to a relevant audience. As a celebration of their learning journey, the capstone presentation is a place where students are encouraged to share successes both in school and out of school, including their reflections on Core Competency development, their contributions to their personal career-life journey, their aspirations, and their possible post-graduation plans. The capstone can take many different forms, depending on student needs and interests and the opportunities available in local school communities.

Learning Experience	Description
Capstone Presentation	Students will showcase their representation to a relevant audience and introduce themselves as lifelong learners at this point in their lives. Opportunities to share can be informed by the nature of the representation, and may include, for example, exhibitions, inviting viewers to post comments online, or hosting a storytelling circle. Students are encouraged to consider the showcase as a celebration of learning and to find ways to share with confidence, drawing on the support of their teacher-mentor(s).

Relevant audience: To whom and in what ways students choose to showcase depends on what makes sense for their needs and interests, as well as the opportunities available in local contexts. For example, relevant audiences may include immediate family and extended family members; peers and school staff; local community members; First Nations, Métis, or Inuit community members; post-secondary educators; business and industry representatives; digital networks; and/or field experts.

Feedback: Students may benefit from feedback from members of the audience, including constructive feedback on the strengths of their representation and showcase. Consider helping selected audience members provide constructive feedback by supplying them with a template to complete, including prompts such as:

- What were two things that you found especially interesting and/or strong about my representation and/or showcase?
- What is one thing that I could work on for next steps?
- What did you learn and/or what questions do you have?

Criteria for the capstone representation

When determining how to assess the capstone representation, it is important to consider common rigorous learning criteria as well as criteria that align with the format selected by the student. Students and teachers can co-construct general criteria that apply to all capstones, as well as negotiate specialized criteria that suits the selected representation and showcase formats and corresponds with relevant authentic sources and expertise. Generally capstones:



Represent quality and depth of learning



Complement the student's personal strengths and competence



Display richness of critical analysis and synthesis

Follow a logical sequencing of thoughts and ideas

Demonstrate coherent organizational structure

Oonnect appropriate content to the overarching theme

Provide clear explanations of key points

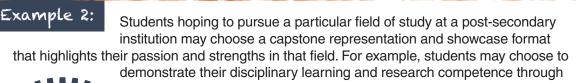
Support claims with relevant and accurate evidence

Include compelling features to engage the audience

Below are examples of how to approach specific criteria to address various capstone formats. These are provided as entry points for educators and students, as they discuss options that will work for local school communities.

For students who elect to share through oral presentation, the criteria can encompass the elements that demonstrate proficiency

in this format. For example, for students who choose to showcase their learning journey through the telling of their personal story, one way to approach preparation for this format is to invite an experienced storyteller into the school to work with students on their presenting techniques and to help co-create assessment criteria with students and teachers. Criteria in this case could include proficient use of voice, facial expression, and body language; intonation; use of imagery and other narrative structures; pacing and responsiveness to audience reactions; and overall creativity of the story.



a field study approach and science display format. In consultation with experts from a post-secondary institution, teachers and students could co-create criteria, including evidence of higher-order thinking, disciplinary knowledge, and research procedures and ethics.

These criteria could be used by teachers to assess the capstone representation and inform feedback from post-secondary experts who attend an exhibition of student displays.

Students whose career-life interests include pursuing a trades program may choose to design and create a product that

demonstrates their creativity, manual dexterity, and technical expertise. Criteria for this aspect of their capstone representation can include industry standards and expert input from a tradesperson in the field. In this case, students can explain how their product meets these criteria, teachers can use these criteria to evaluate this aspect of their capstone representation, and members of the industry community can be invited to share feedback.



Structures to support capstone preparation

Although many students will pursue this culminating celebration of learning during their final year, meaningful preparation occurs throughout their secondary years. Career-Life Education and Career-Life Connections provide the structure within which students can make preparations, including opportunities to:

- reflect on their learning experiences both in school and out of school
- gather authentic demonstrations of growth in the Core Competencies
- engage in ongoing career-life development conversations with their mentor
- build connections with supportive community networks
- develop collaborative and self-advocacy practices
- explore multiple career-life opportunities in educational, work-related, and personal life contexts

In addition, research has shown that when student capstones are well supported – at school, in the community, and at home – and developed through a "review-plan-do" model with student reflection and revision, students can benefit in the following ways:

- increased academic rigour for their final secondary school year
- increased motivation and engagement
- increased post-graduation career-life aspirations
- improved confidence and self-perception
- opportunities to demonstrate learning and proficiency (Hanover Research, 2013; McGill, 2012; Schwering, 2015)

School districts and schools can collaborate with teachers, mentors, and students to determine how the capstone can best be situated within local contexts. The capstone is best supported in school districts and schools where both the process for its development and product guidelines and expectations are clearly communicated and allow for student choice and creativity. Local structures for the capstone preparation process and product evaluation criteria should be clearly articulated and well supported by mentors and teachers, and scheduled time should be dedicated to ongoing mentoring relationships for purposeful career-life development.

A FINAL NOTE: This guide was drafted as an entry point for discussions about how to implement purposeful career-life development for students. We look forward to continued dialogue with districts to collect and share more possibilities and examples.



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APPENDIX A

A closer look at capstone process and representation

Introduction

In response to feedback collected from B.C. educators across several months, a more elaborated description of possibilities for the capstone *process and representation* component is provided here. This section was developed by a small working group of B.C. teachers, and is one of many ways to approach deeper learning processes with students as part of developing the capstone. Deeper learning processes foster depth and relevancy in learning and encourage further growth in Core Competency development. When students are thinking about how they will approach their capstone *process and representation*, offering choices that develop "significant understanding..., exhibit critical thinking and problem-solving, collaborate, communicate, direct their own learning, and...draw together...different disciplines, fields, and traditions" (Mehta and Fine, 2015) can be helpful. Teachers are invited to use this section as a starting point for school team discussions about capstone approaches that will suit their students' learning needs in local contexts and/or as ideas that can be adopted and/or adapted for use with their students.

Supporting students with the capstone process and representation

1. Getting started

Drawing from the *self-assessment and critical analysis* **component:** Guide students in using the ideas and insights they glean from the initial *self-assessment and critical analysis* component of capstone to inform the nature of *process and representation*, where they will be connecting experiences and insights to their preferred plans for post-graduation:

- What has reflecting back on your experiences and growth as a learner revealed about who and how you want to be as a young adult?
- In moving toward your preferred plans for post-graduation, what competencies would you like to further develop?

(See pages 15–21 in the Career Education 10-12 Guide for more information about capstone's self-assessment and critical analysis component.)

Activating student curiosity: When curiosity is activated, we generate the motivation to learn and understand, heighten active engagement, and enhance the ability to sustain long-term projects. Personally meaningful questions and wonderings about the world can shape the design and topics of the capstone *process and representation* in ways that move the student's lifelong learning journey forward into post-graduation life. Encourage students to explore their curiosities to find a capstone process that is engaging and that connects to who they are and how they want to be in the world:

- "What am I interested in and passionate about?"
- "What do I want to learn more about?"
- "Is there something new that I want to explore?"
- "Why does this topic interest me?"
- "In what ways do I want to grow as a person?"
- "What kind of adult do I want to be?"

Student wonderings can develop into open-ended, inquiry-style questions that lead to many possible answers or to more linear questions with a structured method for investigation and evaluation. What

is important to note is that the design and focus of the capstone *process and representation* should be based on the student's curiosities and preferred plans for post-graduation.

Development of Core Competencies and personal growth: In addition to exploring an area of interest related to plans for post-graduation, the capstone is an opportunity for students to further demonstrate their learning and strengths in the Core Competencies and to celebrate their personal growth during the educational journey. As such, students should determine how the Core Competencies will be integrated into the *process and representation* component of their capstone, and how they will reflect on and document development in the Core Competencies throughout the process. In order to navigate the design, creation, and development of the capstone, students can draw on their skills, dispositions, processes, and strategies as resources for reflection. In this way, they will develop resources to help synthesize and celebrate what they have learned about their thinking, communication, and personal and social competence for the *showcase and celebrate* component of capstone.

2. Organizing for success

When clear expectations, timelines, and stages are outlined at the beginning of the process, students are more likely to experience success with their capstone. Co-constructing a project management plan with students is one way to help them organize for success, and this plan can then be used to guide capstone progress conversations during regular check-ins. In addition, discussing guidelines for documenting their progress at the outset, and revisiting this documentation to inform check-in conversations throughout the process, encourages students to keep track of their work and monitor their growth as learners.

It is important for students to consider availability of resources when planning for their capstone process, including but not limited to the timeline from beginning to completion; the time available outside school hours, if needed, to accomplish some activities; the availability and accessibility of potential community advisors with relevant expertise; and the availability and accessibility of needed research, materials, and/or equipment. Because of its personalized nature, the scope of the capstone *process and representation* component will vary from student to student.

3. Inclusive practices

The design and focus of the capstone *process and representation* will vary, depending on diverse student interests and needs and the opportunities available in local school communities. In addition, as is the case for all learning activities, school staff members can vary their support resources and strategies to ensure meaningful engagement and student success with their capstone. Inclusive practices may include, and are not limited to, adaptations and modifications according to their IEP for students with special needs. The following is a sampling of inclusive practices that can support diverse student interests and needs for success with their capstone:

- English Language Learners and other students with diverse English literacy needs may benefit from accessible research materials provided through electronic resources and/or support from the teacher-librarian in the school's Library Learning Commons, talking with community advisors with the help of a peer tutor, and/or extra time and practice presenting their work before the final presentation.
- Students working toward the School Completion ("Evergreen") Certificate may choose to integrate their personal goals, developed in collaboration with family, supportive community members, and service providers through a transition planning process such as PATH (Planning Alternate Tomorrows with Hope), into their capstone.

 Students who are living away from parents/guardians and/or coping with mental health challenges may require increased adult guidance with logistical and/or emotional challenges that can emerge during self-discovery and transitioning into young adulthood learning activities and conversations. This type of need may be addressed through increased frequency of teacher-mentor check-ins and/or collaboration with school-based counsellors, for example.

All students can engage in a personally meaningful capstone process that supports purposeful career-life development for transitioning into plans for post-graduation and young adulthood. Collaboration among families, school staffs, and local community and service providers in support of students with diverse interests and needs helps to ensure that the capstone experience can be a celebration of each student's growth and successes and can support movement toward students' personal aspirations for post-graduation life.

4. Other considerations

There are many general considerations that school teams should consider as they develop capstone processes, structures, and materials to support their students' capstone *process and representation*. A sampling of these considerations is provided below as a starting point for school team discussions:

Research and information sources: Most capstone experiences will require some sort of research activity, and the amount and nature of the research will vary depending on the capstone process and topic(s) selected. Research may be conducted using printed materials, online publications, interviews, polls, surveys, or other means. In addition to considering the relevancy, reliability, biases, and accuracy of sources, students will need help with accessibility to sources in some contexts, such as in small and/or rural schools.

Community connections: Community advisors and other community connections may be challenging for some students to access for a variety of reasons (e.g., geographic location or student confidence in meeting new people). Thinking flexibly about a variety of advisory relationships can help. For example, teacher-mentors can help guide students or facilitate access to relevant advisors among people who are already connected to the local school community and/or are in students' lives, such as diverse school staff members (e.g., teachers in other subject areas, counsellors, youth and family counsellors, Aboriginal Support Workers, secretaries, custodians), volunteers, family members, Elders-in-residence, and coaches. Advisors can also include parents from the school community who have relevant expertise and/or experts available to answer questions and discuss topics through online communities. Depending on student interests and needs, advisors can provide support in areas of specific expertise and/or act as a sounding board generally. It is important to ensure that students have an opportunity to develop community connections and supportive relationships that suit their plans for post-graduation, whether in personal, educational, or workplace contexts. Also consider multiple modes of communication with advisors, including in person, over the phone, in writing, through messaging, or any combination of these, to help foster community connections. Note that local district and school policies regarding the safety of connecting with adults beyond the school staff must be adhered to when considering advisors for students, as is the case for all school-directed learning activities.

Materials and resources: Some capstone processes will require access to specific materials and resources, such as collection and lab equipment for chemical tests conducted on a nearby river, studio equipment for a photography portrait portfolio, or landscaping equipment for the building of a community garden. While some students may have ready access to needed materials and resources, others may need help sourcing materials. Note that some materials will





take more time to acquire, organize, test, calibrate, etc., and this challenge should be taken into account when selecting a capstone process to pursue. Additionally, costs for materials and resources are a consideration.

5. Assessment

Assessment that is responsive to student learning interests and needs, and that encourages their agency as lifelong learners, promotes rigorous capstone *processes and representations*, as well as purposeful career-life development and preparation for post-graduation. The following assessment principles underpin the capstone process ideas and specific capstone examples provided in this section. In addition, these principles can help inform ongoing formative conversations between students and their teacher-mentors, and can help co-design capstone assessment materials with students.

Capstone assessment includes...

- A strength-based perspective a focus on what students are doing well and can build on
- Growth on a developmental continuum a focus on learning as a lifelong journey
- Progress over time a focus on creating space for deeper learning and understanding
- Descriptive and timely feedback a focus on relationship and responsiveness
- Feedback about processes and reflection a focus on experiential learning
- Self-assessment and student ownership a focus on student agency
- Self-advocacy and learning how to ask for what is needed a focus on student confidence
- Application to plans for post-graduation a focus on personal aspirations and next steps in the lifelong learning journey

Deeper learning ideas for capstone process and representation

A small working group of B.C. teachers collaborated to develop seven approaches to the capstone *process and representation* component that encourage deeper learning experiences for students. These are a few examples among many approaches to provide students with ideas and structures for their capstone, and can be adopted, adapted, and/or combined in ways that make sense to student learning goals and plans for post-graduation. School teams are invited to use these ideas as starting points for conversations about which approaches to capstone *process and representation* suit student interests and needs in local contexts. In addition, teacher-mentors may find these deeper learning resources helpful to co-plan and guide formative check-in conversations with their students.

Note that the process structures draw on Curricular Competencies from diverse areas of learning in the curriculum, are interdisciplinary in nature, and foster Core Competency development. The hope is that there is sufficient variation and flexibility within these deeper learning choices to address a multitude of student interests and needs, as well as possibilities for post-graduation. Additionally, teacher-mentors are encouraged to be open to alternative deeper learning structures from their students should the opportunity arise.

Seven general processes, encompassing the following approaches to the capstone *process* and *representation* component, are described below:

- · Connect and collaborate
- · Create and build
- Create and express
- Innovation and entrepreneurship



- Investigate and report
- Personal story
- Service learning

Following these general process descriptions, specific student illustrations of each structure are provided for further elaboration.

Capstone – Connect and Collaborate

This capstone option, which focuses on connecting and collaborating, is an opportunity for students to work closely with a learning partner who has professional and/or personal expertise in a field related to the project. This option is characterized by guided experiential learning, including observation, dialogue, and practice, plus opportunities for application. Where possible, the student and learning partner should meet in person in order to encourage relationship building and to gain deeper understanding.

Process

Identify growth area and develop relationship

- Self-identify an area of interest with potential for personal growth
- Connect with a community member with experience and/or expertise in the growth area (e.g., family member, Elder, community member, industry/business professional, etc.) to shadow and share their knowledge and practice
- · Co-develop plan of action in growth area

Observe and question

- Watch practices with intent to develop a deeper understanding of applied knowledge
- Reflect on practices and personal applications
- Generate questions and dialogue about observations and thoughts behind processes

Experience and apply

- Try practices under the guidance of the community member
- Seek and apply descriptive feedback about growth area
- Document applications of learning
- Reflect on personal growth (e.g., through journal, photo album and captions, etc.)

Communicate

 Reflect on and share growth in new practices and competencies; reflect on how to apply them to preferred future plans for post-graduation



Capstone – Create and Build

For students who choose to create and build a product for their capstone, applied design is a useful process to explore. This process is characterized by the development of an understanding of the people for whom students are designing products and can be useful in grappling with challenges and/or functionality that require creative ideas and hands-on approaches.

Process

Understand and define the context

- Begin with a challenge and/or functionality and the intended user(s) in mind (this will better inform how the applied design process unfolds)
- Enhance understanding of community needs by engaging in empathetic observation, including communication with potential users to explore their needs and wants; practice active listening
- Contemplate the intended purpose of the product and the perspectives of potential users to envision a user-friendly product that addresses the identified challenge or functionality
- Identify the success criteria for the product and its design process, as well as any
 constraints to account for, such as budget, available materials, community impact,
 and environmental care

Ideate, prototype, and test

- Experiment and explore possibilities, taking creative risks in generating ideas and adding to others' ideas in ways that enhance them
- Screen ideas against the success criteria and constraints; maintain an open mind about potentially viable ideas throughout the design process
- Research sources of inspiration and information to develop a design plan that includes key stages and resources
- Create prototypes, making changes to tools, materials, and procedures as needed; document iterations of prototyping
- Seek feedback from identified sources (for example, from a field expert) and communicate with potential users about design ideas and prototype(s); apply the feedback and new information to enhance the design

Make and share

- Use appropriate tools, technologies, and materials to make the product
- Share progress while creating to enable ongoing feedback and to adapt the design as needed
- Be mindful of unintended negative environmental impacts and use materials in ways that minimize waste
- Decide how and with whom to share and/or promote the product
- Evaluate the success of the product design, explaining how it reflects the criteria and addresses the challenge and/or functionality
- Reflect on the creating and making process, building and elaborating on what worked well and what might be done differently next time
- Reflect on newly acquired competencies and skills and how they can be applied in other contexts

Capstone – Create and Express

This capstone option provides students with a creative mode to convey their learning, interests, passions, or talents. Messages, feelings, and emotions can be expressed through original actions, words, images, music, talents, and so forth. Creation and expression can take many forms and include sharing creative work with an appropriate audience.

Process

Inspiration and ideation

- Reflect on personal experiences and skills to brainstorm potential ideas
- Take creative risks in generating ideas and add to others' ideas in ways that enhance them
- Identify a driving question and develop a vision to connect to a theme

Design

- Identify and research relevant elements, contexts, and/or criteria for the project
- Draft preliminary plans (e.g., storyboard, outline, sketch, etc.), considering intended audience and various modes or platforms for presentation/presenting creative work
- Identify appropriate tools, technologies, materials, and processes, and establish a time frame for creation
- Maintain an open mind about potentially viable ideas and flexibility to respond to changes as needed

Create

- Create and refine work/performance
- Receive and apply constructive feedback to further refine and revise
- Use self-reflection and awareness to refine according to intended theme

Communicate

- Arrange showcase/performance (e.g., space, materials, equipment, promotional materials)
- Present to/perform for an audience and seek feedback related to the theme and the intent
- Self-reflect throughout the creating and expressing process, building and elaborating on what worked well and what might be done differently next time
- Reflect on and share growth in new skills and competencies and consider how to apply them to preferred future plans for post-graduation

Capstone – Innovation and Entrepreneurship

The focus of this capstone option is to create and experience the start of a new business initiative. Students will conceptualize a product and/or service that is original to them and may incorporate active job shadowing/internship. This is ideal for students who are enthusiastic about following a personal passion, are self-motivated, desire the experience of working independently, want to meet new people and network with other entrepreneurs and professionals, and wish to help people use products and services that improve their lives. Students may choose to design and create their own personal brand by becoming an expert and learning the ropes of an industry through first-hand experience.

Process

Conceptualize

- Identify areas of interest, personal passions, and enjoyment, and brainstorm types of business ideas that connect to personal interest
- Take creative risks in generating ideas and add to others' ideas in ways that enhance them, maintaining an open mind about potentially viable ideas
- Taking the viewpoint of the potential customer, consider the what, why, who, and how
- Enhance understanding of community needs by engaging in empathetic observation, including communication with potential users to explore their needs and wants
- Determine whether the business will include a service and/or product

Analyze

- Gather and evaluate information through market research on the business service/product concept (e.g., conduct user surveys and test marketing, consider risk management/liability, etc.) to determine the needs of potential customers
- Identify the potential costs (materials, resources, venues, equipment, labour, insurance, etc.)

Design

- Create a plan that includes business elements such as timelines, costs and pricing, promotion, and distribution
- Share progress throughout this process to enable ongoing feedback and improvements

Apply

- Elaborate how to implement the business plan and apply if feasible
- Critically reflect on the entrepreneurial processes, and identify challenges/define new goals for future business ventures
- Reflect on and share growth in new skills and competencies and consider how to apply them to preferred future plans for post-graduation

Capstone – Investigate and Report

This capstone option is an opportunity to build research and communications knowledge and competencies through an active exploration of a meaningful question, problem, desired career path, or issue. Following an inquiry process, students can employ disciplinary thinking to develop important skills, such as formulating driving questions, planning inquiries, gathering and analyzing information, and communicating findings.

Process

Formulate an inquiry question to investigate

 Develop an essential question that addresses curiosity about a topic or issue of personal, local, or global interest

Plan and investigate

- Plan, select, and use appropriate investigation strategies (e.g., academic research, fieldwork study, observation methods, interviewing an expert, etc.) to collect reliable information and data
- Assess risks and address ethical, cultural, and/or environmental issues associated with proposed strategies
- Apply the concepts of validity and accuracy

Analyze and interpret collected information and data

- Seek, analyze, and describe patterns, trends, connections, and/or causeand-effect relationships
- Construct visual support(s) (e.g., tables, graphs, models, diagrams) to efficiently communicate information
- Use background knowledge and new understandings to draw conclusions that are consistent with evidence

Evaluate and conclude

- Describe what worked well and identify specific ways to improve future investigations (e.g., evaluate validity, limitations, and claims; draw conclusions about possible reasons for results; identify new questions to investigate)
- Communicate social, ethical, and/or environmental implications and contributions from the investigation and other research
- Reflect on the inquiry process and results (e.g., identify surface assumptions, identify bias in work and/or in primary and secondary sources, share personal learning and growth, examine the iterative nature of the process)

Report and communicate

- Report on findings, ideas, information, and implications of the investigation (e.g. formal report, science fair, oral presentation, website, video, etc.)
- Share key personal learnings related to the investigation processes and to personal development as an inquirer

Capstone – Personal Story

This capstone highlights and explores a personal story, giving students an opportunity to reflect on and share a meaningful life-changing event/experience (e.g., mental health, recovery, immigration, etc.). The autobiographical process is narrated from the student author's perspective.

Process

Identify purpose and intent

- Students should contemplate a memorable event and/or significant learning experience that challenged and shaped them to be who they are today
- Consider the following questions:
 - Why and how did the event or learning experience change who they are and/or their outlook?
 - With whom would they like to share their story and why?
 - What is the motivation/inspiration for sharing their story and what is the overall message they wish to communicate to their audience?

Plan and design

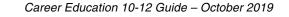
- Create a storyboard combining the ideas and resources that have been gathered, and that maps out alternative versions of the vision
- Determine how the story can be organized in a way that is most meaningful and that best communicates the message to be conveyed
- Organize story events and photos and/or images according to the major stages/progression/transformation to be illustrated
- Determine the best way to tell the story (e.g., visual/oral/written expression, voiceover, text, music, digital tools, other effects or a combination)
- Consider ways to connect the progression/transformation/stages/sections. For example:
 - How might visual/oral/written expression and/or voiceover and/or text be used to tell the story?
 - What will the design/layout look like?
 - Will other effects, such as music be included?
 - How might digital tools be used to tell the story?
- Ensure the story is engaging for the intended audience, as well as focused, organized, and concise

Create and review

- Consider which individuals to approach to review and provide feedback on the personal story, drawing on individuals from multiple areas in the students' lives
- Keeping an open mind, incorporate relevant feedback and suggestions as needed

Present

- Share story with an audience
- Reflect on the story work and thinking throughout the preparation and presenting process, elaborating on new competencies and skills learned, and the personal impact of the capstone process; reflect on how to apply them to preferred future plans for post-graduation



Capstone – Service Learning

This capstone is for students who want to contribute to the community, learn leadership skills, and motivate others to make a difference in their school and/or community. It is also aimed at students who want to broaden or develop leadership traits such as commitment, accountability, initiative, resilience, and empathy by planning, organizing, and leading events that enable them to experience the value of community involvement while inspiring and motivating others to act. Students explore the different roles of a team when working toward a common goal and demonstrate a willingness and enthusiasm to actively participate in service experiences.

Process

Understand and interpret context

- Identify a community to contribute to, and work with community members to generate ideas and identify an issue/need
- Observe the community closely and with empathy to gather ethical, social, cultural, and/or environmental context
- Wonder and ask questions, determine gaps, and clarify priorities that will inform and shape vision

Plan and apply

- Formulate plans for a solution/change; determine a process (an approach with strategies), resources required, and a method to organize the information; describe intended outcomes
- Identify intended impact and possible unintended negative consequences, and consider different viewpoints and perspectives
- Build on prior knowledge, consider social and cultural implications and limiting factors, and generate possibilities and alternatives
- Consult with community and refine the plan based on feedback provided
- Reflect on and monitor the plan and processes

Implement

- Activate the plan using strategies, intended processes, and resources to effect change
- Monitor the plan, maintaining an open mind and the flexibility to be responsive and adjust as needed

Analyze and evaluate

- Communicate with, and seek feedback from, participating community members
- Critically evaluate the impact of the service (Was the intended outcome achieved? How were the community members affected?)
- Explain how the process contributed to the individual, family, community, and/or environment
- Recognize community needs for sustainability, and recommend further support required/follow-up procedures

Communicate

- Decide on how and with whom to share the service experience, impacts, and key learnings (e.g., video, display, concept map, testimonials from community members, pamphlets, etc.)
- Critically reflect on the processes, experiences, impacts, and personal growth

Specific capstone presentation and representation illustrations

In this section, specific capstone *process and representation* illustrations demonstrate how individual students have taken up these general capstone process choices to address personal interests, learning needs, and goals for post-graduation. Also included are details that may be of interest to teacher-mentors as they support students with their capstone, such as connections to diverse areas of learning, mentoring tips, and formative assessment ideas. The table below provides a quick content overview of the illustrations.

Deeper learning process	Illustrations	Page
Connect and Collaborate	Student deepens her knowledge and practical skills in her community's traditional cuisine	35
	Student expands his awareness and experience of teaching profession through job shadowing	40
Create and Build	Student collaborates with team and enhances technical skills	49
	Student builds website to develop her profile as an artist and showcase her work	54
Create and Express	Student enhances artistic design through the cultural traditions of his community	58
	Student develops as a songwriter and performer	62
Innovation and Entrepreneurship	Student develops transferable skills in support of preferred career pathway	66
	Student builds on social, leadership, and athletic strengths to develop as a coach	70
Investigate and Report	Student expands skills as a researcher and historian	74
	Students refine collaboration and field study skills	78
Personal Story	Student seeks to build relationships and improve English communication skills	86
Service Learning	Student refines her social activism and leadership skills	92
	Student further develops her confidence and shares her mindfulness knowledge with peers	97



STUDENT DEEPENS HER KNOWLEDGE AND PRACTICAL SKILLS IN HER COMMUNITY'S TRADITIONAL CUISINE



Self-assessment and critical analysis

Throughout her exploration of possible career paths in Career-Life Education (CLE), Career-Life Connections (CLC), and the *self-assessment and critical analysis* component of her capstone preparation (see pages 15–21 in the Career Education 10-12 Guide for more information about the components of capstone), the student expressed an interest in deepening her knowledge of and practical skills in the cuisine of her First Nations heritage. In considering her preferred options for post-graduation, she shared how important it was to her to learn more about the preparation of the traditional specialty dishes of her community.



Process and representation

<u>Learning focus</u>: Deepening personal knowledge of and practical skills in her community's traditional cuisine under guidance of an expert advisor

Learning artifact: Personal cookbook

Context

The student was inspired by her grandmother's expertise in their community's culinary traditions and her own enjoyment with learning through Food Studies coursework. She was also working on other related learning activities, including her FOODSAFE certificates.

Additionally, the student identified that her preferred learning approach would include partnering with her grandmother and developing practical knowledge through hands-on cooking experiences under her guidance. The *connect and collaborate* process was selected as a good fit for this learning preference. The student asked her grandmother to be her community advisor in this process, and the grandmother agreed to share this knowledge and help her granddaughter deepen her understanding of the relationship between their traditional food and culture.

As a means to record her learning, and as a post-graduation resource for her future reference, the student decided to create a personal cookbook. In consultation with her grandmother and teacher, they agreed that the choice of recipes would be the student's with input from her grandmother's expert advice, and the cookbook would reflect the key traditional foods the student associated with her family, culture, and heritage. Although the cookbook's main purpose was as a personal resource, the student planned to share the recipes with her family and with her school community.





Connections



Curricular or domain connections

<u>Career Education</u> – Analyzing internal and external factors to inform personal career-life choices for post-graduation; Assessing personal transferable skills, and identifying strengths and those skills that require further refinement; Collaborating with teacher-mentor and community advisor; Cultivating community relationships to support plans for post-graduation; Reflecting on learning experiences and personal development in the Core Competencies; Preparing for next steps in personal lifelong learning journey

<u>Food Studies</u> – Creating food products, working collaboratively and individually, and making changes as needed; Identifying and using appropriate tools, technologies, materials, and processes; Learning First Peoples food protocols, including land stewardship, harvesting/gathering, food preparation and preservation, and ways of celebrating

<u>Social Studies</u> – Developing understanding of the connections between the past, present, and future and the people and traditions that shape the development and evolution of communities, especially one's own



Community connections

School community
Local First Nations community



Connections to First Peoples Principles of Learning

Learning involves generational roles and responsibilities: Teaching and learning is the responsibility of all members of a community; Valuing, learning from, and applying her grandmother's expertise

Learning involves recognizing the consequences of one's actions: Focusing on reflective and critical thinking to help learners understand the natural consequences of their actions

Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors: Appreciating the traditional knowledge that her grandmother shared with her, treating it with the respect it deserves, and focusing with intent on healthy living principles for herself and others; What is learned by the individual is also of benefit to family and to the community



Core Competencies connections

Communicating – Connecting and engaging with others; Acquiring and presenting information

Collaborating - Supporting group interactions

<u>Critical and Reflective Thinking</u> – Questioning and investigating; Designing and developing; Reflecting and assessing

<u>Positive Personal and Cultural Identity</u> – Understanding relationships and cultural contexts; Recognizing personal values and choices

Personal Awareness and Responsibility - Well-being

<u>Social Awareness and Responsibility</u> – Contributing to community and caring for the environment; Building relationships; Valuing diversity





Connect and collaborate process



Identify growth area and develop relationship

The student lived with extended family, including her grandmother, so they were able to readily co-plan many learning opportunities, including both informal and formal cooking experiences. These included meal planning, grocery shopping, food preparation, cooking, serving, and eating practices. They planned learning opportunities for a two-month period, ensuring that the student would gradually take on more responsibilities as she developed increased independence with her skills and added to her repertoire of recipes. Other family members would also provide constructive feedback about her cooking practices and the resulting meals.



Observe and question

The student conducted some research on her own first, both online and by interviewing members of her community, to determine what recipes she might want to learn and what skills she would need to develop. In conversations with her grandmother and CLC teacher-mentor, the student decided on three learning goals: deepening understanding of the food and culinary traditions of her family; applying the related practical skills to her own tastes and lifestyle; and thinking about how to use this newly learned culinary knowledge to help others better understand herself, her family, and her culture. She co-developed the following questions to focus her observations and notes:

- What traditional foods and meals should be included in her recipe book to reflect her own tastes and nutritional needs, and to accurately represent her culture?
- What constraints and challenges would need to be accounted for (e.g., financial constraints to purchase ingredients and equipment for when she moved away from home)?
- How can traditional recipes be adapted for various reasons, such as lack of specialized ingredients and specific dietary needs?
- What role would personal preferences and the impact of one's current diet have on exploring new foods (e.g., the student preferred her food to be less spicy than did her grandmother)?
- What possible consequences might result from her actions during this process, and how could they be prevented or mitigated? For example:
 - What precautions should she take to prevent damage of her grandmother's tools and equipment?
 - How could she address repairing relationships if she inadvertently insulted someone by a negative reaction to a food with which she was unfamiliar?
 - In creating a recipe book that others may follow, how should she address topics like allergies and food poisoning, and differences in understanding due to cultural dissonance?

The student then began to observe and assist her grandmother throughout cooking preparation and serving activities. They discussed traditional food ingredients and recipes, as well as their significance to the family and to broader community traditions. The student kept notes about interesting points and new learnings, adding these to the appendix of her cookbook and using them as reminders to share learning progress with her peers during the CLC class's ongoing small group discussions about their capstone.





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Experience and apply

Eventually her grandmother took on more of an assistant role in the cooking process, while continuing to help the student refine her skills and recipe notes. The student collected information about, and recorded different attempts at refining, each recipe, including notes on adaptations and substitutions.

The student began to curate recipes based on her personal preferences, her plans for the cookbook design, and feedback from taste testers. The student also examined published cookbooks, blogs, and social media as a means of researching how to create a cookbook. This research included the art of food photography, how to format recipes, graphic design, and book organization. In addition, she evaluated different food sources and ingredient variety in order to make ethical, culturally sensitive, and environmentally conscious decisions.

The student created a scrapbook-style cookbook that included six recipes with a variety of ingredients and processes, photos of the processes and end results, and blurbs that highlighted some of the cultural protocols and contexts associated with the selected recipes.



Communicate

The student shared the cookbook and some sample recipes to taste during her oral presentation on what she learned about her culture and heritage, and about traditional cuisine, in her CLC class. She invited her grandmother to the presentation, which included a video of them cooking together.

In her presentation and reflective writing notes, the student expressed how this learning brought her closer to both her grandmother and their shared culture and heritage.

Teaching and mentoring tips

- The CLC teacher-mentor worked with her school's Aboriginal Support Worker to ensure cultural sensitivity and respect through appropriate protocols when connecting with the student's grandmother and community.
- The teacher-mentor met with the student, her grandmother, and the Aboriginal Support Worker to discuss learning expectations and feedback guidelines before beginning the process.
- Regular check-in conversations with her teacher-mentor during CLC classes about her cooking experiences and progress helped the student to monitor and manage her learning tasks and time throughout.

Additional resources

- · Canada's Food Guide for First Nations, Inuit, and Métis
- FOODSAFE

Formative assessment

 During their regular check-in conversations, the student shared her notes about her learning and insights with her teacher-mentor. The teacher-mentor used these opportunities to monitor the student's progress and to make suggestions for next steps as needed.



- The student's grandmother was a primary source for formative conversations in this process, providing background information, intervening to support, and advising throughout. The conversation between the grandmother, student, teacher-mentor, and Aboriginal Support Worker about the student's learning goals and ways to support her helped them focus before beginning the learning.
- Regular small group discussions with her peers in CLC class about their capstone learning gave the student a means to reflect on her learning as well as to ask for ideas and support. The student reciprocated for her peers as well, using the questions and feedback suggestions provided by their teacher-mentor to guide the formative conversations in a constructive and strengths-based manner.
- To ensure the quality of her cookbook, the student asked family members to cook
 its recipes, testing the clarity and accuracy of the instructions. She adjusted some
 recipes based on their feedback.



Showcase and celebrate

To continue her community's tradition of passing on knowledge and culture to others, the student decided to publish some of the recipes in the school's newsletter and to cook a meal with her grandmother for audience members as part of her capstone presentation. The student shared her plans to pursue a career in community law enforcement, explained how her future of healthy living would include cooking for herself and connecting with others through relationship and culture, and concluded that she could apply these transferable skills to both her personal and professional lives post-graduation.



STUDENT EXPANDS HIS AWARENESS AND EXPERIENCE OF TEACHING PROFESSION THROUGH JOB SHADOWING



Self-assessment and critical analysis

Throughout his volunteer and work experiences, and the *self-assessment and critical analysis* component of his capstone preparation in Career-Life Connections (CLC) (see pages 15–21 in the Career Education 10-12 Guide for more information about the components of capstone), the student expressed his interest in working with children and pursuing a career in teaching. He felt that he could expand his awareness of what the profession is really like by observing learning in an elementary classroom and tapping into the thinking of a practicing teacher. The student hoped to try teaching a few lessons with students as well.



Process and representation

<u>Learning focus</u>: Expanding awareness and experience of the teaching profession under guidance of an expert practitioner

Learning artifact: Learning journey blog

Context

The student enjoyed working with children, including as a babysitter and sports coach, and was wondering if he should pursue a career in education. Considering how he hoped to expand his knowledge and skills, the student decided to seek a job shadowing opportunity and follow the *connect and collaborate* process in doing so. He had kept in touch with some of his elementary school teachers, and his elementary school was a short distance away, so he was readily able to arrange a job shadowing partnership.

Connections



Curricular or domain connections

<u>Career Education</u> – Analyzing internal and external factors to inform personal career-life choices for post-graduation; Assessing personal transferable skills, and identifying strengths and those skills that require further refinement; Collaborating with teacher-mentor and community advisor; Cultivating community relationships to support plans for post-graduation; Reflecting on learning experiences and personal development in the Core Competencies; Preparing for next steps in personal lifelong learning journey

<u>Child Development and Caregiving 12</u> – Theories of child development, including cultural influences; Stages of child development from birth to age 12; Role of play in human development and learning; Legal responsibilities of caregivers and educators





Community connections

Neighbourhood elementary school Teachers' professional community



Connections to First Peoples Principles of Learning

Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors: The uniqueness of each learner is valued and appreciated; Each person is unique and there are many different ways that learning occurs; Valuing learning, supporting younger members of the community, and building relationships through education

Learning involves patience and time: Learning is most effective when it occurs in a setting where the learning can be applied in an authentic context, and over time



Core Competencies connections

Communicating - Connecting and engaging with others; Acquiring and presenting information

Collaborating - Working collectively; Supporting group interactions

<u>Critical and Reflective Thinking</u> – Analyzing and critiquing; Questioning and investigating; Designing and developing; Reflecting and assessing

Personal Awareness and Responsibility - Self-regulating; Well-being

<u>Social Awareness and Responsibility</u> – Contributing to community and caring for the environment; Building relationships

Connect and collaborate process



Identify growth area and develop relationship

Initially the student visited some of the teachers at his former elementary school to observe learning in the classroom and ask questions before starting his job shadowing experience. He then made arrangements to collaborate with one of the teachers and to visit her classroom on a regular basis over six weeks, during the CLC block of time in his secondary schedule.

With his elementary teacher agreeing to be his advisor, the student developed a plan to observe learning in the classroom and to record notes and questions for their later discussions. Eventually the student would begin to assist in some whole class lessons and support students in small group learning activities. The culminating goal was for the student to design at least one learning activity and teach the class by the end of the job shadowing period, under the guidance of his advisor. In addition, he and his CLC teacher-mentor agreed that the student would document his learning journey throughout the six-week period according to the co-designed personalized rubric (see "Formative assessment" section below), using district guidelines to maintain student privacy and safety.



Observe and question

The student was an active observer, taking notes on what he noticed and devising questions to ask the advisor and/or other staff, and/or to research using information provided in resources





that his advisor had recommended he read (e.g., *Early Learning Framework* and *The Primary Program*).

In addition to the classroom visits, the student arranged times to meet with his elementary advisor outside class to debrief and ask questions. These conversations were also an opportunity to refine plans and next steps for observing, supporting, and collaborating in the classroom.



Experience and apply

The student created a blog to document his learning journey and share with his CLC teachermentor and peers, being careful to abide by the district's internet use and privacy protocols. For example, the student's photos and descriptions from the classroom avoided student faces, names, and other identifiers. His posts were a combination of reflections on what he observed and experienced, questions arising from what he noticed and was confused about, and research and interview notes about teaching and learning practices, rather than notes about the elementary students themselves.

As he became more comfortable and confident in the classroom, the student became more active and took on more responsibilities for classroom-student learning. For example, he tutored individual students who were struggling with particular tasks and led small group learning activities. Throughout, he checked in regularly with his advisor for suggestions and feedback.

The student began to use some techniques he had learned through coaching experiences as well, testing their effectiveness with elementary students in a classroom environment, and described on his blog what seemed to be working and what he was learning about teacher-student interactions.

In collaboration with his advisor, the student developed a lesson plan for an integrated science and art learning activity related to the class's current learning theme. He taught it during his last visit to the elementary classroom, recorded what he noticed about the students' learning and reactions, and posted these insights to his blog with an accompanying self-assessment of his Core Competency development.



Communicate

Upon completion of the job shadowing experience, the student spent time polishing his blog so that, in addition to his original posts, it included:

- reflections on how he applied theories of learning, information about learners, and ideas to successfully engage and support the young students
- images of the work the students created as a result of their learning throughout the lesson (with parental permissions in place)
- a video of his self-reflection on learning and Core Competency development from the entire experience
- his research notes about how students learn, including a bibliography
- comments on what he would change about his practices in the future and why
- a description of how he now envisages his future career in teaching after this experiential learning opportunity





Teaching and mentoring tips

- Whenever considering a job shadowing opportunity beyond the school campus, it is important to ensure student safety and adhere to district protocols. Check your local district policies and procedures. See also Appendix B on page 101 for important considerations when students are working or volunteering offsite.
- It is important to communicate with parents about visitors in the classroom. The student prepared a letter of introduction to parents with the support of his advisor, explaining who he was, why he was in the classroom, and what he hoped to learn and accomplish with their children. Additionally, the principal introduced the student to the school community with a picture and brief biography so that everyone knew who he was and why he was helping throughout the school.
- As with all volunteers in the school, follow district safety protocols. In this case, the student needed to get a criminal record check before he began observing in the classroom. This activity was also part of his learning about the seriousness of his role and responsibilities as a co-supervisor of young children.
- It is a significant shift in perspective from being a "student" to becoming a "teacher" in the classroom. In this case, the elementary principal addressed this challenge proactively, providing the student with an orientation to the professional and safety expectations of adults working with young children, and offering to answer his questions and uncertainties as they arose.
- Students may not know what level of students and/or which subjects they might want to explore in teacher job shadowing experiences. Having time to observe informally in different classrooms before starting helped this student identify which teacher and class he hoped to work with.
- Students interested in early childhood education specifically may wish to volunteer and/or job shadow in a local StrongStart Centre or daycare program. Students interested in secondary education may wish to tutor peers, support small group work in areas of their learning strengths, run workshops for peers in an area of passion, and/or co-teach with an advisor in their own school community.

Additional resources

- Schools are a wealth of human resource expertise in education! Students can interview
 principals/vice principals, counsellors, youth workers, parents, district staff, and/or others
 in the school to learn more about a variety of teaching and learning roles and
 responsibilities in the school community.
- Early Learning Framework
- The Primary Program: A Framework for Teaching





In CLC, the teacher-mentor shared the general required criteria for the capstone components with the whole class. (See page 45 for the general capstone rubric provided to all students.)

Once this student had selected the connect and collaborate process with a focus on teaching and job shadowing, he developed a personalized assessment rubric, detailing specific criteria more relevant to his situation. He and his teacher-mentor negotiated some points until they both agreed on all criteria. They then used the personalized rubric as a reference to co-monitor learning progress throughout the six-week period, and to evaluate his work together for a final capstone process and representation mark. In this way, assessment and evaluation processes were collaborative, formative, and transparent.



Showcase and celebrate

The student presented his learning journey at the school's Capstone Fair in the gym to a small audience of CLC classmates and some Career-Life Education students, so they could get a sense of what capstone might look like for them the next year. The oral presentation length was 10 minutes, included visual aids, and was presented twice to different groups of peers.

As part of the presentation, the student pointed to his blog as the main demonstration for his learning journey into a future career in teaching. By sharing highlights from his blog, he was better able to present without needing to constantly look at his notes. For example, the student shared his revelation about how much patience is needed to work well with some students and how he was developing his ability to monitor his own emotions and responses so that he could better engage with these students. Additionally, he shared how personally motivating it was to give back to his local learning community. The student also planned to use the blog as part of the application process to post-secondary education programs for the following year.

A week later, the student presented about his learning journey again, this time in the less formal setting of his CLC classroom to a small group of three or four classmates and his teacher-mentor. This group provided feedback in learning areas he had predetermined for input.





General Capstone Process and Representation Rubric Guide

The general criteria required for the capstone *process and representation* component are listed below. These refer to demonstrations of learning by all students, regardless of the process and topic(s) selected. In their own capstone proposals, students should explain what specific steps they will take and milestones they plan to accomplish as they work through the selected process for this component.

Note:

- Suggested ways to personalize the capstone are provided; however, students may propose any other criteria relevant to the proposal as well.
- All final personalized criteria must be agreed upon by both the student and the Career-Life Connections (CLC) teacher-mentor.
- Personalized statements will help students design the steps of this capstone component. They will be referenced throughout check-in conversations about learning progress with the CLC teacher-mentor and will inform the capstone evaluation.
- Once the capstone process is underway, students may revise (in consultation with their teacher-mentor) criteria to reflect changes in plans as needed.



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Sections	General Criteria	Planning and organization notes and tips
Proposal	Proposal is handed in on time with all sections completed.	✓ My proposal will be completed and handed in by (date).
	I described multiple connections between at least two of my personal, educational,	✓ Format for my proposal: paper-based/digital/ video/other?:
	and/or career goals for post-graduation and the selected process and topic(s).	✓ My proposal will have extra detail in the area of to better explain
	My proposal identified the appropriate process used to pursue my capstone process and representation (either one of	✓ I will know I'm ready to move from research/information gathering to experiential learning when
	the suggested processes or an alternative and approved process specifically tailored to my capstone).	✓ I will collect these kinds of artifacts/evidence throughout my project to illustrate my progress and learning:
		✓ I will collect and organize my learning artifacts/evidence throughout the process in this way:
		Other ideas specific to my proposal:
Learning Partnerships	I found a learning partner or community advisor with relevant knowledge and/or	✓ I will hand in my learning partner/community advisor proposal by
	experience to connect with about my learning.	✓ I am looking for a learning partner/community advisor with these attributes, experiences, and/or skills:
	I communicated regularly with my CLC teacher-mentor to provide updates on my progress, successes, and areas where I	I will connect with my learning partner/community advisor in these ways:
	need further support. I demonstrated communication and collaboration skills when working with others, such as:	✓ In order to do well, I have talked with my learning partner/community advisor about the following expectations and plans, and I will follow through on these to reach my learning goals:
	 ⇒ Active listening ⇒ Responding in a timely manner ⇒ Speaking/writing clearly and with appropriate vocabulary and respectful 	✓ In addition, I will include the following people as resources to support my learning (e.g., Library Learning Commons teacher, guidance counsellor, family member, and/or educator with relevant
	language ⇒ Asking and answering questions	knowledge, etc.): ✓ I will communicate regularly with my CLC teacher-
	⇒ Asking for help and offering to help	mentor about my progress in these ways:
	Collecting and organizing information (including messages)	✓ To keep track of information and messages from my learning partner/community advisor, as well as the
	I submitted a constructive learning partner/community advisor report at the end of the process.	questions and insights that they prompt, I will
I participated as a member of my learning community by sharing my learnings through conferencing with, and presenting to, my peers.	✓ If I experience challenges working with a learning partner/community advisor, I will try these strategies:	
	In addition to sharing my learnings through conferencing with, and presenting to, peers, I will to give back to my learning	
		community and/or other communities. ✓ Other ideas:



Sections	General Criteria	Planning and organization notes and tips
Research	I consulted multiple relevant and reliable sources. I synthesized information from multiple sources to create personal meaning and understanding. I engaged ethically with information, demonstrating academic honesty and intellectual integrity. My bibliography lists all major sources, is formatted properly, and includes relevant annotations. I handed in all my research notes, including any recordings of interviews, screenshots of messages, etc. I consistently applied information literacy skills to accomplish learning, such as: ⇒ Knowing when information is required ⇒ Knowing how to develop an inquiry question ⇒ Knowing how to find information ⇒ Critically examining sources of information ⇒ Selecting the best sources of information ⇒ Organizing and using information	✓ My topic is phrased as the following inquiry question, encouraging deeper and meaningful exploration: ——— ✓ My topic(s) include these relevant subtopics, each allowing for interesting exploration that will support my main inquiry: ✓ I will consult these primary sources and other sources to gain a well-rounded understanding of the topic: —— ✓ I will use to take and organize notes with integrity, reducing the possibility of accidental plagiarism and increasing the possibility of making insightful connections between pieces of information. ✓ I will to document interviews conducted for research. ✓ I will to document online messaging conducted for research. ✓ I will to document survey/poll results conducted for research. ✓ My bibliography will be in MLA/APA/Chicago/other format: because ✓ My bibliography will include annotations about for each source (e.g., relevancy, accuracy, timeliness, source credibility, etc.). ✓ Other ideas:
Learning Artifacts and Evidence	I collected artifacts that relate to, and are evidence of, my learning throughout. I organized and shared a selection of these items as part of my representation, presentation, and reflection.	 ✓ I plan to collect these kinds of artifacts/evidence of my learning journey: ✓ I will keep my artifacts/evidence organized by ✓ I will share artifacts and/or pieces of evidence in my presentation to help illustrate the progression of my learning by ✓ I will share all artifacts/evidence with my CLC teachermentor by ✓ If I cannot physically bring in an artifact or piece of evidence, I will to document and share its place in my learning journey. ✓ Other ideas:
Representation	My representation was made wholly or mostly by me, and acknowledges sources of information and/or inspiration as part of its development. My representation is a direct application of what I learned during the course of this process.	 ✓ I will select a representation format that highlights my capstone and learning progress in relevant ways: ——— ✓ My representation will be a(n) because ✓ I will get help creating my representation from because ✓ My representation will be developed by following these steps:



		, Johnson
Sections	General Criteria	Planning and organization notes and tips
Representation (continued)	My representation is the result of my commitment to and passion for my topic(s) and choice(s). My representation showcases many of the skills and the knowledge I have developed during the course of this process. My representation supports my presentation and engages the audience.	 ✓ I will document the creation and evolution of my representation by ✓ My representation will be incorporated into my presentation by ✓ If I cannot bring in my actual representation because it is too large, too heavy, too fragile, etc., I will bring in as a stand-in representation. ✓ Other ideas:
Reflection	I addressed my questions clearly to explain the work that went into my capstone process as well as my thoughts and feelings about that work. I discussed my personal growth as well as academic and/or career-related growth that came from doing this project. I made clear connections between my project and growth in the Core Competencies. I used terminology and vocabulary relevant to my topic and my project.	 ✓ I will hand in my reflections by: ✓ My reflections will be recorded in the following format: paper-based/digital/video/other? ✓ I will focus on documenting my growth and progress in these initially identified Core Competencies, as they relate most strongly to my focus for this learning journey and my plans for post-graduation: I will review and revise this list throughout my capstone process, as needed. ✓ Other ideas:
Presentation	I dressed appropriately for my presentation, in either formal business attire or clothing appropriate to my learning focus and/or topic(s). My presentation clearly connected my capstone process to my personal, academic, and/or career goals. My presentation explained my personal growth during the course of the process as well as major learnings. I encouraged audience engagement. I communicated clearly with the audience. ⇒ Appropriate volume and pace ⇒ Appropriate tone for the learning focus and/or topic(s) and for the presentation setting ⇒ Consistent, appropriate eye contact ⇒ Confident posture and body language ⇒ Effective use of aids to support presentation (e.g. visual aids, speech notes) ⇒ Appropriate terminology used with context or explanation	 ✓ I will dress in for my presentation because ✓ My presentation will include these sections and/or key points: ✓ My presentation will include a speech/slideshow/video/activity/other?: ✓ I will encourage audience engagement by ✓ To prepare for presenting, I will: ✓ Other ideas:





Create and Build Illustration 1

STUDENT COLLABORATES WITH TEAM AND ENHANCES TECHNICAL SKILLS



Self-assessment and critical analysis

Throughout the *self-assessment and critical analysis* component of her capstone preparation (see pages 15–21 in the Career Education 10-12 Guide for more information about the components of capstone), the student shared that she wasn't sure about her plans for graduation yet, but was very excited about her experiences with the school's robotics club. She wondered if she could pursue this passion in some way as part of the capstone *process and representation* component. With the guidance of her Career-Life Connections (CLC) teacher-mentor, the student decided she wanted to focus on furthering her technical skills and developing effective strategies for engaging with her team members with increased confidence.



Process and representation

<u>Learning focus</u>: Collaborating as part of a team and enhancing technical skills to design and build <u>Topic focus</u>: Engineering and robotics

Context

The student is part of the school's Robotics Club and is completing coursework in Engineering 11. She has decided to collaborate with a team of students with complementary skills to explore an inquiry question in the field of robotics. The team of students recently watched a video that demonstrated the use of robots to lift and move items in a warehouse. The video inspired the team to design, create, and build a smaller-scale robot that can carry and move personal items. Their inquiry question is: How can we design and build a robot that will lift, carry, and move personal items for the user?

Connections



Curricular or domain connections

<u>Career Education</u> – Analyzing internal and external factors to inform personal career-life choices for post-graduation; Assessing personal transferable skills, and identifying strengths and those skills that require further refinement; Collaborating with teacher-mentor; Reflecting on learning experiences and personal development in the Core Competencies; Preparing for next steps in personal lifelong learning journey

<u>Engineering</u> – Applying design and user-centred principles, programming languages and applications, manufacturing, quality control methods, interpersonal and consultations skills to interact with clients

<u>Mathematics</u> – Understanding how to apply mathematics concepts to functional design, measurement and diagramming techniques, computational thinking and programming







Community connections

Robotics Club and team School community



Connections to First Peoples Principles of Learning

Learning involves patience and time: Working collectively as a team on common goals, seeking input and feedback from potential users throughout the creating and building process, repeated trial and error cycles to develop prototypes and iterations; Learning is most effective when it occurs in a setting where the learning can be applied in an authentic context

Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place): The student's learning is experiential, as she works with her team through iterations and feedback to create a functional robot



Core Competencies connections

<u>Communicating</u> – Connecting and engaging with others; Acquiring and presenting information <u>Collaborating</u> – Working collaboratively

<u>Creative Thinking</u> – Creating and innovating; Generating and incubating; Evaluating and developing

<u>Critical and Reflective Thinking</u> – Designing and developing; Reflecting and assessing

<u>Social Awareness and Responsibility</u> – Contributing to community and caring for the environment; Building relationships; Valuing diversity

Create and build process



Understand and define the context

- Although the team was already determined to design a robot that would lift, carry, and
 move personal items, there were many details to figure out regarding who might use this
 type of robot and for what purpose. The team pursued a market survey of students in the
 school community and decided to create an assistive technology that could carry items
 between lockers and classes for those students who found it difficult to do so on their own.
- Applying one of the strategies to develop her confidence with team members, the student decided to show initiative and volunteered to draft success criteria for their robot that she would later share with them for finalization. She interviewed a couple of students that teachers recommended might benefit from this type of robot and used the resulting information to write up the draft success criteria. The student later shared that she learned surprising insights from the students she interviewed and felt proud of how impressed her teammates were with her work on this task.
- The team shared their initial plans with their Robotics Club supervisor, and he was able
 to help them access the school's 3D printer, robotics components, and other resources
 to begin the design work.





Ideate, prototype, and test

- The team of students had many experiences with building robots from prior club activities to draw from, but they still ended up creating a few prototypes. For each iteration, they sought input and feedback from the Robotics Club supervisor.
- The student took the lead in documenting and recording their various designs and prototypes, including diagrams and photographs. She used these records as evidence of technical learning to reflect on and to self-assess Core Competency development.
- Taking the lead as record keeper for the group helped to build the student's confidence in contributing to the group in a key role. She was able to use the documentation activity as a means to initiate conversations and share her thoughts related to their progress with fellow team members.
- The student also volunteered to take the lead in connecting with users to get their input and feedback on designs and prototypes, as she had already developed relationships with them.

Make and share

- The team built a final iteration of their robot design; however, the students were not satisfied with the results. The complexity of this type of robot made it difficult to produce to a standard that would be viable as an assistive technology in a real way. However, the Robotics Club supervisor pointed out how much the students had learned about robotics design and development generally through their many trial-and-error experiences, thus defining the process as a learning success. At the year-end Robotics Club event, the team shared a model of the robot they had hoped to build, discussing its assistive benefits, the challenges they had in building it, and what they had learned throughout the process.
- The student felt she had made good progress in enhancing her technical skills
 throughout the process. In addition, she was especially proud of her progress in
 developing confidence and leadership skills from working with other team members, as
 well as her progress in developing and sustaining relationships with the students who
 had provided input and feedback on the design.

Teaching and mentoring tips

- When helping students develop inquiry questions for design thinking, begin with either a desire to change a design or to explore an idea from a provocation or from a student's personal interest in a domain.
- For students who may need support with project management and timelines, consider chunking the process at each stage with smaller tasks/milestones to accomplish, and then putting it all together at the end.
- Graphic organizers for steps and processes are useful to help students determine and reach goals, as well as providing a framework for reflection (e.g., students can keep a journal to document ideas, process, progress, and understandings of learning).



- Safety procedures must be followed when developing and working with robotics ensure
 that appropriate adult supervision for production and use of machinery and electronics is
 in place.
- Some students may need help coping with failed attempts and frustrating challenges. Remind them that failures are a normal part of the design process and should be used as a platform for learning, not to mention an opportunity to build resiliency and grit.

Additional resources

- A Day in the Life of a Kiva Robot (video)
- 3D printer

Formative assessment

- Co-constructing criteria with students helps ensure clarity of expectations and
 encourages student ownership of learning. Once the student and the CLC teachermentor had developed the criteria together, the teacher-mentor used it to frame
 descriptive feedback based on observations of the student's practice and application of
 teamwork strategies and technical skills.
- Additionally, the student used a graphic organizer to inform reflections on learning at various stages of the design, creation, and application process to move her thinking and development forward. (See page 53 for sample of a reflection graphic organizer.)
- For some capstone approaches, a collaborative effort among teachers can help tap into diverse sources of expertise for learning and assessment purposes. During regular check-in conversations, the CLC teacher-mentor provided the student with suggestions and feedback on ways to provide input in a confident manner to her peers on the team, one of her learning goals. While the team worked on their inquiry, the Robotics Club supervisor provided ongoing feedback to the whole team about their progress in the design and development of the robot, which the student reflected on and shared with her CLC teacher-mentor as part of her second learning goal.



Showcase and celebrate

At the school's capstone showcase, the student shared a synthesis of her learning journey to family, school staff, and peers, including demonstrations of learning from the record-keeping and accompanying reflections. In addition, the student spoke about how she had experienced an unexpected side benefit from the capstone process: she had learned much about the mobility challenges of her fellow students and had become very interested in the potential of assistive technologies to change their quality of life. As such, she was planning to study biomedical engineering.



Create and Build Reflection Graphic Organizer

Create and Build process stage	Strengths	Stretches	What I am	Notes: (e.g.,	Next steps
I am working on	(incl. evidence)	and/or challenges (incl. evidence)	learning (e.g., about myself, re. capstone goals)	questions I still have; resource(s) I need, etc.)	
Inspiration and Ideation					
Given my prior knowledge, personal experiences, and skills, I can frame and clarify the type of problem I am solving and focus my exploration by identifying what I know and need to know about the design challenge.					
Design					
 I can design a plan to solve my challenge that is viable and includes time constraints and benchmarks. 					
I can create a system for gathering feedback from my learning partners with identified criteria.					
Create					
I can create a testable first attempt at a solution.					
I can identify the strengths and weaknesses of my prototype to use as feedback/data for refining my design to create a more responsive solution to the challenge.					
I can justify my decisions and process.					
Coordinate and Present					
I can identify criteria for an effective presentation and use them to present my findings to an audience, keeping in mind who my audience is.					
I can authentically reflect on my process and product during each phase of the design and creation process, and share what I have learned and how I plan to move forward with my learning postgraduation.					



STUDENT BUILDS WEBSITE TO DEVELOP HER PROFILE AS AN ARTIST AND SHOWCASE HER WORK



Self-assessment and critical analysis

Throughout the *self-assessment and critical analysis* component of her capstone preparation (see pages 15–21 in the Career Education 10-12 Guide for more information about the components of capstone), the student has been very clear in her aspirations for post-graduation: to continue her work as an artist as well as pursue further learning within the Faculty of Fine Arts.



Process and representation

Long-term learning focus: Further her career-life plans as an artist

<u>Immediate focus</u>: Design website to create a public profile and to share her work more broadly

Context

The student is a committed visual artist and is currently learning through IB Art coursework as well as community-based art lessons. She is already well on her way as an artist, has participated in several group shows at a local gallery, and has sold several pieces. The student would like to further her career-life goals in the fine arts and has chosen to focus her capstone *process and representation* component on sharing her creative works with a wider audience, including post-secondary fine arts programs. She decides to build a website to establish a public profile as a practicing artist and to market her work.

Connections



Curricular or domain connections

<u>Career Education</u> – Analyzing internal and external factors to inform personal career-life choices for post-graduation; Assessing personal transferable skills, and identifying strengths and those skills that require further refinement; Creating and critiquing personal and public profiles for self-advocacy and marketing purposes, collaborating with teacher-mentor; Reflecting on learning experiences and personal development in the Core Competencies; Preparing for next steps in personal lifelong learning journey

<u>Visual Arts</u> – Understanding the purpose of critique and choosing when to apply suggestions; Documenting and sharing artistic works in a variety of contexts; Connecting with others on a local, national, and global scale; Roles of and relationship between artist and audience in a variety of contexts

<u>Information and Communications Technology</u> – Website development planning tools; Advantages/disadvantages of websites and content management systems; Technical and symbolic elements that can be used to create representations influenced by point of view, story, genre, and values





Community connections

School community
Artist communities, both local and online
Fine Arts faculties



Connections to First Peoples Principles of Learning

Learning is embedded in memory, history, and story: The student shares her personal story through her art



Core Competencies connections

Communicating - Connecting and engaging with others; Focusing on intent and purpose

<u>Creative Thinking</u> – Creating and innovating; Generating and incubating; Evaluating and developing

<u>Critical and Reflective Thinking</u> – Analyzing and critiquing; Designing and developing; Reflecting and assessing

Personal Awareness and Responsibility - Self-advocating

Create and build process



Understand and define the context

- The student planned to create a website that could act as a platform to expose her art to a wider audience. In addition, she hoped to use this platform as a portfolio to support her applications to faculties of Fine Arts and to perhaps generate some income through sales of her work in a way that was flexible and compatible with her expected busy schedule while attending post-secondary studies the following year.
- The student conducted research before and while building her website, including:
 - Analyzing websites and selling platforms used by other visual artists, taking notes on what she liked and what she thought could be improved or personalized for her own style and needs
 - Speaking with people who knew her artistic style to get a sense of what they would expect to see on a website that represented her
 - Researching the portfolio requirements for the post-secondary programs she planned to apply to
 - Analyzing and comparing several website-building platforms with e-commerce capability after receiving recommendations from people with experience building websites
 - Talking with her art teachers about the styles and pieces that would best reflect her personal style and passions
- The student designed an online survey and sent it to a wide range of people. She used the feedback to help develop the look and functionality of her website. Questions included:
 - When visiting a website with artwork, how many images do you look at before deciding if you like the artist's style?



- Do you prefer a slideshow or gallery view of images?
- If you are familiar with my artistic style, would you say that a minimalistic black & white or a colourful palette would be a better backdrop for my website?
- Which of the following fonts best represents my style and personality?
- After doing her research, the student decided to use a site-building service that required some cost to run, but that would, in her estimation, allow her to expand the website in the future with minimal extra work. The student also chose to purchase a domain name after learning that they are portable (should she decide to change platforms in the future), and decided to learn some basic coding rather than pay for a premium website template. Overall, she deemed that her implementation costs were low and manageable.



Ideate, prototype, and test

The student created her website over several weeks after deciding which pieces she wanted to include: photos, illustrations, and other visual arts pieces that she had created over the past few years. She also developed her own font, based on her handwriting, to personalize the site further with her own brand. Over the course of the website development, the student checked in with a few peers and her art and ITC teachers to get feedback on various aspects of the design, and applied their input to improved iterations.

After researching the differences in pricing between original [physical] artwork and digital artwork, as well as the processes available for making printed copies of her pieces, the student decided to start with just a few pieces for sale online as digital copies only. However, the platform she chose would allow her to expand her offerings in the future.



Make and share

Once the website was ready for public viewing, the student focused her energies on promotion, adding a link to it on her social media accounts and creating a digital business card that linked to it as well. The student frequently shared links to her website on visual social media sites, such as Instagram and VSCO. She also planned to include the link in her post-secondary applications the following year.

At the time of completion, the student had not yet made a sale of her artwork, but she had received positive feedback about how the design was well aligned with her artistic style and highlighted her and her work in an appealing way. She felt confident that the website was a solid foundation she could continue to build on over the next few years, and she planned to expand e-commerce options after beginning her post-secondary studies.

Teaching and mentoring tips

- Creating a website presence to showcase a student's profile and/or products can include many types of work, such as music, film, fashion design, metalwork, and/or woodwork.
- Although this student was seeking a broader digital audience for her work, other students
 may prefer a less public platform to showcase their products. As such, they may, for
 example, choose to build a paper-based portfolio or one that is accessible only to a
 closed and invited audience.





 Collaborating with other teachers in the school can support students with specific knowledge and expertise. Connecting with her art and ITC teachers was a valuable resource to the student in this case.

Additional resources

Code BC

Formative assessment

- At the beginning of the process, the student and her Career-Life Connections (CLC) teacher-mentor agreed on the benchmarks the student would work toward, including website design research; selection of art pieces to showcase the student's personal values and aesthetic style, while also addressing the portfolio requirements for applications to her preferred post-secondary programs; a timeline for production and publication; personal branding; and e-commerce capability.
- The student checked in with the CLC teacher-mentor weekly through online blog posts that described her progress, current challenges and recent breakthroughs, and reflections on the process so far. Her teacher-mentor responded with prompts that encouraged further thought and suggestions for moving forward.
- The student conferenced several times with the CLC teacher-mentor throughout the process. At times, she engaged in a small group discussion with classmates to ask clarifying questions, seek help and/or input, receive feedback, and benefit from diverse perspectives that could inspire further creative and reflective thinking.
- At the end of the research phase, the student compiled her research notes and created a bibliography of sources to submit to the CLC teacher-mentor as evidence of learning.
- Throughout the process, the student took screenshots of the website to document its
 evolution, using these later to illustrate the drafts the site went through as she sought
 feedback from others and to include as demonstrations of learning to share with the
 teacher-mentor.
- At the end of the process, the student prepared a self-assessment write-up for the
 teacher-mentor that summarized the events in each stage of the process, her progress
 related to the learning goals, her plans to apply her learning in the future, her
 development in the Core Competencies, and her overall feelings about how the process
 had an impact on her life.



Showcase and celebrate

The student prepared two versions of a presentation to share her learning. The first was an oral presentation, including visual aids, at the schoolwide Capstone Fair. The second version of the presentation was briefer and was presented in the classroom to the CLC teacher-mentor and three or four classmates as part of a sharing circle using an assessment and feedback protocol that had been previously established as a regular CLC class routine.





Create and Express Illustration 1

STUDENT ENHANCES ARTISTIC DESIGN THROUGH THE CULTURAL TRADITIONS OF HIS COMMUNITY



Self-assessment and critical analysis

Throughout the *self-assessment and critical analysis* component of his capstone preparation (see pages 15–21 in the Career Education 10-12 Guide for more information about the components of capstone), the student had shared with his teacher-mentor reflections on experiences in school and out of school and an accompanying self-assessment in the Core Competencies, as well as highlights of his learning journey and his preferred options for post-graduation. His teachermentor noted that the student frequently spoke of how important he felt it was to continue the cultural traditions of his First Nations community. Consequently, when the student was unable to find a path he was happy with for the *process and representation* component of his capstone, his teacher-mentor suggested that he might want to think about how he could incorporate his personal and future-oriented interests in continuing the cultural traditions of his community into the learning expectation, to which he readily agreed.



Process and representation

Long-term learning focus: Enhancing artistic design and continuing community traditions

Theme: Honouring those who have helped you in life

Context

The student decided to integrate his aspirations to continue the cultural traditions of his community with his desire to enhance his artistic design skills by creating a hand drum as a gift for someone who had supported him throughout his education process and who inspired him to continue moving forward in learning. The student chose to create a drum in the traditional ways of his community, which included hunting, cleaning, and skinning the deer; scraping, soaking, and preparing the hide; constructing the drum ring; sewing the drum together; and painting a symbolic image on the drum. The work took place over weeks, and the student worked with an Elder to learn skills and practice the mindfulness and attitude appropriate to cultural protocols.

Connections



Curricular or domain connections

<u>Career Education</u> – Analyzing internal and external factors to inform personal career-life choices for post-graduation; Assessing personal transferable skills, and identifying strengths and those skills that require further refinement; Collaborating with teacher-mentor; Cultivating community relationships to support plans for post-graduation; Reflecting on learning experiences and





personal development in the Core Competencies; Preparing for next steps in personal lifelong learning journey

<u>Applied Design, Skills, and Technologies</u> – Applying design thinking principles and traditional technologies

<u>Visual Arts</u> – Deepening traditional First Peoples worldviews, stories, and history, as expressed through the arts; Intentionally seeking and combining materials, processes, and technologies to convey ideas; Interpreting how artists use materials, technologies, processes, and environments in art making; Demonstrating respect for self, others, and place through art making

<u>Social Studies</u> – Developing understanding of the connections between the past, present, and future and the people and traditions that shape the development and evolution of communities, especially one's own

<u>Mathematics</u> – Understanding how to apply mathematics concepts to overall creative and functional design, including the musical sound of the drum



Community connections

School community
Local First Nations community



Connections to First Peoples Principles of Learning

Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place): The student connected deeply with his grandfather, his friends, and the land as he followed his local traditions to learn drum-making

Learning involves generational roles and responsibilities: Valuing and applying the expertise of the Elder

Learning recognizes the role of Indigenous knowledge: Recognizing that Indigenous peoples hold a wealth of knowledge that has been transmitted from generation to generation



Core Competencies connections

<u>Communicating</u> – Connecting and engaging with others; Acquiring and presenting information Creative Thinking – Creating and innovating

Critical and Reflective Thinking - Designing and developing; Reflecting and assessing

<u>Positive Personal and Cultural Identity</u> – Understanding relationships and cultural contexts; Recognizing personal values and choices

<u>Social Awareness and Responsibility</u> – Contributing to community and caring for the environment; Building relationships



Create and express process



Inspiration and ideation

The student reflected on the individuals who had supported him throughout his education and chose to build a drum for a family member who had helped him stay on path in school through both difficult and good times.



Design

The student hunted regularly, and so organized a hunting trip with friends to obtain a deer. Because the student and the family member to whom he was giving the drum are both from the same clan, he sketched an animal illustration that represented qualities of their relationship to be painted on the drum when it was finished. The student made a plan with his grandfather about where on the local river they would soak the hide, as well as a timeline and a list of the materials they would need.



Create

After a successful hunting trip, the student and his grandfather completed the hide work together. The student had watched his grandfather prepare hides before and had learned skills and protocols through observation. The student built the drum and brought it back to the school to dry. He then painted the design on the drum and crafted a drum stick.



Coordinate and present

The student reflected on the process of building the drum in one-on-one conversations with his Career-Life Connections (CLC) teacher-mentor. He spoke about how he had grown through the process, the positive impact it had on his relationship with his grandfather, and how he looked forward to passing on what he had learned to others. The student used the self-reflective conversations with his teacher-mentor to help guide and inform his capstone presentation.

At the graduation ceremony, the student spoke about the importance of his family member and how this person had contributed to his life and education. He spoke about the process of making the drum and gave thanks to his grandfather and the deer. The student then presented the drum to his family member in front of the community.

Teaching and mentoring tips

- The student and his teacher-mentor communicated by email on a schedule created by the student to help ensure that milestones of the project were being met in a timely way throughout the *create and express* process.
- The teacher-mentor had two conversations with the student's grandfather in order to find out more about the traditional drum-making process and to express interest and respect for the work they were doing.
- The teacher-mentor was in contact with the student's guardians to ensure he had permission to go on the hunting trip; she also got assurances from them that the student had a gun licence and the experience necessary to hunt safely.





Additional resources

 Local First Peoples communities are an important resource for protocols to create in traditional ways. Check in with your school/district Aboriginal Support Workers for appropriate ways to connect with and/or receive permissions from local communities.

Formative assessment

- Throughout the process, the student wrote three short activity reports on hunting, preparing the hide, and building the drum. The student also wrote three self-reflections structured explicitly around Core Competencies and the First Peoples Principles of Learning.
- The student presented his initial draft illustration to the teacher-mentor and received descriptive feedback on it, highlighting its strengths and providing suggestions.
- The student presented the first draft of his speech to his teacher-mentor, received descriptive feedback, and incorporated that feedback. He then forwarded the second draft of his speech to the teacher-mentor for subsequent review and approval. The student practiced the final, approved draft on a microphone in front of peers for feedback before the formal presentation at the graduation ceremony.
- The student had previously built two drums from prepared kits. The knowledge and skills
 he gained from creating those drums were helpful during this more complicated and
 authentic process. This process of building on his background knowledge and
 experience to inform new learning was highlighted in the student's reflections in the
 ongoing email communications with his teacher-mentor.



Showcase and celebrate

As part of his class's capstone celebration event, the student described how both the creation of the drum with his grandfather and its presentation to the supportive family member at the graduation ceremony had a profound personal impact on how he sees himself and the way he hopes to continue to contribute to and help others in his community.





Create and Express Illustration 2

STUDENT DEVELOPS AS A SONGWRITER AND PERFORMER



Self-assessment and critical analysis

Throughout the *self-assessment and critical analysis* component of her capstone preparation (see pages 15–21 in the Career Education 10-12 Guide for more information about the components of capstone), the student frequently shared her passions for music and performance. Although she wasn't yet sure whether she would go on to study music at post-secondary, the student knew that playing music would always be an important part of her life, so she decided to integrate this passion into her capstone in some way.



Process and representation

Learning focus: Developing as a songwriter and performer

Theme: Losing someone close to you

Context

The student was an experienced musician and had been writing instrumental music, playing guitar, and singing others' songs for a few years. She decided to use the *create and express* process to incorporate this important part of her life into her capstone work. Her private guitar teacher acted as an advisor and supported the student with the music-related aspects of her capstone process.

Connections



Curricular or domain connections

<u>Career Education</u> – Analyzing internal and external factors to inform personal career-life choices for post-graduation; Assessing personal transferable skills, and identifying strengths and those skills that require further refinement; Collaborating with teacher-mentor; Cultivating community relationships to support plans for post-graduation; Reflecting on learning experiences and personal development in the Core Competencies; Preparing for next steps in personal lifelong learning journey

<u>Arts Education</u> – Improvise and take creative risks in instrumental music; Adapt performance techniques, processes, and skills for use in innovative ways; Study and perform a variety of musical styles and genres; Develop and refine expressive techniques; Reflect on personal and performance experiences and musical growth; Express emotions and ideas through music

<u>English Language Arts</u> – Construct meaningful personal connections between self, text, and world; Appreciate and understand how language constructs personal, social, and cultural identities;



Transform ideas and information to create original texts, using various genres, forms, structures, and styles

<u>Visual Arts</u> – Interpreting how artists use materials, technologies, processes, and environments in art making; Demonstrating respect for self, others, and place through art making



Community connections

School community
Private guitar teacher



Connections to First Peoples Principles of Learning

Learning involves patience and time: The student recognized and honoured the recursive approach to perfecting her story and her song

Learning is embedded in memory, history and story: The student shared her story of the family friend through her crafted song



Core Competencies connections

 $\underline{\textbf{Communicating}} - \textbf{Connecting and engaging with others; Acquiring and presenting information}$

Creative Thinking - Creating and innovating

Critical and Reflective Thinking - Designing and developing; Reflecting and assessing

<u>Positive Personal and Cultural Identity</u> – Understanding relationships and cultural contexts; Recognizing personal values and choices

<u>Social Awareness and Responsibility</u> – Contributing to community and caring for the environment; Building relationships

Create and express process



Inspiration and ideation

The student started by identifying her areas of passion and skill, including storytelling, acting, playing guitar, and musical composition. She also identified some of her core values, such as the importance of family and relationships, and the joy she experienced through creativity.

The student then decided to focus her learning goals for the capstone *process and representation* on developing her songwriting and performance skills. While she had written instrumental music and performed in front of small groups of friends and family before, she had not yet written a song complete with lyrics, nor performed in front of a larger audience.

The student tried several approaches to find inspiration for a new song, including listening to singer/songwriters she admired and reading through her journals to find material that spoke strongly to her. After reflection, she decided to write a song that honoured a family friend who had passed away the year before.





Design

The student researched musical theory and composition to better understand the relationship between music and emotion, including the emotions evoked through the use of major and minor keys, different instrumentation, and different tempi.

After speaking with her community advisor – a professional guitar player – and others she knew with musical knowledge, the student initially considered arranging the song for multiple instruments and began to research how to do it well. However, as the song progressed and its intimate nature evolved, she finally decided to incorporate voice and one acoustic guitar as the sole instruments, and to perform it on her own.

The student researched how to record a song professionally, including the equipment and software needed for recording and mixing. After discussions with music teachers at the school and her advisor, she had to change her plans to record at this time due to the significant costs involved. She felt it would make more sense to pursue a recording after she had a larger repertoire of music to share.

Having refined a basic melody and landed on the key themes of her song's story, the student was ready to create her new music.



Create

It took some time to write her song, working through continuous tweaking and revisions until the student felt that the music and lyrics finally worked well together. Throughout the creation stage, the student sought feedback from her music advisor and from trusted friends, performing pieces of the song and practicing the storytelling she planned to use in her performance.



Coordinate and present

The student wanted her song to be debuted in a classic coffee-house style, with a spoken storytelling opening and the song performed afterwards. She arranged to perform at a local café in the evening and invited friends, family, her advisor, and some of her teachers to join the audience.

The student gathered photos of her family friend to share with the audience and wrote an outline of the story she wanted to tell. She identified the required equipment (guitar, microphone, speaker, projector with screen, laptop, stool to sit on, extension cords) and arrived early to arrange and test them before she stepped on stage.

She began her performance by projecting photos of the family friend and describing the relationship between them, as well as between the family friend and the rest of her family. She carefully crafted an emotional atmosphere that suited the song's intended impact.

The student ended her performance by singing her song while playing the guitar. Her friend videotaped the whole event for her so that she could upload it as a demonstration of learning to her digital portfolio and to show her Career-Life Connections (CLC) teacher-mentor and classmates.

Later, the student reviewed the videotape and wrote an accompanying reflection about how it portrayed her progress with her learning goals and Core Competency development. She then met with her CLC teacher-mentor in a one-on-one conference to debrief this learning evidence and

reflection. It was an informal conversation (approximately 10 minutes) that gave the student an opportunity to share the highlights of her experience and the teacher-mentor an opportunity to ask questions. During this conference, the student also shared relevant pieces of evidence and reflections from her digital portfolio that she had been uploading throughout her secondary years to further illustrate the points she had made about her learning.

Teaching and mentoring tips

- Students may struggle with the initial creative stages for writing lyrics and/or music. It may be helpful to talk with them about the concept of "forced creativity" and/or to have them brainstorm key emotions or images related to the theme to use as inspiration.
- There are many ways a student can share songs they have written (and other creative products), such as performing in front of smaller and more supportive audiences (e.g., the class or just the teacher-mentor), recording the song, performing the song at a school event such as an assembly or band concert, or having others sing along.
- There are many ways that students who are passionate about music can pursue learning in their capstone, including a focus on music arrangement or transcription, learning to play a new instrument, and/or learning about recording and sound engineering.

Additional resources

Collaborating with music teachers (at the school and/or in the community) can be helpful, not just with advising, research, and community connections, but also with sourcing equipment and sharing performance opportunities.

Formative assessment

At the beginning of the project, the teacher-mentor went over the general required criteria for capstone with the whole class. In addition, once the student had selected her focus for learning, she received permission from the teacher-mentor to develop a personalized rubric, in which she added specific detailed criteria in order to make the rubric more relevant to her capstone choices. She and the teacher-mentor negotiated some points until they both agreed on all criteria. Both the student and teacher-mentor then used this personalized rubric to assess progress along the way, and to evaluate her capstone together at the end.



Showcase and celebrate

As part of the school's capstone celebration tradition, graduating students shared their lifelong learning journey and plans for post-graduation during an exit interview with a staff member from the school. The student incorporated key learning and insights about herself from the experience and how it had shaped how she wanted to be as a performer.





Innovation and Entrepreneurship Illustration 1

STUDENT DEVELOPS TRANSFERABLE SKILLS IN SUPPORT OF PREFERRED CAREER PATHWAY



Self-assessment and critical analysis

Throughout many conversations in Career-Life Education (CLE) and Career-Life Connections (CLC) and the *self-assessment and critical analysis* component of her capstone preparation (see pages 15–21 in the Career Education 10-12 Guide for more information about the components of capstone), the student shared her enjoyment as a volunteer at the local SPCA and her hopes to pursue post-secondary studies in veterinary medicine. The student also needed to earn extra money in order to pay for her studies, and she discussed with her teacher-mentor an idea she had for a business.



Process and representation

Learning focus: Developing transferable skills in support of her preferred career pathway

Area focus: Setting up a pet-sitting business

Context

The student attended school in a small rural town and had been volunteering at a local SPCA for eight months. As an animal lover and advocate for humane treatment of animals, her volunteer work became a passion, and she was promoted quickly from cleaning cages and play areas to feeding and grooming. In addition, the student had received training on how to give medication, intravenous fluids, and some injections, and had just been offered a paid position as the weekend assistant manager for the SPCA. While she was grateful for the part-time opportunity, she knew that she would need to earn and save even more money to support her post-graduation goal to study veterinary medicine. At the SPCA, she had taken many calls from people looking for someone to look after their pet while on vacation, and she felt that this service would be a good business for both her educational goal and her financial needs. As such, she decided to follow the *innovation and entrepreneurship* process to develop this small business.

Connections



Curricular or domain connections

<u>Career Education</u> – Analyzing internal and external factors to inform personal career-life choices for post-graduation; Assessing personal transferable skills, and identifying strengths and those skills that require further refinement; Collaborating with teacher-mentor; Reflecting on learning experiences and personal development in the Core Competencies; Preparing for next steps in personal lifelong learning journey





<u>Entrepreneurship</u> – Recognizing entrepreneurship opportunities, market analysis, learning about components of starting a small business, interpersonal skills to promote services and interact with clients

<u>Information and Communications Technology</u> – Website development planning tools; Advantages/disadvantages of websites and content management systems; Technical and symbolic elements that can be used to create representations influenced by point of view, story, genre, and values



Community connections

School community Local neighbourhood Animal owner community Non-profit organizations



Connections to First Peoples Principles of Learning

Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors: Creating a business to serve a community need as well as a personal need and interest, which in turn supports the well-being of pets and their owners

Learning is holistic, reflexive, reflective, experiential, and relational: Connecting to community through volunteer experiences, the student is learning experientially



Core Competencies connections

Communicating - Connecting and engaging with others

<u>Creative Thinking</u> – Creating and innovating; Evaluating and developing

<u>Critical and Reflective Thinking</u> – Questioning and investigating; Designing and developing; Reflecting and assessing

Personal Awareness and Responsibility – Self-advocating; Well-being

<u>Social Awareness and Responsibility</u> – Contributing to community and caring for the environment; Building relationships

Innovation and entrepreneurship process



Conceptualize

In recognizing a community need, the student connected her passion for animals to the development of an animal care service business. In surveying neighbourhood pet owners, the student found out that pet owners typically needed a range of services to support them while on vacation or away from the house for extended periods. Drawing from these suggestions, the student brainstormed various ideas for specific activities she could offer, such as drop-in pet-sitting services at the pet owner's home, extended supervision of the pet in her own backyard, and walking the pet to the local park for exercise and to play with toys. In discussion with her parents, she weighed the different options.





Analyze

The student began by conducting market research, including:

- Making calls to local veterinary offices and researching online any possible competing businesses to identify and consider overlaps of service, determine competitive fees, and get ideas for advertising
- Conducting surveys via SurveyMonkey and through Facebook and Instagram, as well as canvassing the local neighbourhood and veterinary offices, asking about when and how often people were seeking pet-sitting services
- In analyzing the data collected, the student found out that most people wanted either
 twice-daily visits for regular activities like feeding and/or providing medications, or fullservice in-home care. In addition, the student recognized that while she had no overhead
 costs for a building and its maintenance, she would need to pay for a website presence,
 business cards, related vehicle costs, and a business licence.

Design

Finally, in consultation with her family, the student decided to provide drop-in care in the morning and evening at the pets' homes, as well as a daily walk and play time. In addition, her parents agreed to let her be a live-in pet-sitter for those families that they knew well.

To develop her business plan, with ongoing input and feedback from her SPCA colleagues and her Media Design teacher, the student:

- · Collaborated with a friend to come up with a name for her business
- Designed and ordered business cards that she could leave at pet stores and veterinary offices
- Purchased a domain name and created a website dedicated to her services
- Set prices for her services
- Developed a plan to gather testimonials from the SPCA staff and new clients and include them on her website over time
- Developed and paid for an ad in the local paper
- Shared her website link though various social media platforms
- Created and posted flyers at school and around the neighbourhood



Apply

After making some minor adjustments to address feedback she received from her SPCA colleagues, such as a recommendation to increase her pricing, the student officially launched her small business.

Teaching and mentoring tips

- Student safety needs will have to be addressed in capstone activities that are not supervised at the school. In this case, parent involvement was key.
- Ensure that Ministry and district policies and procedures for volunteering and working beyond the school community are followed. See more details in Appendix B on page 101.

- Share with students that most places require volunteers to obtain a criminal record check before they may be permitted to participate.
- Remind students that they might want to include information about their business and its
 related learnings in post-secondary scholarship applications and in their own portfolio
 development that can support many of their post-graduation plans.

Additional resources

- · Volunteering at the SPCA
- Information regarding criminal record checks
- Collaborating with other teachers in the school can help students access specialized
 expertise in support of their capstone. In this case, the student's Media Design teacher
 provided ideas and feedback about her website design.

Formative assessment

- In their CLC class, students are required to write a proposal, including specific stipulations for student safety, and have the proposal signed by parents. In this way, students, teacher-mentors, and parents are all informed about students' capstone plans, including milestones and timelines, to encourage student success.
- Throughout the process, the student wrote entries reflecting on her progress in a journal that she shared regularly with the CLC teacher-mentor.
- Approaching the end of the process, the student worked with peers in small groups to share progress, challenges, and successes. She received peer feedback and suggestions to help improve and move forward to completion.
- Afterward, the student chose to write a reflection paper to synthesize her learning, Core Competency development, challenges, successes, final outcome, and next steps that would apply to her plans for post-graduation.



Showcase and celebrate

The school holds an annual Capstone Fair, inviting students from Grades 9 to 12, school staff, district staff, parents, and community members to attend. Students prepare displays to synthesize their learning journey and post-graduation plans, and the audience is encouraged to ask students questions. In this case, the student felt that her capstone *process and representation* experience was a significant achievement related to her learning and post-graduation goals, so she chose to make it the focal point of her display, sharing her business plan, website, business cards, and photos of her work with clients (pets and owners – with their permission).





STUDENT BUILDS ON SOCIAL, LEADERSHIP, AND ATHLETIC STRENGTHS TO DEVELOP AS A COACH



Self-assessment and critical analysis

Throughout the *self-assessment and critical analysis* component of her capstone preparation (see pages 15–21 in the Career Education 10-12 Guide for more information about the components of capstone), the student, who excelled in soccer and other athletics, and was determined to play for a soccer team during her post-secondary studies, hoped to connect her capstone to her love of the game. She had also expressed the need to earn funds toward post-secondary tuition the following year. Her Career-Life Connections (CLC) teacher-mentor suggested that the student might want to think about how to combine these two goals though the *innovation and entrepreneurship* capstone process choice.



Process and representation

Learning focus: Building on social, leadership, and athletic strengths to develop as a coach

Area focus: Creating and leading a specialized sport camp to earn needed funds

Context

The student was deeply passionate about playing soccer and had already begun preparing herself for scouting and tryout opportunities at the post-secondary level. The student had always been athletic and had played on many community sports teams, including soccer, while growing up in a suburban community. She decided to build on this strength and pursue new learning as a coach to address her need to earn funds in a way that she enjoyed.

Although the local community offered regular soccer camps for kids, the student noticed that there were no specialty camps, and she wondered if she should try to run a goalie soccer camp. She was already working part-time at the grocery store but was hoping to earn extra money for post-secondary studies while doing work connected to what she loved

Connections



Curricular or domain connections

<u>Career Education</u> – Analyzing internal and external factors to inform personal career-life choices for post-graduation; Assessing personal transferable skills, and identifying strengths and those skills that require further refinement; Collaborating with teacher-mentor; Reflecting on learning experiences and personal development in the Core Competencies; Preparing for next steps in personal lifelong learning journey



eneurship opportunities and market analysis, learning

<u>Entrepreneurship</u> – Assessing entrepreneurship opportunities and market analysis, learning about components of starting a small business, interpersonal skills to promote services and interact with clients

<u>Physical and Health Education</u> – Demonstrating competencies and problem-solving strategies required for physical activities and recreation leadership, refining strategies to effectively participate in physical activities, demonstrating safe and appropriate participation in physical activities



Community connections

School communities
Neighbourhood
Local soccer association
Sports and recreation community



Connections to First Peoples Principles of Learning

Learning ultimately supports the well-being of the self, the family, and the community: Although the student struggled academically, she recognized that diverse learning styles meant that her learning might be more effective through experiential opportunities, and through athletic pursuits where she was acknowledged for her special gifts

Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place): The student was learning experientially through her soccer camps for children



Core Competencies connections

Communicating - Connecting and engaging with others

Creative Thinking – Creating and innovating; Evaluating and developing

<u>Critical and Reflective Thinking</u> – Questioning and investigating; Designing and developing; Reflecting and assessing

Positive Personal and Cultural Identity – Identifying personal strengths and abilities

Personal Awareness and Responsibility – Self-advocating; Well-being

<u>Social Awareness and Responsibility</u> – Contributing to community and caring for the environment; Building relationships

Innovation and entrepreneurship process



Conceptualize

The student identified a need for a specialty sport camp for kids in her community. She brainstormed possible ways to create a camp, such as how to run it independently or whether it would be preferable to find a local soccer association to support the endeavour and offer her services to run it through them. She also explored whether it should take place indoors or outdoors, possible locations and facility costs, and whether it should take place after school, in the evenings, or during the summer.





There were several other questions she was unsure about and needed to research further:

- Was there enough interest among children in the community to create a camp solely for goalies?
- As she did not have funds to rent a field, where could she hold a camp?
- Where could she find assistance with advertising, communications, and other administrative logistics?



Analyze

The student conducted service and market research, including:

- Interviewing a coach and a teacher to find out more about how to facilitate learning, skills development, and sportsmanship
- Reviewing learning activity resources recommended by the coach and teacher to inform her own camp activity plans
- Getting school district permission and then surveying parents in the local elementary school communities to gauge their interest, deciding to move forward if she received enough positive responses
- Meeting with the local soccer association to find out if it would be interested in her idea
 of holding a goalie camp simultaneously with the association's regular soccer camp
- Researching similar camps offered to determine what type of fee she should charge
- Recognizing that if she offered the camp outdoors, she would likely have fewer overhead costs and might save money by eliminating building rental and maintenance costs



Design

The student received significant interest from parents and decided to proceed with her business plan. In addition, the soccer association agreed to support her camp, enabling her to piggyback on its advertising and administration services. Using the soccer association's scheduling system, the student coordinated and uploaded her camp days, times, and fees.

The student reconnected with parents who had emailed her with their interest. She shared that the camp was moving forward and let them know the details. To encourage participation, she designed, printed, and placed advertising posters at the local schools, in the recreation centre, in community businesses where families are often found (e.g., grocery stores), and on various social media platforms.

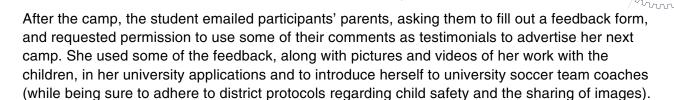
The student gathered needed equipment by approaching the district and high schools, asking for donations and loans. She then began to design fun skills-building activities for the camp. Recognizing the important role that interpersonal and leadership skills played in becoming a successful coach, the student approached her own coach to ask for tips and resources to support her learning.



Apply

The student led one session of her camp with a cohort of 15 students, aged 8 to 12 years. To support her development as a coach and facilitator, she asked one of the association coaches to observe some of her lessons and give her feedback.





Teaching and mentoring tips

- In capstone processes like this one, ensure that students adhere to district policies for working with youth, including getting a criminal record check.
- There are many ways to provide students with valuable feedback. In this case, the student was appreciative that hers came primarily from discussions rather than in written form.
- Community connections can be very supportive of student capstones. It was because of help and resources received from community partners that this student was able to follow through on her business venture.

Additional resources

- School staffs and resources across the district
- · Community sports associations and recreation facilities
- YouTube videos about skills development (e.g., breaking down goalie skills)
- Articles about teaching youth sport skills

Formative assessment

- The student used input and feedback from the association coach's observations and the
 parent surveys to determine what worked well and what she would try differently at her
 next camp.
- The student completed a reflection based on her experiences throughout the process and on the feedback provided, identifying her strengths, development in the Core Competencies, areas of growth, and learning goals for the future.



Showcase and celebrate

- At the school, students present their learning journey and plans for post-graduation to a
 panel of teachers and two community members. The student included highlights from her
 capstone experience, along with learning successes and challenges across the
 secondary years, and her plans for next steps for post-secondary studies and athletics.
- In addition, the school district held a district-wide career education fair, inviting students, staff, and community members. The graduating students were grouped according to capstone themes, and each student hosted a kiosk to showcase and celebrate their learning.





STUDENT EXPANDS SKILLS AS A RESEARCHER AND HISTORIAN



Self-assessment and critical analysis

Throughout the *self-assessment and critical analysis* component of her capstone preparation (see pages 15–21 in the Career Education 10-12 Guide for more information about the components of capstone), the student shared with her teacher-mentor her reflections on experiences in school and out of school, her accompanying self-assessment in the Core Competencies, and highlights of her learning journey and preferred options for post-graduation. The student hoped to study history or archaeology in university and decided that it would be beneficial to develop transferable skills as an academic researcher through a formalized inquiry into cultural impacts of colonialism, a topic of personal interest. She selected the *investigate and report* capstone process to align with the research and reporting skills that would serve her well in pursuing her goals for post-graduation education.



Process and representation

Learning focus: Developing transferable skills as an academic researcher

Research topic: Colonialism in the Middle East during the Middle Ages

Context

Inspired by Michael Chabon's novel *Gentlemen of the Road*, the student wanted to know more about the politics of the Middle East in the Middle Ages. She expressed curiosity about events of that time and place, and also about the history of colonization in that part of the world. She also wanted to put the experience of colonization in North America into a wider and more global context by studying the history of colonialism in another era and on another continent.

Connections



Curricular or domain connections

<u>Career Education</u> – Analyzing internal and external factors to inform personal career-life choices for post-graduation; Assessing personal transferable skills, and identifying strengths and those skills that require further refinement; Collaborating with teacher-mentor; Cultivating community relationships to support plans for post-graduation; Reflecting on learning experiences and personal development in the Core Competencies; Preparing for next steps in personal lifelong learning journey

<u>Social Studies</u> – Gaining understanding of people, places, issues, and events that have shaped the world through historical inquiry; Comparing different cultures and experiences that exist and





have existed throughout the world develops an appreciation of how aspects of human experience are shared across time and space

Mathematics - Data literacy and representation

<u>English Language Arts</u> – Gaining a repertoire of communication skills, including the ability to interact with a community advisor and share information through digital means in ways that engage the audience



Community connections

Global community
North American community
Local community



Connections to First Peoples Principles of Learning

Learning is embedded in memory, history and story: Gathering history from the local First Nation, and an understanding of historical and cultural contexts

Learning involves recognizing the consequences of one's actions: Thinking that we are all related, the student's exploration of colonization historically in various parts of the world may serve to highlight our similarities



Core Competencies connections

Communicating - Connecting and engaging with others; Acquiring and presenting information

<u>Critical and Reflective Thinking</u> – Analyzing and critiquing; Questioning and investigating; Designing and developing; Reflecting and assessing

<u>Creative Thinking</u> – Creating and innovating

Positive Personal and Cultural Identity - Understanding relationships and cultural contexts

Social Awareness and Responsibility - Building relationships; Valuing diversity

Investigate and report process



Formulate an inquiry question to investigate

The student considered a series of questions, including:

- How were statistics captured in the Middle Ages in contrast with how this is done today (process and technologies)?
- Are there repeated cycles of colonization throughout human history, and, if so, what are the signifiers of those cycles?
- What types of prejudice existed in the Middle East and the regions surrounding Khazaria, and were aspects of those prejudices tied to colonization?



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Plan and investigate

Seeking an advisor for this project, the student reached out to the local First Nation to see if anyone in the community was currently taking or had recently taken a university-level history course. After connecting with a trusted community member enrolled at the university, the student began to correspond with him via email and social media to get advice about the project and research procedures. They also made plans to meet in the city (approximately two hours from the community) so they could visit both the university library and the downtown Vancouver library to do some research together.

The student reviewed APA guidelines and maintained electronic citations as she carried out her research. The student also decided to use iMovie to communicate her research and findings.



Analyze and interpret collected information and data

Using her research, the student completed an overview of Khazarian and Middle Eastern events during the Middle Ages. She also completed a series of timelines setting out the dates of invasions and colonial events in the region.



Evaluate and conclude

The student completed T-charts to compare and contrast colonial events in the Khazarian and Middle Eastern regions. She also completed a T-chart comparing and contrasting the colonial history of the local First Nation with the colonial history of the Byzantium Caliphate, which she had also been researching, in order to discern possible similarities.



Report and communicate

The student created an iMovie to present her questions, findings, and conclusions; it included spoken and written information, maps, and graphics. She also included details of the research processes undertaken, including live shots of her working with the university student advisor, conducting research at the libraries.

The film was shown to multiple audiences in the school and at the school community's year-end capstone showcase.

Teaching and mentoring tips

- When students are allowed to pursue investigations into topics of their choice, student investment in and ownership of the research is more likely. This student was highly curious about the topic of this inquiry, and this curiosity led to self-motivation and initiative.
- Regular check-in conversations with her Career-Life Connections (CLC) teacher-mentor
 throughout the *investigate and report* process provided opportunities for reflection on her
 progress in developing relevant researcher skills in the social sciences. In addition, these
 regular check-in conversations helped the student organize the research process into
 manageable chunks to keep her work on track.
- The relationship with her advisor, the university student (who was very generous with time and advice), was key to the student's success. Suggesting ways the student could express gratitude to the community advisor, and supporting her in these actions, was helpful in making the student aware of the significance of people volunteering valuable time and energy, and encouraged recognition of supportive community members.





Additional resources

- Writing Centre, UBC Faculty of Arts, Department of History
- Self-help and resources, UVic Centre for Academic Communication

Formative assessment

- The student and her teacher-mentor maintained an online calendar together as a means to check in to ensure that regular progress was made on the co-developed project management timeline and that milestones were being met.
- Over a period of four months, the student completed and submitted bi-weekly selfreflections on her progress in developing as an academic researcher, the hurdles she
 was facing, and the successes she was experiencing. These reflections were also an
 opportunity for the student to consider how to apply her new understandings and
 knowledge to other areas of life.



Showcase and celebrate

At the Capstone Showcase Dinner, the school community and members of the broader community were invited to join together for an evening of sharing and celebrating the soon-to-be graduates' learning journeys. The student chose to include what she had learned about herself as a researcher and how she planned to apply this self-knowledge to her post-secondary studies in history the following year. Her creativity in reporting research findings was also showcased by sharing the iMovie at this event.





STUDENTS REFINE COLLABORATION AND FIELD STUDY SKILLS



Self-assessment and critical analysis

Throughout the *self-assessment and critical analysis* component of their capstone preparation (see pages 15–21 in the Career Education 10-12 Guide for more information about the components of capstone), both student A and student B expressed how well they had collaborated on their career-life exploration component for Career-Life Connections (CLC) and how they hoped to continue to collaborate in some way on their capstone *presentation and representation* work. As the students were planning to pursue post-secondary studies in the sciences, they felt that the *investigate and report* process would be a good opportunity to strengthen their disciplinary learning and scientific research competence in preparation for their post-graduation plan. In consultation with their CLC teacher-mentor, they decided to collaborate on the field study aspects of the research process and to individually report out on their findings.



Process and representation

Learning focus: Refining collaboration and field study skills

Research topic: What factors are affecting our local water quality?

Context

Both students were inspired by their Environmental Science 11 coursework and their career-life exploration field study experience in CLC, where they participated in a mini-series on water-quality testing with an employee of a local municipal agency. They hoped to apply their learning to test water quality at local beaches, continuing to deepen their understanding of this environmental topic while refining their competence as researchers.

Connections



Curricular or domain connections

<u>Career Education</u> – Analyzing internal and external factors to inform personal career-life choices for post-graduation; Assessing personal transferable skills, and identifying strengths and those skills that require further refinement; Collaborating with teacher-mentor; Cultivating community relationships to support plans for post-graduation; Reflecting on learning experiences and personal development in the Core Competencies; Preparing for next steps in personal lifelong learning journey

<u>Environmental Science</u> – Demonstrating a sustained intellectual curiosity about an environmental topic of personal, local, and global interest, pursuing scientific method of inquiry

Mathematics – Data literacy and representation





Social Studies - Politics of water, social justice, and Truth and Reconciliation

<u>English Language Arts</u> – Gaining a repertoire of communication skills, including the ability to conduct interviews and share information in ways that engage the audience



Community connections

School community
Local community
Municipality
Faculty of Science at local university



Connections to First Peoples Principles of Learning

Learning ultimately supports the well-being of the self, the family, the community, and the land: Including consideration of environmental and social ethics as part of their research, elaborating the importance of clean water to everyone's quality of life and to the well-being of all living things locally and globally, and that we all belong to the land



Core Competencies connections

 $\underline{\textbf{Communicating}} - \textbf{Connecting and engaging with others; Acquiring and presenting information}$

<u>Collaborating</u> – Working collectively; Determining common purposes

Critical and Reflective Thinking - Questioning and investigating; Reflecting and assessing

Social Awareness and Responsibility - Contributing to community and caring for the environment

Investigate and report process



Formulate an inquiry question to investigate

With the help of their Environmental Science 11 teacher, the students were able to refine their general concerns about water-quality issues into a manageable inquiry question for investigation: "How do local factors affect water quality, and, based on our findings, what recommendations can help our community sustain and/or improve water quality?"



Plan and investigate

The students decided to pursue the following investigation strategies to collect reliable information and data:

- Conduct academic research, including review of recommended articles from their Environmental Science 11 teacher
- Interview an expert at the local post-secondary institution to access relevant knowledge and elicit feedback and advice to enhance their research process
- Test and compare the water quality at various beaches, both fresh water and salt water



Analyze and interpret collected information and data

The students collaborated with each other to synthesize their research and interview notes, and worked together to analyze and compare their water-quality sample results.



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Evaluate and conclude

The students collaborated to review what worked well during the study, to identify its limitations, and to draw conclusions about possible reasons for results. They also worked together to develop notes about the environmental and social implications and contributions of their findings to inform their individual reports.

Report and communicate

Individually, each student prepared a report on their research and findings. Student A decided to write up a formalized report, including tables and graphs, as written expression is his strength. Student A decided to write up a formalized report, including tables and graphs, as written expression is his strength.

Student B prepared an eight-minute informational video. Both reports, including recommendations for the community, were shared publicly on the school's website.

Teaching and mentoring tips

- Local district and school safety protocols were adhered to. As the students would be
 collecting water samples in several locations outside the school, the teacher-mentor
 reached out to their guardians to confirm that they were available to transport the
 students to and from the various beaches, and would be supervising their activities.
- Collaboration with a science specialist the Environmental Science 11 teacher in this
 case is helpful for students to access advice regarding disciplinary knowledge and
 competencies, criteria development, safety considerations, and connections to other
 community experts, such as the post-secondary expert.
- Including students in the development of their investigation plan and its accompanying
 criteria helps to clarify expectations and encourage student ownership. During regular
 check-in times with their CLC teacher-mentor, the students used the co-created criteria
 to describe what they had been working on and to plan next steps. The teacher-mentor
 provided guidance to ensure that the students' next steps were manageable and moved
 the project forward. See more tips in the formative assessment section below.

Additional resources

- What Makes a Question Essential?
- UVic Speakers Bureau

Formative assessment

- With input from the Environmental Science 11 teacher, the students and the CLC teacher-mentor agreed to the components and criteria for this capstone component. (See pages 82–85.)
- During the regular check-in conversations with their CLC teacher-mentor, the students
 often referred to the agreed-upon criteria to reflect on their growth in collaboration and
 field study competencies.

- The Environmental Science 11 teacher agreed to answer the occasional science-specific questions for these students throughout the process. This provided relevant formative input that deepened their disciplinary understandings and knowledge of this research topic.
- During their school's Capstone Display Open House, these students invited the postsecondary professor they had interviewed to view their reports and provide feedback on their display. They asked this expert to share with them two strengths of their research and one suggestion for further growth as researchers.
- In their CLC cohort, the students had been assigned to a triad with two peers, who they
 checked in with regularly every two weeks during class for peer feedback and advice
 regarding their capstone work. The students identified a specific area that they would like
 feedback or advice on from their peer support group.
- Drawing from all of the above assessment opportunities, each of the students met with their CLC teacher-mentor to determine their final mark for the capstone *presentation and representation* component, using the criteria they had co-developed.



Showcase and celebrate

At their school's year-end Capstone Display Open House, both students chose to share their key learnings about collaboration and field study research as an important stage in their personal lifelong learning journey story and elaborated how they planned to use these learnings in future research work during their post-secondary studies the following year.



		Capstone Pro	cess Sample A	ssessment		/ VAAAN
Capstone Component: Self- Assessment and Critical Analysis	Continuum (No summative assessment takes place here: for self-reflection only)			Student Notes	Teacher- Mentor Feedback	
		STUI	DENT REFLECTIO	N		
	I articulate initial awareness of my Core Competency development with some connections to learning experiences and am beginning to reflect on my learning journey (past, present, and possible futures).	I articulate some of my Core Competency development, including relevant demonstrations of learning experiences, and am working on making sense of past and current learning experiences.	I clearly articulate my overall Core Competency development, including corresponding relevant evidence of learning experiences. Key insights, such as "aha!" moments, learning milestones and struggles, and hopes for the future are shared with relevant descriptions that explain how they were formative and personally meaningful.	I articulate my overall Core Competency development, including corresponding relevant evidence of learning experiences, and apply critical analysis of the learning journey to inform goalsetting and capstone process choices in support of plans for postgraduation.		

Capstone Component: Process and Representation	Proficiency Scale				Student Reflection and Evidence	Teacher- Mentor Feedback
	Emerging	Developing	Proficient	Extending	Notes	Notes
		INVESTI	GATE AND REPO	RT		
Formulate an inquiry question	The student identifies the broad topic or issue to investigate and indicates how it connects to plans for postgraduation.	The student refines the question or problem for study and relates it to the local community and/or a world topic or issue.	The student develops a focused question for study and outlines an accompanying manageable inquiry process plan to pursue the study, which includes milestones and timelines.	The student articulates the focused question and outlines the accompanying inquiry process plan, elaborating the study's potential impact for the community/ world and for personal growth as a researcher.		

Capstone Component: Process and Representation	Proficiency Scale				Student Reflection and Evidence	Teacher- Mentor Feedback
	Emerging	Developing	Proficient	Extending	Notes	Notes
		INVESTI	GATE AND REPO	RT		
Plan and investigate	The student selects and applies research investigation strategies to collect information.	The student selects and applies appropriate research investigation strategies to collect information and data, assesses and mitigates environmental and social risks, and applies concepts of accuracy and validity.	The student selects and applies appropriate research investigation strategies to collect information and data, assesses and mitigates environmental and social risks, and applies concepts of accuracy and validity, through multiple iterations. The student applies feedback and advice from an expert researcher about best practices in field study for the inquiry process.	The student pursues a thorough investigation process, including observations and data collection that demonstrate the relevant concepts and terminology of the novice researcher, through multiple iterations. The student applies feedback and advice from an expert researcher about best practices in field study for the inquiry process.		
Analyze and interpret collected information and data	With support, the student analyzes the data collected, seeking potential patterns and trends related to the research question.	The student discerns trends in the collected data and checks in with a research expert for discussion about preliminary ideas and themes for feedback and advice.	The student discerns trends in the collected data and checks in with a research expert for discussion about preliminary ideas and themes for feedback and advice. The student clearly explains their interpretation process and how it connects back to the research question, and draws conclusions supported by the evidence.	The student elaborates their data analysis process and shares challenges faced in interpretation, describing how these were addressed. The student checks in with a research expert for discussion about preliminary ideas and themes for feedback and advice. The student incorporates communication enhancements, such as visuals, to synthesize complex trends in the data.		

			9.			Transon			
Capstone Component: Process and Representation	Proficiency Scale				Student Reflection and Evidence	Teacher- Mentor Feedback			
	Emerging	Developing	Proficient	Extending	Notes	Notes			
	INVESTIGATE AND REPORT								
Evaluate and conclude	The student articulates the findings of the study, what worked well, and ways to improve future investigations.	The student shares findings, draws reasoned conclusions about factors related to the results, and makes recommendations for the community.	The student elaborates the findings, draws reasoned conclusions, shares validity and limitations of the study, and makes recommendations for the community, using appropriate scientific terminology.	The student elaborates the findings, draws reasoned conclusions, shares validity and limitations of the study, and makes recommendations for the community, using appropriate scientific terminology. The student shares the environmental and social implications of the findings, the study's contribution to the field of research, and reflections on their own biases and assumptions as a researcher.					
Report and communicate	The student reports out on their study.	The student shares their research publicly in a way that highlights the key findings and recommendations related to the inquiry question.	The student applies appropriate scientific communication strategies in their public report.	The student applies appropriate scientific communication strategies in the public report, seeking to engage the audience's interest and response in their reporting approach.					

Capstone Component	Proficiency Scale				Student Reflection and Evidence	Teacher- Mentor Feedback
	Emerging	Developing	Proficient	Extending	Notes	Notes
		SHOWCA	SE AND CELEBRA	ATE		
	The student shares the investigate and report experience as a component of their capstone showcase.	The student shares the investigate and report experience, describing personal learning and growth related to their collaboration and learning goals as a component of their capstone showcase.	The student shares the investigate and report experience, elaborating in what ways their research experience relates to their growth as a researcher and to their overall lifelong learning journey.	The student shares the investigate and report experience, elaborating in what ways their research experience relates to their growth as a researcher and to their overall lifelong learning journey, reflecting on how they plan to apply their learning to next steps and future plans for postgraduation, and how these plans align with who and how they hope to be in the world as a young adult.		





STUDENT SEEKS TO BUILD RELATIONSHIPS AND IMPROVE ENGLISH COMMUNICATION SKILLS



Self-assessment and critical analysis

Throughout the *self-assessment and critical analysis* component of his capstone preparation (see pages 15–21 in the Career Education 10-12 Guide for more information about the components of capstone), the student talked to his Career-Life Connections (CLC) teacher-mentor about the challenges he has faced as a recent immigrant to Canada, including difficulties integrating into his new community, learning to speak English well, and building relationships and friendships. His teacher-mentor suggested that he might want to use the capstone *presentation and representation* as an opportunity to further develop relationships with peers and staff at the school, and to create connections in the local community. This would enable him to build social resources, both for now and for post-graduation. The teacher-mentor suggested that as part of the process he could share his personal story as a new immigrant. This would be interesting to his audience and would enable him to introduce himself to others.



Process and representation

Learning focus: Developing relationships and improving English communications skills

Learning topic: Transitioning from life in China to Canadian society

Context

The student is a recent immigrant from China and an English Language Learner (ELL) at school. He decided to tell about his move from Guangdong Province in China to British Columbia, Canada, as part of his capstone, hoping the *personal story* process would help him build relationships in the school and broader community as well as further develop his English communication skills. The student was seeking to build stronger connections and relationships with his peers, teachers, and support staff at the school and with possible employers in his local community. Through his experiences, he hoped to share how moving to Canada had been a significant transformative experience that deeply changed who he was and his hopes for post-graduation.

Connections



Curricular or domain connections

<u>Career Education</u> – Analyzing internal and external factors to inform personal career-life choices for post-graduation; Assessing personal transferable skills, and identifying strengths and those skills that require further refinement; Collaborating with teacher-mentor; Cultivating community relationships to support plans for post-graduation; Reflecting on learning experiences and personal development in the Core Competencies; Preparing for next steps in personal lifelong learning journey



<u>English Language Arts</u> – Exploring how story deepens understanding of diverse, complex ideas about identity, others, and the world, gaining a repertoire of communication skills, including the ability to share in ways that engage the audience; Appreciating and understanding how language constructs personal, social, and cultural identities; Constructing meaningful personal connections between self, text, and the world; Evaluating how literary elements and new media techniques reflect different purposes and audiences

<u>Social Studies</u> – Understanding the diversity and complexity of cultural expressions in one culture enhances our understanding of other cultures



Community connections

School community Local community



Connections to First Peoples Principles of Learning

Learning is embedded in memory, history and story: By sharing his personal story, the student created a bridge between two cultures and highlighted communities' responsibilities to welcome newcomers and build trusting relationships with them

Learning ultimately supports the well-being of the self and the community: In the telling of his personal story, the student was able to tackle his struggles to build relationships, and the community benefited from his knowledge as an immigrant to better address how to welcome newcomers



Core Competencies connections

Communicating - Connecting and engaging with others

Creative Thinking – Creating and innovating

<u>Positive Personal and Cultural Identity</u> – Understanding relationships and cultural contexts; Identifying personal strengths and abilities

Personal Awareness and Responsibility - Self-advocating

Social Awareness and Responsibility - Building relationships; Valuing diversity

Personal story process



Identify purpose and intent

The student decided to incorporate the following topics into his personal story about transitioning to Canadian life:

- Explaining why he and his family moved to Canada
- Comparing and contrasting life in China and Canada, including differing perspectives about family and education, and similarities in teen interests and activities
- Describing how this move changed his life and who he is, relating personal struggles and successes, and his hopes for the future as a new Canadian

Overall, he hoped to communicate how extremely challenging it had been to become part of a new and very different culture, and to include suggestions on how schools and communities could support youth in building new friendships and connections.





Plan and design

The student created a storyboard to map out the story, including the organization of events and images. In CLC class, peers provided feedback and suggestions to enhance his plans, suggesting that he include more about his feelings related to the events.

Because he felt unsure of himself as a presenter in front of English-speaking audiences, the student decided to create a short video of his immigration journey that he could share with an audience.



Create and review

The student created a video that included a collection of photographs, voiceover to narrate his story, and text that highlighted the main themes of the message he wanted to convey. Topics addressed making the move to Canada, his associated feelings about the move, his confusions and struggles, and how he accessed supportive resources. The student shared how his participation on the basketball team and in the school's ELL program were helping him connect with people and helping him learn to speak English better. However, he was still hoping to meet more people and make friends, especially for life post-graduation. His video provided some ideas on ways to welcome new immigrants, and described his aspirations for his future as a Canadian.



Present

For the purpose of building relationships with peers, the student decided he would share the video with students in both his CLC and ELL classes. In order to introduce himself to others beyond the school community, he also decided to include the video as part of his post-secondary scholarship applications. Because the video was well received by these audiences, he gained more confidence and agreed to share it with the Student Leadership class. The video inspired members of that class to brainstorm ways to encourage and support both the student and other ELL students to participate in more social activities and events that the Leadership class organized. The student was also invited to volunteer with the class at some events, which helped him to begin building more friendships outside the classroom.

Reflecting on his experience through the *personal story* process, developing and sharing his story, the student expressed increased confidence in communicating with others in English in spite of ongoing struggles with vocabulary, as he felt others were now more empathetic and patient during interactions. He was also enjoying the continued opportunities to make more friends.

Teaching and mentoring tips

- Beginning with a brainstorming of memories and/or ideas can help students determine
 relevant themes to include before organizing their narrative. Analyzing exemplars of
 storytelling can also help students identify formats and elements that best suit their own
 stories and audiences.
- Storyboard graphic organizers can be a helpful tool when students are ready to structure and sequence their narrative.
- Remind students that their personal story can be told in many effective ways, such as an exhibition of photographs accompanied by either a written or oral narrative, a paperbased or digital product, and/or a presentation in front of a live audience.



- The student and his CLC teacher-mentor co-developed the assessment criteria related to
 his learning goals, and reviewed the *personal story* process criteria for effective narrative
 creation and presentation (see page 90). The student used both these criteria to frame
 the topics to discuss in his reflections throughout the process, and used a graphic
 organizer to record his reflections (see page 91).
- The student used his reflections to share his progress with the teacher-mentor during their check-in conversations in CLC class. The teacher-mentor also provided the student with feedback on his developing story, and gave suggestions to help with identified challenges and next steps throughout the process as needed.
- Input and feedback from his peers helped the student refine his story plans to be more engaging for the audience.



Showcase and celebrate

On his CLC class's capstone showcase day, the student included highlights from his personal storytelling experience, showcasing his lifelong learning journey and plans for post-graduation, for an audience of classmates, family, and invited staff and guests.





Narrative components	Criteria	Feedback (from teacher- mentor and/or peers)
Ideas and Organization	Purpose The message is purposeful and	
	focused.	
	Opening	
	The introduction is clear and engages the audience.	
	Development of Ideas	
	Components of the narrative (e.g., description, details, characters, dialogue) develop experiences, events, and characters.	
	Narrative includes personal reflection in a logical sequence of events.	
	Conclusion	
	The conclusion is clear and reveals the impact of the experience.	
Craft and Style	Word Choice and Tone	
	 Precise and descriptive words draw the audience into the experience. 	
	Language helps to establish and maintain an appropriate tone.	
Oral Presentation	The speaker considers the audience when presenting (e.g., voice projection, body language, eye contact, etc.).	
	Supporting resources are integrated within the presentation and improve the communication of ideas.	

Adapted from White, 2018.

Student Reflection Graphic Organizer

Narrative Components	Strengths related to criteria (with evidence)	Challenges	What I am learning/ Progress with my goals	Next steps
Ideas and Organization				
Craft and Style				
Oral Presentation				



STUDENT REFINES HER SOCIAL ACTIVISM AND LEADERSHIP SKILLS



Self-assessment and critical analysis

Throughout her many past service-project experiences and the *self-assessment and critical analysis* component of her capstone preparation (see pages 15–21 in the Career Education 10-12 Guide for more information about the components of capstone), the student shared her interest in leadership and social activism. Additionally, the student was inspired by the learning she had pursued through Social Justice 12. Not yet sure about her next steps for post-graduation, the student did know that she would like to continue helping others in some way. Under the guidance of her Career-Life Connections (CLC) teacher-mentor, she decided on *service learning* for her capstone *process and representation* component as a means to further refine her social activism and leadership skills.



Process and representation

Learning focus: Refining transferable social activism and leadership skills

Service focus: Women and children's safety and well-being

Context

The student was in grade 12 at a small secondary school in a rural town in interior B.C. During her middle years, the student began to recognize the diversity in economic and family backgrounds of her friendship groups, noticing differing life struggles and challenges. In her secondary years, she became more informed about social justice issues through volunteerism in local social programs that responded to the needs of individuals and families, including the annual community winter clothing drive, the shoes donation drive for their sister school in India, and the bake sale fundraisers for the local food bank organized by the Leadership Club. Recently the student had seen an article in the paper focused on the women's shelter and its need for donations of personal supplies for families staying there. Building on her volunteer and fundraising experiences, the student decided to refine her social activism skills by leading and organizing an event to raise funds for the purchase of personal hygiene items, bedding, children's clothing, and toys for the shelter.

Connections



Curricular or domain connections

<u>Career Education</u> – Assessing personal transferable skills, and identifying strengths and those skills that require further refinement; Collaborating with teacher-mentor; Cultivating community relationships to support plans for post-graduation; Reflecting on learning experiences and personal development in the Core Competencies; Preparing for next steps in personal lifelong learning journey





<u>Social Justice 12</u> – Exploring the complexity of social justice issues in Canada and impacts on individuals and families, pursuing a social justice initiative in service of individuals and families

<u>Student Leadership</u> – Working on and fundraising for projects that benefit local community and charities, organizing other volunteers, coordinating with community partners and services



Community connections

School community Municipality Local social assistance programs



Connections to First Peoples Principles of Learning

Learning involves patience and time: The student appreciated how meaningful change can take time, as she reflected on challenges faced throughout the process

Learning is holistic, reflexive, reflective, experiential, and relational: The student learned how important it is to connect with and include others, as a leader of a service initiative; She reflected on how to create a positive environment for service, in spite of the negative feelings that can arise for volunteers when working on social justice causes that seem daunting



Core Competencies connections

<u>Communicating</u> – Connecting and engaging with others; Focusing on intent and purpose; Acquiring and presenting information

<u>Collaborating</u> – Working collectively; Supporting group interactions; Determining common purposes

Critical and Reflective Thinking - Designing and developing; Reflecting and assessing

<u>Positive Personal and Cultural Identity</u> – Recognizing personal values and choices; Identifying personal strengths and abilities

<u>Social Awareness and Responsibility</u> – Contributing to community and caring for the environment; Building relationships; Resolving problems

Service learning process



Understand and interpret context

The student contacted the person in charge of the women's shelter to discuss her wish to raise funds to support their needs, and discovered that their current greatest need was for children's clothing, toys, and food items. The shelter staff were enthusiastic about the student's idea, but they explained that for confidentiality reasons the student would not be able to visit the shelter. Any communication must take place through the manager, and by phone. The shelter manager agreed to advise the student and provide feedback throughout the process.



Plan and apply

The student chose a tentative date for the fundraising event, in consultation with the
principal, and recruited student volunteers to help with canvassing prior to the event,
and on the day.



- With no start-up funds, the student canvassed local businesses for donations to sell at
 the fundraiser, and was able to secure free printing services for posters to advertise the
 event throughout the community, free ad space in the local newspaper, and a free space
 to hold the event. She had permission to use the school gym, but felt that the other
 space would be more central in order to access the broader community.
- The student designed an ad for the paper, incorporating information and facts supplied by the shelter, and sent it in for publication. She also arranged colour printing of 50 posters.
- The student arranged to have tables for the event, and organized volunteers to set them up.
- Eighty items were donated from local businesses for the auction, and the student was able to use the school's printer to develop the requisite auction sheets.
- The principal offered to house the donated items in a secure place at the school and reached out to the staff for teacher-volunteers to help with supervision at the event. The student then arranged for transportation of all items to and from the auction venue, as well as a plan to donate any remaining items that were not claimed by the end of the claim period.
- The student developed a plan to distribute items and collect funds once the silent auction was complete, using student volunteers as well as teacher-supervisors and parents/guardians.
- The student worked to build engagement and momentum among her volunteer team by sharing some of the stories about families who had used the shelter that had been communicated to her by the manager of the shelter (while ensuring confidentiality). She explained how having the supplies that the auction would generate would have an immediate impact. She was pleased by the volunteer team's overall enthusiasm, including the fact that some of the student volunteers decided to also host a tea and bake sale in conjunction with the auction, with all proceeds going to the shelter.

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Implement

- Two weeks prior to the auction, after obtaining permissions, the volunteer team posted the information posters in highly visible places. The ad was published in the paper.
- On the morning of the event, the student and her volunteers, accompanied by teachersupervisors and parents/guardians, set up the community space, including the donated items with their accompanying silent auction sheets and the tea/bake sale table. A large sign was set up outside the venue to draw people in.
- Within three hours, all silent auction items had bids that met their reserve amounts and were considered sold.
- The student and the volunteer team then separated the auction items into lots, and collaborated with teacher-supervisors and parents/guardians to contact all winners, collect proceeds, and arrange for items to be picked up.





Analyze and evaluate

• After the event, the student connected with the shelter manager to share how much was raised and to ask for suggestions on what specific types of items would most support

Although the fundraising event was a success, the student realized that, unfortunately,
the donated items that the shelter most needed were consumables and would only be of
short-term benefit to the shelter residents. She struggled with how to continue supporting
this cause. The student decided to set up a donation jar, with the agreement of the office
staff at the school, to be used for ongoing support to the shelter. In addition, she decided
to continue her contact with the shelter manager post-graduation to coordinate the
distribution of any funds collected through the school office.

Communicate

current shelter residents.

- The student shared the thank-you letter from the shelter with her team of student volunteers. The letter outlined how the women and children were living a little more comfortably, even while being displaced during a time of stress, because of their gifted items.
- The student wrote and distributed thank-you letters, detailing the results of the auction and how proceeds were used for the shelter, to all businesses and community partners that had provided donations and support for the event.
- An article was written in the local community newspaper, highlighting this student initiative that benefited a local community need and acknowledging the efforts of the volunteers.
- The student chose to write about the experience for a personal essay assignment in English Studies 12. In it she discussed her developing competence and her commitment to continuing to be a social activist and leader.

Teaching and mentoring tips

- For this type of service learning, recognition of and commitment to confidentiality and sensitivity to the plight of others are crucial. The CLC teacher-mentor may need to connect with community partners (in this case, the shelter manager) to determine guidelines for communications and the sharing of information with both the student and other student volunteers.
- For any students who may be triggered by the sensitive nature of social justice and service learning topics, strategies to cope with negative and/or trauma-related emotions should be in place. Connect with appropriate staff (e.g., the principal, school counsellors) and/or refer to related district/school policies.
- Consider providing and/or co-constructing a form letter for students to use when they
 communicate with community partners and services to legitimize their requests for
 donations and support.
- Ensure students know about how service learning can be used for post-secondary entrance applications and scholarships, as well as for resumés and digital profiles when seeking employment.





Additional resources

- · School counsellors and Youth and Family workers
- Local advocacy groups and service providers
- · Victims services through local police agencies

Formative assessment

- The CLC teacher-mentor provided all students with a general capstone components
 assessment rubric at the outset and used it to frame mentoring conversations and
 student reflections about their experiences. In addition, the teacher-mentor guided
 students to talk about progress on their personal learning goals during check-in
 conversations.
- The student worked closely with the shelter manager and received regular input and feedback while planning the event. This community advisor also agreed to fill out a descriptive feedback assessment form developed by the CLC teacher-mentor. The teacher-mentor had provided the feedback form in advance and also included an introductory letter to assist the advisor in framing feedback for the student.
- The student asked a few of the partnering businesses to complete a checklist of competencies she displayed during the event planning; two businesses also agreed to include written reference letters acknowledging her efforts. She planned to use these to support various applications as part of her post-graduation plans.
- The student decided to use her personal essay from English Studies 12 as a demonstration of learning in CLC, including an accompanying self-assessment of her Core Competencies development.



Showcase and celebrate

In this school community, the approximately 150 graduates presented their learning journey and next steps for post-graduation to an audience of school staff, students, and invited community guests. The students were divided into groups based on their capstone focus and/or topic(s), and the community guests were assigned to the groups respectively. Students presented in classrooms throughout the school, with each student given approximately 15 to 20 minutes, and were encouraged to include learnings from the capstone process, such as their challenges, successes, and growth in Core Competency development. As a contributory aspect of the overall CLC evaluation for capstone, supervisory teachers on the day of the presentation completed a rubric the CLC teacher-mentor supplied that requested descriptive feedback on what the students had shared for self-reflection, personal learning, and plans for next steps for post-graduation. The CLC teacher-mentor then used these completed rubrics to help inform one-to-one discussions with students as they co-constructed the student's marks together, based on all aspects of the *process and representation* of capstone.





STUDENT FURTHER DEVELOPS HER CONFIDENCE AND SHARES HER MINDFULNESS KNOWLEDGE WITH PEERS



Self-assessment and critical analysis

Throughout her mentoring conversations with the Career-Life Connections (CLC) teacher-mentor and the *self-assessment and critical analysis* component of her capstone preparation (see pages 15–21 in the Career Education 10-12 Guide for more information about the components of capstone), the student frequently spoke about the significant benefits that mindfulness practices were having on her ability to deal with stress and anxiety. As this topic seemed to be of particular interest to the student, her teacher-mentor suggested she might like to think about how she could use this learning as a strength to draw on for her capstone *process and representation* component.



Process and representation

Learning focus: Developing confidence in presenting to small groups of peers

Service focus: Mindfulness and well-being

Context

In order to further develop her confidence in presenting in small group settings, the student decided to connect her knowledge of mindfulness practices and mental health experiences to the service learning process by working with interested peers. After being introduced to mindfulness practices in small group workshops led by the school counsellor, the student found that these really did help her cope with everyday stresses and alleviated some of her anxiety symptoms. The counsellor supported her interest in sharing this knowledge with peers and collaborated with the student on how to share her personal stories about struggles with anxiety in a personally safe manner. The counsellor also helped the student describe and model the mindfulness practices that were working for her. The student led several sessions during a series of Mental Health Week workshops they co-designed for younger Grade 9 and 10 students who were struggling to cope with stressors. The counsellor prepared the student for this leadership opportunity by sharing tips on how to lead the mindfulness sessions. They also role-played extensively before the sessions, and the counsellor agreed to be available during sessions to provide extra emotional support for both the student and the younger student participants when and if needed.

Connections



Curricular or domain connections

<u>Career Education</u> – Assessing personal transferable skills, and identifying strengths and those skills that require further refinement; Collaborating with teacher-mentor; Cultivating community relationships to support plans for post-graduation; Reflecting on learning experiences and





personal development in the Core Competencies; Preparing for next steps in personal lifelong learning journey

<u>Physical and Health Education Mental Health and Well-Being</u> – Evaluate and explain strategies for promoting mental well-being; Create and evaluate strategies for managing physical, emotional, and social changes during puberty and adolescence; Develop skills for maintaining healthy relationships and responding to interpersonal conflict



Community connections

School community
Community wellness centre



Connections to First Peoples Principles of Learning

Learning is holistic, reflexive, reflective, experiential, and relational: The student was able to reflect on her own personal struggles, appreciate the support of her school counsellor and the practice of mindfulness strategies, and then pay these gifts forward by sharing with others

Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors: The student recognized the importance of mindfulness practices to her own well-being, and that the primary purpose of learning is for well-being; She chose to help others with similar struggles to learn how to manage their own stress, and to promote their own well-being



Core Competencies connections

Communicating - Connecting and engaging with others; Acquiring and presenting information

Collaborating – Working collectively; Supporting group interactions

Critical and Reflective Thinking - Designing and developing; Reflecting and assessing

Positive Personal and Cultural Identity – Identifying personal strengths and abilities

Personal Awareness and Responsibility – Well-being; Self-Regulation

Social Awareness and Responsibility - Contributing to community and caring for the environment

Service learning process



Understand and interpret context

The student identified the community as being Grade 9 and 10 students who were feeling stressed and overwhelmed and/or needed a break from stressors (e.g., test-taking, noisy and busy environments, difficulties at home), based on generalized feedback received from the counsellor. The student then developed and focused on the following inquiry questions to frame her reflections:

- How can taking time out of the school day to practice mindfulness help decrease student stress and provide a greater sense of well-being?
- Throughout this process, in what ways have my experiences helped to build my confidence in speaking to small groups?



Through online research and connecting with a school community member who taught/practiced mindfulness, the student learned about ways to facilitate small groups and to share mindfulness techniques with her peers during Mental Health Week.



Plan and apply

The student researched various resources online about mindfulness and teens, including breathing techniques and quick and easy-to-use mindfulness activities.

She also collaborated with the school counsellor to plan workshop sessions, coordinate classroom space, and schedule time slots for sessions. Once she was clear on what she was going to present, she shared her plans with the counsellor, and together they role-played her plan to lead and guide the workshops. Both the counsellor and the student agreed to offer these sessions during Mental Health Week.

The student advertised her sessions by designing and posting flyers throughout the school. The counsellor agreed to recommend the sessions to students who might benefit from them, and also shared information with teachers at the next staff meeting in case they knew of students who might like to join in. Closer to Mental Health Week, the student also arranged for announcements about the series to be read over the PA and posted on the school website.



Implement

During the sessions offered throughout Mental Health Week, the student shared her personal experiences and knowledge, and led peers through the steps of a four-part breathing method as well as other mindfulness activities. She created a quiet and supportive space for the sessions by playing calming background music, dimming the lights, and seating participants in a circle. At the end of the session, the student requested that her peer participants give anonymous feedback about their experience in the workshop sessions by filling out exit survey cards that they left in the drop-box at the door.



Analyze and evaluate

The student reviewed the feedback on the exit survey cards in collaboration with the school counsellor. Together they synthesized the main themes to share with her CLC teacher-mentor and to include as part of her capstone showcase presentation.



Communicate

With her CLC teacher-mentor and class, the student shared the synthesis of participant feedback that she and the school counsellor had prepared. She also shared insights from her reflections on developing her confidence. She expressed personal satisfaction with her progress and the session results, and decided to include these and some of her mindfulness practices knowledge as part of her final capstone presentation.

Teaching and mentoring tips

When working with sensitive topics related to mental health, it is important to anticipate and mitigate potential emotional triggers for some students. In this case, the school counsellor played a key role in both supporting the student in her capstone work and supervising and being readily available to student participants during the mindfulness session times.





Additional resources

- Mental Health Week
- Teen Mental Health
- Mindful Breathing (Mental well-being)
- Mindfulness for Teens
- Mindful Schools

Formative assessment

- In this CLC class, students co-create a self-assessment rubric with their teacher-mentor, based on some general criteria related to capstone processes, as well as specific criteria related to each of their personal learning goal(s). In this case, the criteria were related to the process the student underwent during her service learning, and to the student's goal of developing confidence in presenting to small groups of peers.
- All students reflected on their progress with learning goals, including successes and challenges, at least once weekly in a journal format. They used the journal entries to help identify some key insights about themselves and their plans for post-graduation to share during their school's capstone showcase week.
- The student had requested that peer participants complete exit surveys to provide her
 with feedback about the mindfulness sessions. To help frame this type of survey in a
 strengths-based, constructive, and respectful way, it is recommended that the teachermentor support students in developing peer assessment tools.



Showcase and celebrate

During the school's Capstone Presentation Week, the student described how her service learning experience influenced her learning journey and Core Competency development. The student also shared the participant feedback from the sessions, including what worked well and what she might try differently next time. As a demonstration, she led the audience through a breathing activity that she had tried with participants during the sessions.

The student presented to a small panel that included some of her peers, the CLC teacher-mentor, the school counsellor, and other interested teachers. The student decided to invite some of her elementary school teachers, two of whom were able to attend and who shared how impressed they were with her increased confidence as a young adult.

