



# Independent Study Course Curriculum (ISC521/ISC621)

## **Curriculum Guide**

### **Department of Education and Early Years**

**The application and approval forms are available in electronic format for easy completion**

*Version: October 5 2023*

## **Independent Study Course Curriculum (ISC521/ISC6)**

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## What is an Independent Study Course?

The Department of Education and Early Years (the Department) recognizes the importance of providing students with opportunities for self-directed learning. The Independent Study Course allows students to engage in personally meaningful, authentic, real-world learning within an inquiry and problem-solving framework. Students have the opportunity to investigate a self-selected topic or theme that extends the curriculum of an authorized provincial course(s) and contributes to their knowledge, skills, and attitudes necessary for lifelong learning.

The Independent Study Course should be a student-directed investigative project that is planned in collaboration with a supervising teacher and community mentor, that is monitored frequently, and allows the student to assume the role of firsthand inquirer. This study should uncover new questions and ideas for further inquiry and may solve real-life community issues. It is designed as an opportunity to pursue further studies and should not be regarded as a student entitlement. This course will showcase a student's care, attention to detail, and overall pride in their work while requiring a considerable commitment of time, effort, and energy on the part of the student.

**The Independent Study Course (ISC521A/621A) is designed to provide students with an opportunity to ...**

- apply interests, knowledge, skills, creative ideas, and task commitment to a self-selected topic or theme;
- acquire advanced-level understanding of the knowledge (content) and methodology (process) that is used within particular disciplines, artistic areas of expression, and interdisciplinary studies;
- identify and achieve learning outcomes in a self-directed environment;
- increase flexibility and individualization of programming at the high school level.

**Students interested in enrolling in ISC521A/621A should ...**

- demonstrate the ability to work independently with minimal direction;
- be committed to a high quality level of work;
- be interested in pursuing a topic or theme that is authentic and personally meaningful;
- demonstrate an interest and ability to collaborate with and learn from others;
- demonstrate strong problem solving skills, critical thinking skills, and creativity;
- be willing to share their learning experiences with others.

More details are available in the Application Support Documentation Section (Appendix A).

## Guidelines for an Independent Study Course (ISC521A/621A):

- Students may be granted one Independent Study Course credit in each of Grades 11 and 12.
- Students may earn a total of two Independent Study Course credits towards graduation requirements.
- The Independent Study Course credits may count towards graduation requirements as elective credits. ISC credits do not fulfill other graduation requirements such as a Creativity and Innovation credit.
- Students will be supported by a supervising teacher at the school.
- Students should be supported by a community mentor who should will have a criminal background check with vulnerability sector.
- Independent Study Courses should be developed cooperatively by the student and a supervising teacher, approved and supported by the parent/guardian(s), supervising teacher, school counsellor, and school principal.
- An Independent Study Course should be designed to take about 110 hours - equal to that of other credit-based courses.
- Numerous revisions of the application should occur at the school level before the application is submitted for approval at the Department level.
- Once submitted to the Department, further revisions may be recommended in order to support the student's work and ensure a successful application that meets expected standards. It is possible that approval may be denied until recommended changes are implemented.
- Approval is required by the Department **before** a student can begin the Independent Study Course. This avoids situations where the student has begun their work only to have their application require adjustments before final approval is given.
- Final completed applications (after revisions) must be shared with the Department.
- Credit is awarded in the semester that the course is complete. This gives students greater flexibility to plan their start time and end time in a way that suits their schedule, topic of research, etc. There are some specific requirements as follows, however:
  - For students wishing to complete their work *within* a semester, the application should be submitted no later than the first week of the start of the given semester.
  - For students wishing to work on their ISC over the summer, they must show in their application how their mentor will be available to support their work (the supervising teacher will not be available to them over the summer months).
- All Independent Study Courses must include the creation and evaluation of a formal final product, pre-determined by the student.
- All Independent Study Courses must include a final Presentation of Learning where a panel will provide feedback to the student as well as feedback for the supervising teacher to support their evaluation of the student's work.
- All Independent Study Courses must include a final Reflection to be evaluated by the supervising teacher. This reflection should include elements of the student's personal and academic journey as well as a reflection on their growth and development in the Essential Graduation Competencies.
- Independent Study Course credits cannot replicate existing provincially curricula.

- A copy of the approved application form should be filed in the student's cumulative record.
- The student must maintain a record of all components of the Independent Study Course (e.g., application, management plan, learning log, journal, assessments). Such records can be held in a designated Google Drive ISC folder

## Application Process

1. Determine if an ISC is right for you.
  - Check the support section for important details to consider when making your decision.
2. If you have decided that you want to pursue an ISC, create a Google Drive folder in your My Drive and call it Last Name First Name ISC (e.g. Smith John ISC).
  - Be sure to use your school account. You will have trouble accessing required documents if you use an "outside" email.
  - Use this Google Drive folder to hold any ISC-related work
3. Share your ISC Google Drive folder with [isc@cloud.edu.pe.ca](mailto:isc@cloud.edu.pe.ca) and with your supervising teacher.
  - The [isc@cloud.edu.pe.ca](mailto:isc@cloud.edu.pe.ca) email is connected to the Department's Flexible Learning Support Leader. Once you share your ISC Google Drive folder with this email, it will allow them to review your application, supporting documents, etc. and provide feedback.
4. Make a copy of the Application Form to go into your own ISC Drive Folder.
  - In some circumstances, when you make a copy of a Google Doc, it puts the copy of the file into the folder where the original Doc is located. You want to make sure that the copy goes into your own ISC Drive Folder and not into the source folder. If you aren't sure how to do this, ask a teacher at your school for help.
5. Be sure to use the Support Document to help you with your application.
6. Complete the School-Based Approval Page.
  - There is a School-Based Approval Page for Grade 11 and 12 Students.
  - There is a different School-Based Approval Page for Grade 10 students who wish to apply for an ISC521A credit.
  - The approval form requires signatures so you need to print it and have it signed by everyone.
  - Once you have those signatures, you can scan the document and add it to your ISC Google Drive folder.
7. Complete your Application Form and ensure that the most up-to-date copy is in your ISC Google Drive folder.
  - This is a very detailed and time-consuming task. You need to plan carefully.
  - Be sure to reach out to your teacher-supervisor and mentor during the process for feedback and support.
8. When your application is complete and your School-Based approval pages are signed and added to your Google Drive folder, reach out to [isc@cloud.edu.pe.ca](mailto:isc@cloud.edu.pe.ca) to let them know you are ready for your application to be reviewed.
  - You will receive approval (and if necessary, some feedback) and an approval form from the Department that you can add to your ISC Google Drive.
9. Once approval is received, you are ready to begin.

## **Roles and Responsibilities**

### **The Student**

It is the responsibility of the student to:

- find a supervising teacher to support them in their ISC;
- make formal application to pursue an Independent Study Course;
- achieve their identified learning outcomes; and
- organize and complete the learning experiences and activities involved in the course.

### **The Parent/Guardian**

It is the responsibility of the parent/guardian to:

- ensure they understand the nature and requirements of the ISC; and
- support their child as needed throughout the ISC journey.

### **The Guidance Counsellor**

It is the responsibility of the guidance counsellor to:

- help students make informed decisions about the suitability of an ISC as related to their high school and post-secondary pathway (transcript review, post-secondary pathway options, etc.); and
- help students make informed decisions about the student's ability to undertake an ISC as related to their interests and abilities.

### **The Principal**

It is the responsibility of the principal to:

- help, when necessary, to select an appropriate supervising teacher(s) who has the skills and ability to effectively support students pursuing an ISC;
- develop a process to approve student applications at the school level that supports students and aligns with the procedures required by the Department; and
- engage the school counsellor to provide leadership in the selection of appropriate candidates.

### **The Supervising Teacher**

It is the responsibility of the supervising teacher to:

- support students in completing the application for an Independent Study Course;
- support approved students in the execution of the learning experiences and activities involved in the course;
- assist the student in securing a community mentor;
- assist in the assessment and evaluation of the student's work; and
- ensure the guidelines and procedures for community based learning are adhered to, if applicable.

### **The Community-Based Mentor(s)**

It is the responsibility of the community-based mentor to:

- complete a criminal record & vulnerable sector background check when required by the PSB . This will depend on the nature of the interactions with the student. It is best practice to follow the coaching guideline of "Rule of Two" when meeting with students in person. The Rule of two ensures that all interactions and communications are done in the open, are observable by others and are in an appropriate setting;
- provide advice based on experience in the topic that the student is covering;
- if necessary, provide support for the student to undertake tasks associated with the student's ISC (e.g. showing the student how to use equipment, connecting the student to other community resources, etc.); and
- If asked, to provide information to the supervising teacher to support the evaluation of the student's final presentation of learning.

### **The Department of Education and Early Years**

Is is the responsibility of the Department of Education and Early Years to:

- support the stakeholders with any questions they have during the ISC process;
- approve applications; and
- keep records of annual ISC applications and completions.



## ISC Application Form (v1.J2021)

You might find it helpful to have the support document open while you complete the application form. Some sections will need further explanation in order for you to complete the application form with enough detail for approval. Please refer to the support document section for help with the application form.

Both the Application Form and the Support Document are available digitally. It may be easier for you to work with the digital version since each section of the digital version is linked to the relevant support section.

### Section 1: Applicant Information

Student Name:					
Student's School:		Grade			
Supervising Teacher:					
Supervising Teacher email:					
Principal:					
Indicate with an X which course you are applying for:	ISC521A		ISC621A		
Application Date:					
*Target Completion Date:					

*\*The Target date is only an estimate. If you need more or less time, that is acceptable.*

### Section 2: Your Rationale for Independent Study

#### 2a. Independent Study Course Curriculum Area and Topic.

Curriculum Area: (in the space below)	Topic:

#### 2b. Why have you selected this theme or topic for Independent Study?

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**2c. Describe Yourself as a Learner.**

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**Section 3: Your Driving Question and Related Processes**

**3a. What is your Driving Question?**

It should show the purpose of your ISC, be challenging, open-ended in nature and achievable within the timeframe that you have set.

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**3b. Outline and where applicable, explain the steps you will need to take from the beginning to the end of your ISC. You can put your steps in order according to a potential timeline or you can discuss the steps in different process categories.**

Provide as much detail as you can.

What steps are you taking and why?

*\*Add rows below as necessary. Right click in the bottom row and choose Insert Row Below from the menu box that opens.*

**3c. What will your final product be?**

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**3d. Who is the intended audience for your presentation of learning?**

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**3e. Who will act as your Community Mentor(s) or Expert(s)?**

Mentor Name(s)	What is the mentor's role in the community? How will this mentor support you in your Independent Study Course?

## **Section 4: Your Independent Study Course Learning Plan**

**4a. What do you hope to learn and be able to do by the end of your ISC?**

I will know:

<ul style="list-style-type: none"><li></li></ul>
--

I will be able to:

<ul style="list-style-type: none"><li></li></ul>
--

**4b. Connection to the Essential Graduation Competencies.** Your teacher can provide you with the Essential Graduation Competencies. They are linked in the digital version of the application form.

EGC	Mark with an X	Explain why/how completing your independent study will help you to develop your chosen EGCs
Citizenship		
Communication		
Personal-Career Development		
Creativity and Innovation		
Critical Thinking		
Technological Fluency		

## Section 5: Assessment and Evaluation Plan

### 5a. Assessment For Learning and Assessment Of Learning: Formative and Summative Tasks in your ISC.

This part of your application is about assessment, including the rubric that you plan to use to assess your final product. *Ideally you will submit the rubric for your final product when you submit your application form, but don't worry if you aren't ready. It is okay to wait for a little while to see how your ideas are developing. If you aren't sure what you want your rubric to be just now, please note this in the table below and share a specific date by which you will have your rubric ready..*

You can include a hyperlink to the rubrics in the table below and/or add your rubric files to your ISC Google Drive folder.

Formative Tasks	Optional or Required	Details
The Learning Log	Required	Please indicate in this space the format that you would like to use for your learning log:
		My Format will be:
Meetings with your Supervising Teacher	Required	Please provide an approximate schedule of the meetings you will have with your supervisor in Section 6c.

Meetings with your Mentor(s)	Required	Please provide an approximate schedule of the meetings you will have with your mentor(s) in Section 6c.	
Other?	Optional		
<b>Summative Assessment**</b>	<b>Rubic</b>  Add the link to your final product rubric here or you or upload your rubric into your ISC Google Drive folder.	<b>Possible Range</b>	<b>Your Choice</b>
The Final Product		30%-40%	
Formal Presentation of Learning	Rubic Provided	40%-50%	
Student Final Reflection  Include reference not only to the ISC itself, but also to your growth in the Essential Graduation Competencies.	Rubic Provided	20%-30%	

## Section 6: Action Plan

### 6a. Resources

<p>List the main resources (material, human, community, technological, etc.) that will be used to support learning throughout the Independent Study Course. Include a brief explanation as to why the resources are necessary.</p> <p>For example, if your ISC is about the prevalence and impact of radon gas on P.E.I., you might need</p> <ul style="list-style-type: none"> <li>• Radon Survey at Selected Sites Across Prince Edward Island (2008) report to look at the levels of radon measured at different locations across P.E.I.</li> <li>• Access to the Chief Public Health Officer: Interview to discuss impact of Radon on individual health</li> <li>• Access to a radon detection kit to take my own measurements</li> <li>• etc</li> </ul>
<p>My List:</p> <ul style="list-style-type: none"> <li>•</li> </ul>

## 6b. Learning Activities

List the activities that will be involved in this Independent Study Course and provide a brief description of each.

e.g.

- Literature Review: I will review the Radon Report (2008) and note in my Learning Log any observations that are important
- Research: I will do a search for more recent reports and/or incidents of high radon levels in pockets across P.E.I.
- Interview: I will prepare questions based on my research and arrange a meeting with the Chief Public Health Officer
- Interview: I will visit a local company that offers Radon Testing to talk about their experience with radon levels on PEI.
- Interview: UPEI Geology Professor to discuss soil compositions and vulnerability to radon

My List:

-

## 6c. Timeline

Create a detailed timeline including approximate dates for the specific activities listed below. Additional activities and timelines may be added.	
<b>Date</b> (Can be specific, or be a bit broader such as "the week of ..." or "the month of ...")	<b>Activity</b> A <b>bolded</b> task is required
	<b>Student/Teacher Meeting to review ISC Application Form before submission</b>
	<b>Commencement of the course</b> (Written approval must be received before a course can begin. Please allow at least one week between submission and course start dates)
	Add timeline items as needed. You can add and delete rows as necessary.
	<b>Student/Teacher Progress Meeting</b> (remember to update your learning log)
	Add timeline items as needed. You can add and delete rows as necessary.
	<b>Student/Teacher Progress Meeting</b> (remember to update your learning log)
	Add timeline items as needed. You can add and delete rows as necessary.
	<b>Student/Teacher Progress Meeting</b> (remember to update your learning log)
	Add timeline items as needed. You can add and delete rows as necessary.
	<b>Student/Teacher Progress Meeting</b> (remember to update your learning log)
	Add timeline items as needed. You can add and delete rows as necessary.
	<b>Student/Teacher Progress Meeting</b> (remember to update your learning log)
	Add timeline items as needed. You can add and delete rows as necessary.
	<b>Final Product Draft Submitted to Mentor(s) and Supervising Teacher for Feedback</b>
	<b>Final Product Completed and given to Supervising Teacher and Mentor(s)</b>
	Rehearsal for Presentation of Learning
	<b>Formal Presentation of Learning</b>
	<b>Final Student Reflection Submitted to Supervising Teacher</b>
	<b>Final Course Mark Returned To Student</b>

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## Appendix A: Independent Study Course Application (v1.J2021) Support Document

Use this document to help you complete your independent study course application

### **Before You Begin: Is an Independent Study Course right for you?**

If you are interested in doing an Independent Study Course (ISC), you should have a conversation with some key people that can help you make informed decisions.

First, you should see your school counsellor to discuss your options. They will review your transcript, the course offerings at your school, and your learning interests to help you decide if an ISC is right for you. They will also notify your principal regarding your intention to apply. If you haven't already considered who will act as your supervising teacher, your school counsellor can help with that too.

Second, you should have a discussion with your parent(s)/guardian(s) about the ISC. They will likely have questions about what an ISC is and how it will affect you and your post-secondary pathway.

Finally, you should have a conversation with yourself ... as in *self-reflection*. Doing an ISC is a challenging task, so it is essential that you have a genuine interest in doing the work as well as the ability to handle the process. Consider the following questions to guide your thinking about the ISC:

- Do I have a passion for learning about a particular subject or aspect of a subject?
- Is there a particular topic I learned about in my courses that I wish I could study in more depth?
- Have any of my courses left me with unanswered questions that I want to explore further?
- Can I work independently with minimal direction?
- Can I do high quality work at an academic grade 11 or grade 12 level with minimal supervision?
- Can I collaborate with and learn from others?
- Can I solve problems and think both critically and creatively?
- Am I able to share my learning experiences with others in a final presentation?

It will be a difficult task to successfully complete an ISC if you can't answer "yes" to these questions. Doing an ISC is a big commitment.

## **You have decided that an ISC is a good option for you. Now what?**

If you have decided that you would like to develop an Independent Study Course, the next steps are to complete your application form (link to follow), submit it and then wait for approval.

Completing your application form will take time, careful thought and consideration. As part of the application process, you need to *plan* your ISC. You need to imagine what your ISC will look like from start to finish. You need to think about what you want to do and how you want to do it. You need to think about what you will learn, what resources you will need, etc. It is quite challenging, but don't worry ... you can do it!!

Your application form asks you to share your *intended plans for your ISC*, but we realize that it is impossible to plan every detail. You don't know what you don't know! Once you start doing your ISC work, you might discover a better way to do a task, or find another resource, or connect to an additional community mentor. The point of the application is to help you start off with a very solid vision of your work. If you need to make changes along the way, you can write about them in your learning log.

You can reach out for help as you fill in your application form. Your supervising teacher and/or school counsellor are there if you get stuck. They can provide feedback and help you to make revisions before completing and submitting the final application to the Department of Education for approval. There is no need to worry that your application isn't "good enough". Even when it gets to the Department of Education, you can get feedback from staff (if necessary) to make sure that your application is good to go.

Here is a checklist to help you stay on track:

- ☐ Using your school account, create a Google Drive folder in your My Drive and call it Last Name First Name ISC (e.g. Smith John ISC).
- ☐ Share your ISC Google Drive folder with [isc@cloud.edu.pe.ca](mailto:isc@cloud.edu.pe.ca) and with your supervising teacher.
- ☐ Make a copy of the Application Form to go into your own ISC Drive Folder. If you prefer working with a hard copy of the application, print the relevant pages from this document.
- ☐ Refer to the Support Document to help you with the various sections.
- ☐ Print and complete the appropriate School-Based Approval Page (Grade 10, Grade 11/12)
- ☐ Once you have the signatures you need, scan the document and add it to your ISC Google Drive folder.
- ☐ Complete your Application Form and ensure that the most up-to-date copy is in your ISC Google Drive folder.
- ☐ When your application is complete and your School-Based approval pages signed and added to your Google Drive folder, reach out to [isc@cloud.edu.pe.ca](mailto:isc@cloud.edu.pe.ca) to let them know you are ready for your application to be reviewed.
- ☐ Once approval is received, you are ready to begin

**Now ... let's get started!**

## **Support for Section 1: Application Information:**

### Choose the Timing of your ISC

Be sure to discuss the timing of your ISC with your supervising teacher and/or guidance counselor. You can submit your Independent Study Course Application *at any time*, but don't start your work until your application has been approved. As soon as approval is granted and your support people are ready, you can start your ISC. The credit will be awarded in the semester that you finish your work.

Many students want to start and finish their ISC in one semester as a fourth course in their schedule, but there are other options. You can take an ISC as a fifth course, either in one semester or over the span of the full school year. You can even submit your application in April, start in May, and finish in November of the following school year if you want. The point is to be flexible, and the timing is up to you and your supervising teacher.

Of special note:

If you want to finish your work during one semester, you need to submit your completed application form for approval from the Department of Education and Early Years by early September at the latest for first semester credit and by early February at the latest for second semester credit.

If you plan to work on your ISC over the summer, your supervising teacher will not be available to you. You must therefore show in your application form how your community mentor will support you in July and August, especially if your ISC involves work that requires supervision (e.g. lab work, etc.). You should also plan a meeting with your supervising teacher before school ends in June to update them on your plans for July and August, and early in September to update them on your progress.

## **Support for Section 2a. Independent Study Course Curriculum Area and Topic**

Your ISC should have a connection to our provincial curriculum in some way without duplicating it. You can self-select your topic or theme but it should extend the curriculum of an authorized provincial course(s). Being on the yearbook committee or being part of the student council isn't an independent study course, but you might find some inspiration in those activities that *could* lead to an ISC topic with enough rigor. For example, you might have been involved with a student council activity that welcomed newcomers to the school. Some of your recent students have arrived from a refugee camp where they had lived for many years. This might have inspired an independent study credit that explores the social impact of refugee migration due to war or climate change. The curricular connection could be to global issues or one of your science classes, etc.

Examples of areas and topics:

- Biology - impact of pesticide use on fish health;
- Global Studies - alternative facts and politics;
- Physics - the prevalence and impact of radon gas on P.E.I.
- Music or Psychology - the use of music therapy in Alzheimer's Patients,
- Physical Education - concussions in women's soccer, etc

### **Support for Section 2b. Independent Study Course Curriculum Area and Topic**

Use this space to explain why you want to learn more about your chosen topic or theme.

- Why is it important to you?
- How does it connect to your interests? Your current areas of study? Your future plans?

### **Support for Section 2c. Describe Yourself as a Learner**

In order to manage your learning during an independent study course, you need to draw on your strengths as a learner and be open to developing areas for growth. To start the process, share how you see yourself as a learner right now. The following questions might help you to write your response.

- Reflect on your most memorable learning experiences. What key elements stand out for you?
- Do you like to learn from others?
- Do you like to tackle hands-on projects that require building and constructing?
- Do you like to perform?
- Are you able to shift through lots of information to find exactly what you want?
- Do you have strong visual-spatial skills?
- Can you identify areas where you can grow as a learner?
- Is there anything else you want to share?

You don't need to answer the questions individually - they are only meant to get you thinking so that you can write your response.

### **Support for Section 3a. What is your driving question?**

Your driving question should show the purpose of your independent study course and be written **in the form of a question.** Your Driving Question is the focus of everything you will do in the course so give it some thought.

**The driving question should be challenging and complex, open-ended in nature, yet achievable and measurable within a reasonable time frame.** A suitable degree of rigor is expected (this is an academic 521 or 621 course). It should connect to a subject area and extend your learning *in* that subject area, but should not be the same as the curriculum covered in our program of studies. You can't duplicate the work you do for external credit in an independent study course - no double dipping.

Some examples of driving questions include:

- What is the best way to plan and execute a campaign to raise awareness among various groups in our community about a healthy diet?
- To what extent do the dominant character archetypes in Canadian History still embody our values today?
- How do rain events affect the chemical and physical properties of a section of the Dunk River?
- What does the work of George Orwell show us about humanity and who we are as humans?

Your final product should provide a clear answer to your driving question, and all of the learning activities you undertake in the course should serve to help you find an answer to that question.

**Research Reality Check ...** Don't worry if your journey takes you in unexpected directions. As you do research, speak with your mentor(s) or chat with your supervising teacher, your Driving Question might change. Your Driving Question might stay the same, but you end up with unexpected results. Twists and turns are a normal part of any research journey. Research isn't a linear process so expect change. Be sure that your final project addresses your final driving question though.

**Support for Section 3b. Outline and, where applicable, explain the processes involved with your investigation.**

It is important to think about the steps you need to take in order to complete your independent study credit before you start your independent study credit. Doing some initial planning now will give you direction as you start. Some questions to consider are:

- What do you need to do in order to explore your driving question? Start at the beginning and work your way through to the end.
- Who can help you find the answers?

**Research Reality Check ...** Be prepared to add to and/or revise your processes

Even though we are asking you to start explaining the processes involved in your investigation now, we understand that things can *and probably will* change as you work through your ISC. You may find new tasks to do along the way. Your research might lead you to a better way of doing something. Your mentor or your supervising teacher might have a terrific suggestion for you. Your research might bring you to a dead end or highlight a different focus that you would rather explore. This is absolutely okay. In fact, this often happens when you do big research projects. Research takes resilience! Be sure to reflect on any changes in your Learning Log.

**TIP ...** Ask a friend to read your outline

If they can describe the project back to you and capture what you plan to do, your description is clear and thorough. If they can't, you might need to add more detail.

### **Support for Section 3c. What will your final product be?**

Your final product should be appropriate to your final driving question and make sense within the field of study. Did you do an experiment? Your final product could be a lab report. Did you conduct academic research on a topic? Your final product could be a written paper. Your final product might be a book, performance, prototype, model, video, speech, podcast or website. There are many possibilities. Don't forget to be open to change. This is your *initial* plan. If your driving question changes, or if your focus changes, your final product might change too.

### **Support for Section 3d. Who is the Intended Audience for your Presentation of Learning?**

In addition to submitting your final product and a final reflection to your supervising teacher, you will also need to invite guests to a formal presentation of your learning. It is up to you to decide the most appropriate audience members. Will you invite your mentor? A group of experts in the field? Other community members? A university professor? Some friends? Your teachers? Your driving question and final product should be meaningful to the audience so keep that in mind as you consider who to invite. **At least three audience members will give you verbal and/or written feedback on your presentation of learning. They will also provide your supervising teacher with input to help them evaluate your presentation of learning.**

If you are comfortable inviting a Department of Education and Early Years staff member from the curriculum area(s) associated with your ISC, please do so. They love to see the work of students in their curriculum area. If you aren't sure who to invite, check with your supervising teacher or send an email to [isc@cloud.edu.pe.ca](mailto:isc@cloud.edu.pe.ca) for recommendations.

### **Support for Section 3e. Who will act as your Community Mentor(s) or Expert(s)?**

Throughout your independent study course you will have the opportunity to work closely with at least one community mentor/expert who is involved in a field of study related to your topic area. They might live in your community, or you might engage with them via technology. The mentor(s)/expert(s) will be able to provide advice based on their personal experience with your topic. It is your responsibility to secure your mentor(s)/expert(s) but your supervising teacher can help you brainstorm potential names, make connections, etc.

Questions to consider when identifying potential mentors/experts:

- How can this mentor help to deepen your understanding of the topic and support you in finding answers to your driving question?
- When and where will you work with them?
- What method of transportation will you use to travel to your mentor's workplace? Will it be easier to Skype with your mentor or chat on the phone instead? How will you stay in touch?
- How often will you communicate with them?
- Are they able to provide ongoing feedback during different stages of your investigation?
- How are you going to document your mentor interactions?
- Will your mentor(s) be involved in the assessment of your final product?

**Important ... Before you begin working with your mentor**, make sure that you and your supervising teacher have consulted the [Guidelines and Procedures for Community Based Learning document](#). Note: This document has not been updated since 2011 but is the most current version available.

**ESSENTIAL ... Mentors are required to complete a criminal record & vulnerable sector background check. The school will provide the mentor with a volunteer letter that they can then take to the appropriate police department for processing. The cost of this background check is usually waived for volunteers. Your Supervising Teacher can help get a copy of this letter for you.**

It is best practice to follow the coaching guideline of "Rule of Two" when meeting with your Mentor. The Rule of two ensures that all interactions and communications are done in the open, are observable by others and are in an appropriate setting.

**Support for Section 4a. What do you hope to learn and be able to do by the end of your ISC?**

Learning outcomes define what you will learn (e.g., I will know...) and what skills you will build (e.g., I will be able to...). They are intended to help you design your learning experiences and assessment tasks. They should be specific, measurable, and achievable with your ISC timeline. In other words, tell us what you expect to know and be able to do as a result of your independent study course.

Example: If you choose to create a podcast that outlines the impacts of climate change on the infrastructure of P.E.I. fishing ports, you will no doubt come to know facts about the current impact of climate change on P.E.I. (I will know ...), but you will also be able to create a podcast (I will be able to ... ) which will have even more "I will be able to ... " items embedded within that.

If you need advice or support with this part of your application, please consult with your supervising teacher or your mentor.

**Research Reality Check ... At this stage, it is unreasonable to expect you to know all of the possible learning outcomes you will accomplish.** In fact, you will likely know and be able to do much more than what you list here. Still, it is worthwhile and important to think about the possibilities. You can note any changes in your learning log as they arise, but getting a start now will provide you some goals/direction.

**Support for Section 4b. Connection to the Essential Graduation Competencies.**

Essential Graduation Competencies are the attitudes, skills, and knowledge that prepare learners to successfully participate in lifelong learning and life/work transitions.

In order to understand the meaning/context for each of these EGCs, you should read the

following document: [The Atlantic Canada Framework for Essential Graduation Competencies](#). The EGCs are also listed at the end of this guide. Which one(s) do you feel you will develop most and why/how?

### **Support for 5a. Assessment For Learning and Assessment Of Learning: Formative and Summative Tasks in your ISC**

Assessment is a very important part of your Independent Study Course. Your ISC requires both assessment *for* learning tasks (formative) and assessment *of* learning tasks (summative).

Your Summative Assessments are used to give you a final grade. Your Formative assessment tasks aren't worth marks, but you still have to do them as part of your course because they support your success. Your formative tasks help you keep track of your learning and get feedback along the way. This feedback is important and gives you the best chance to create a final product, presentation, and final reflection that really shows who you are as a learner.

#### Summative Tasks

Every ISC has three mandatory summative assessments:

1. Your Final Product (30% - 40%),
2. Your Final Reflection (40% - 50%), and
3. Your Formal Presentation of Learning (20% - 30%).

You have the flexibility to determine the value of these three assessments within the ranges provided.

Each of these tasks will need a rubric for assessment purposes. The Presentation of Learning and the Final Reflection rubrics are provided by the Department of Education and Early Years and are standard for all ISC students starting in 2023. The other rubric is for your Final Product. Your supervising teacher will help you find or make one that is appropriate for your final product.

Ideally you will submit your final product rubric when you submit your application form, but don't worry if you aren't ready. If you aren't sure what your final product and rubric will be just yet, make a note in the table below and share a specific date by which you plan to have your rubric ready.

#### 1. Final Product Rubric: Student-Determined

Your teacher is going to evaluate your final product so you will need to create or find a rubric that makes sense for whatever your final product is going to be. Did you do a scientific study and experiment? Is your final product going to be a comprehensive lab report and a document highlighting your supporting research? Look for a rubric to evaluate those items. Did you create a podcast and a video? What would those rubrics look like? Your teacher can help you to find and/or develop a suitable rubric.



## 2. Final Presentation of Learning - Provided

During your final presentation, at least three audience members will provide information to your teacher in support of your evaluation. Your panel guests will use the rubrics provided but they are not the ones formally assessing you. The teacher will use those rubrics to help inform their own final assessment of your presentation of learning.

## 3. Final Reflection - Provided

Your final reflection will be graded by your supervising teacher using the rubric provided.

**Suggestion ...** You should review the Final Reflection and the Formal Presentation of Learning rubrics. This will help you make a more informed decision about the percentage values you want to assign to each of the three components. Make sure your three percentage values add to 100%.

### Formative Tasks: Monitoring Your Learning to Help You Learn

In order to prepare for your summative assessments, you need to do three formative tasks along the way:

1. A Learning Log;
2. Meetings with your supervising teacher; and
3. Meetings with your mentor(s).

Formative tasks give you opportunities for feedback and help achieve your learning outcomes.

#### The Learning Log:

The process of *doing* your ISC is just as important as the product that you are creating so it is important to document your journey. Your Learning Log gives you a place to reflect about your learning and comment on growth and development as a learner/researcher. This is a place to record your process - steps you have taken, changes you have made and why, notes from meetings, observations, discoveries about yourself in the learning process, successes and challenges that you have faced along the way, what you have done to overcome those challenges, changes in procedure, direction, etc. The Learning Log will be a very important tool for you when it comes time to write your final reflection.

#### Meetings with your supervisor:

You must have regular meetings with your supervisor. Bring your Learning Log to your meetings. Your Learning Log and help guide your meeting. Be sure to document what happens in the meetings in your log too. Make note of suggestions, ideas, advice and other discussion topics that come up.

Meetings with your community mentor(s)/advisor(s):

You may want to meet with your community mentor(s) regularly or only once in a while. Bring your Learning Log with you to these meetings as well for the same reasons you take them to meetings with your supervising teacher.

**Research Tip** ... Keeping your learning log up to date will help you with your final assessment task. Reviewing a well-kept learning log will help you to write an authentic and meaningful reflection that highlights not only what you learned about your topic, but also what you learned about yourself as an independent learner, about the research process, etc. Keeping your learning log up to date will also allow you to track advice from your teacher and mentor, give you a place to write questions that you can take to your meetings, etc.

### **Support for 6a. Resources**

Think about the resources you will need to complete your Independent Study Credit. Try to think not only about material resources such as books and equipment, but also about human resources such as your mentor and other experts in your field. Try to include as many resources as you think you will need. It is okay to add to the list once you get started. Just be sure to make note in your learning log.

### **Support for 6b. Learning Activities**

Throughout your ISC, you will complete many different tasks. For instance, you might do field research, interview members of the community, conduct internet research, review policies, write drafts, etc. To help you create this list of learning activities, begin with your final product and work backwards. What activities will you need to complete in order to create your final product? You might find it helpful to draw a mindmap. Remember that this is your initial plan. It is okay if you make changes.

### **Support for 6c. Timeline**

The timeline is one of the most important pieces of the application. Be sure to consult your school calendar as well as your own personal calendar when completing your timeline tasks. You might find it easiest to start with the final activities. By what date do you want to have your grade? Do you need it by the end of a semester? Do you need it to graduate? Once you and your supervising teacher agree on this date, work backward to set the rest of your tasks.

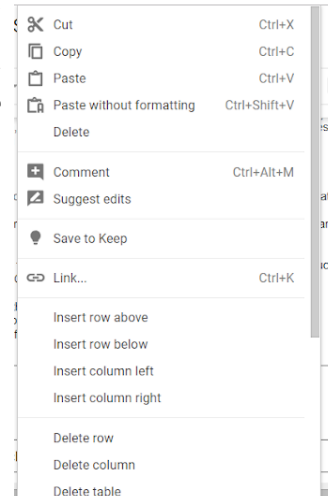
Consider the following:

- How much time do you need between your practice presentation of learning (if you choose to do one) and your final presentation of learning in order to incorporate feedback and make revisions?
- How often will you meet with your supervising teacher? These meetings should take place regularly throughout the ISC process so that you can discuss your successes, challenges, and next steps.

- How often will you meet with your community mentor(s)?
- Do you need to set a date for your teacher to look at a draft or drafts of your work? Do you need to have data collected, or interviews done, or research gathered by a certain point in time to be able to finish?
- Do you need to book space for your final presentation? If so, by what date?

You can add other deadlines to your timeline. The tasks in **BOLD** are required and should be as specific as possible in your plan (knowing that they are subject to change).

**Technology Hint** ... To insert rows between ones that already exist, click into a row and then right-click-mouse. You will see a menu pop-up as shown below. You can then insert a row above or below the row you are in. You can also delete a row if needed.



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## **Appendix B: Rubrics**

### **1. Final Product Rubric Exemplars (Summative - required):**

Required for use by the teacher-supervisor to assess the student's final product

Many different rubric examples can be found online. You can use these examples to help you to create a rubric for your final product. Your supervising teacher is also a great resource to help you create your final product rubric.

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## **2 . Student Final Presentation of Learning Rubric (Summative- required):**

Required for use by the teacher-supervisor and other members of the student's evaluation panel to assess the student's final presentation of learning

### **Formal Presentation of Learning**

Thank you for agreeing to be a panelist during this Presentation of Learning (POL). This student is near the completion of his/her Independent Study Course and this POL is one of the major assessment components of that course. Below you will find an overview of the Independent Study Course. The student and supervising teacher should also provide you with a copy of the student's approved application form.

#### **What is an Independent Study Course?**

The Department of Education and Early Years (the Department) recognizes the importance of providing students with opportunities for self-directed learning. The Independent Study Course allows students to engage in personally meaningful, authentic, real-world learning within an inquiry and problem-solving framework. Students have the opportunity to investigate a self-selected topic or theme that extends the curriculum of an authorized provincial course(s) and contributes to their knowledge, skills, and attitudes necessary for lifelong learning.

The Independent Study Course should be a student-directed investigative project that is planned in collaboration with a supervising teacher and community mentor, that is monitored frequently, and allows the student to assume the role of firsthand inquirer. This study should uncover new questions and ideas for further inquiry and may solve real-life community issues. It is designed as an opportunity to pursue further studies and should not be regarded as a student entitlement. This course will showcase a student's care, attention to detail, and overall pride in their work while requiring a considerable commitment of time, effort, and energy on the part of the student.

The Independent Study Course (ISC521A/621A) is designed to provide students with an opportunity to

- apply interests, knowledge, skills, creative ideas, and task commitment to a self-selected topic or theme;
- acquire advanced-level understanding of the knowledge (content) and methodology (process) that is used within particular disciplines, artistic areas of expression, and interdisciplinary studies;
- identify and achieve learning outcomes in a self-directed environment;
- increase flexibility and individualization of programming at the high school level.

Students interested in enrolling in ISC521A/621A should demonstrate the ability to work independently with minimal direction;

- be committed to a high quality level of work;
- be interested in pursuing a topic or theme that is authentic and personally meaningful;

- demonstrate an interest and ability to collaborate with and learn from others;
- demonstrate strong problem solving skills, critical thinking skills, and creativity;
- be willing to share their learning experiences with others.

## **Format of the Formal Presentation of Learning**

### **Student Presentation: (15 - 30 minutes)**

This is an opportunity for the student to share their work with you. They will communicate why they selected the Independent Study Course and what they set out to investigate. The student will also share their final product with you and communicate struggles and successes they experienced along the way. Be sure to examine the specific learning outcomes the student created on their application form and look for evidence of this learning in the presentation. There should be evidence of quality reflection, critical thinking, problem solving, and creativity.

### **Conversation: (15 - 30 minutes)**

This part is equally as important as the student presentation. This is the opportunity for you as a panelist to ask the student in-depth questions related to their work and learning. Part of this process is for the student to gain experience in fielding questions. Potential questions are listed below to assist you.

### **Debrief and Assessment: (15 - 30 minutes)**

At the conclusion of the POL, all of the panelists should confer in a separate location to discuss the presentation and also prepare feedback for the student. The assessment rubric is included and the supervising teacher will be able to provide information and support if needed. At the end of the panelist debrief session, the panelists should take the opportunity to provide immediate feedback to the student.

## **Sample Questions for Panelists:**

In addition to questions related to the product/subject itself, you might choose to ask the student some of the following questions to get a better understanding of their learning:

- Did you meet your specific learning outcomes?
- Of your work so far, what are you most proud of? Why?
- What part of the ISC process or project did you enjoy most? Why?
- What is the most valuable thing you learned in this course? Why?
- What is the most interesting thing you have learned in this course? Why?
- Why did you choose this project?
- How does your work connect to the real work outside of school?



- What is this project important/relevant to you? To others?
- How does this project include multiple perspectives? Can you give an example of how you better understand a different perspective as a result of your work?
- How much did you know about this subject before you studied it?
- Have you done a similar kind of work in the past (earlier in the year or in a previous grade, inside or outside of school)? If yes, how has your ISC progressed your understanding of the subject you chose?
- What did you learn about yourself as a learner? A researcher? What were your areas of strength? In what area(s) do you feel you have more room for growth?
- What problems did you encounter while you work doing your Independent Study Course? How did you solve them?
- What resources did you use while working on your Independent Study Course? Which ones would you use again?
- Did your goals change as you moved through the Independent Study Course process? If yes, can you provide an example of how they changed and why?
- What was especially satisfying to you about either the Independent Study Credit process or your final product? What do (or did) you find frustrating?
- Do you feel that your Independent Study Credit (process and product) was worthwhile? Why or why not?
- What is one thing you would want someone to notice when they look at your work?
- If someone was looking at your final product right now, what might they learn about it?
- If you had a chance to do your Independent Study Course again, would you do differently? If yes, why? If no, why not?
- How did doing the Independent Study Course prepare the next steps in your career-life pathway (e.g. continuing education, going to work, etc.)
- What is one goal that you would like to set for yourself for next year?
- How well do you think you did in this POL? Why?
- Are there any questions you want to ask us?
- Are there any questions you wish we had asked you, but didn't?



**2. Findings:** Has the student arrived at a coherent set of findings?

The student made it clear what they learned about the field of study.	
The student provided ample evidence to demonstrate their achievement of the specific learning outcomes identified during the application process.	
The student provided ample evidence to demonstrate their development of the Essential Graduation Competencies identified during the application process.	
The student clearly described how their work connects to the work of other people within this field of study.	
The student identified new questions, ideas, or activities to pursue as a result of the work.	

Comments/Clarifications:
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**3. Reflection:** Has the student told the story of their project and analysed what they learned?

The student provided a coherent narrative of the project, including obstacles and surprises.	
The student reported what they learned about doing this kind of major independent student course.	
The student assessed their strengths and areas for growth in carrying out this project.	

*Comment Space for 3. Reflection is on the next page*

Comments/Clarifications:

**4. Communication:** Has the student presented the work in a way that conveys its meaning and observes the conventions of written and oral communication?

The student has prepared the materials in a clear, concise, and well-organized manner.	
The student gave a well-organized and thoughtful oral presentation, and conveyed a sense of mastery of the material and awareness of the audience.	
The student used supporting materials (e.g. visuals) that enhanced the presentation.	

Comments/Clarifications:

<b>TOTAL (Maximum Score of 56)</b>	<b>/56</b>
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## Part B: Panelist Feedback to the Student

The following comments WILL BE SHARED with the student in addition to any verbal feedback you provide directly to them.

1. What comments would you like to share with the student in relation to their final product?
2. What comments would you like to share with the student in relation to their presentation?
3. What comments would you like to share with the student in relation to their final product?

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### **3. Student Final Reflection Rubric (Summative - required):**

Required for use by the teacher-supervisor teachers to evaluate the student's final reflection

The student final reflection is a mandatory summative assessment piece for the Independent Study Course. During the application process, you identified the value this assessment will have (20 – 30%) in relation to the entire evaluation plan and also the date this reflection is to be submitted to your supervising teacher for evaluation.

#### **Format for the Student Final Reflection**

The format for the final student reflection is left to your discretion in consultation with your supervising teacher. You will need to select a format in which you can effectively communicate your learnings from the entire Independent Study Course. You may select a formal written product, a digital product (e.g., website, video, podcast), a live interview, or another form of product. The success of the final reflection lies in your ability to reflect on your own learning experience and effectively communicate those findings.

#### **Content for the Student Final Reflection**

The following are intended as springboards for your reflection. You may choose to include your responses to some of the following:

- Overall, how successful was your independent study? Explain.
- What do you like best about your project? Why?
- What were the most difficult steps? How did you overcome these difficulties?
- What are some of the new skills you learned while working on this project?
- How did you build on the 21st Century Skills you identified in your application?
- In what ways was your action plan reasonable? In what ways might you have improved your plan?
- Who else was interested in your project? With whom did you share your results? How did you do this? What was the reaction of your audience(s)?
- Do you have unanswered questions about the topic? Do you have ideas on how you might like to extend/expand this project or any ideas for new projects?

## Student Final Reflection Rubric

**Directions:** Choose a mark from 1 - 10 that you feel best represents each of the areas of assessment. For mark choices that are in the below or exceeding expectations categories, provide a brief written comment and/or evidence to support your mark. A student that doesn't submit any given component will be given a score of "0".

	Emerging	Proficient	Strong	
	1 2 3 4	5 6 7 8	9 10	
<b>Reflection on Content and Processes</b>  <u>Double Point Value</u>	Comment/Evidence	<ul style="list-style-type: none"> <li>The student has reflected on their learning within their chosen area of focus.</li> <li>The student has reflected on the successes and challenges they experienced when engaging with the content and the processes of their ISC.</li> <li>The student has shared what they might have done differently if they had a chance to do their ISC again.</li> <li>The student considered their next learning steps and/or unanswered questions that remain.</li> </ul>	Comment/Evidence	(/20)
<b>Reflection on Personal Connections to the Experience</b>  <u>Double Point Value</u>	Comment/Evidence	<ul style="list-style-type: none"> <li>The student has reflected on the connection between their ISC experience and their own skill development in the context of their content area.</li> <li>The student has reflected on their personal growth and development as an independent learner.</li> <li>The student has reflected on their strengths and areas for growth as a learner.</li> </ul>	Comment/Evidence	(/20)
<b>Communication, Organization and Structure</b>	Comment/Evidence	<ul style="list-style-type: none"> <li>The student's final reflection is presented in an appropriate format.</li> <li>The student has communicated their reflections to the reader in a clear and consistent manner.</li> <li>The organization and structure of the final reflection does not distract the reader from the message that the student is trying to convey.</li> </ul>	Comment/Evidence	(/10)
<b>Final Comments (optional):</b>				
<b>Final Mark (/50)</b>				



### Essential Graduation Competencies Self-Reflection Rubric (Formative - Optional):

This optional rubric will provide an extra opportunity for you to engage in self-reflection. The rubric invites you to consider your strengths and areas for growth in the Essential Graduation Competencies. This will give you an additional avenue to explore in your final reflection.

Areas for Growth	Criteria	Areas of Strength
	<p><b>Citizenship</b></p> <p>Overview: I find ways to help my environment and the people who live in it. I think about different cultures, the environment, and social issues. As a good citizen, I make decisions, come to conclusions, and solve problems with these factors in mind. I understand that citizenship is important in my community, my country and around the world.</p> <p>I can</p> <ul style="list-style-type: none"><li><input type="checkbox"/> recognize things that are “fair” in democratic societies</li><li><input type="checkbox"/> show the skills of a good citizen</li><li><input type="checkbox"/> Consider the consequences of:<ul style="list-style-type: none"><li><input type="checkbox"/> my decisions,</li><li><input type="checkbox"/> the conclusions I make</li><li><input type="checkbox"/> my solutions to problems</li></ul></li><li><input type="checkbox"/> take part in activities that support social and cultural diversity and unity</li><li><input type="checkbox"/> promote human rights and equity</li><li><input type="checkbox"/> show that I understand sustainable development</li></ul>	
	<p><b>Communication</b></p> <p>Overview: Media can influence how I see and understand the world. I understand that we make choices about the media we use for communication and that media can be used to influence me. I can listen, read, view and create media for learning and for pleasure. I can take part in critical discussions (I listen carefully, speak thoughtfully, consider viewpoints, etc.)</p> <p>Note: The term “media” refers to the different ways that we communicate. Media include things like music, social platforms, TV, magazines, books, newspapers, reports, essays, and so much more.</p> <p>I can</p>	

	<ul style="list-style-type: none"> <li><input type="checkbox"/> listen and interact respectfully with others in different situations</li> <li><input type="checkbox"/> take part in meaningful conversations</li> <li><input type="checkbox"/> understand, interpret and respond to thoughts, ideas and feelings that I get through different media forms</li> <li><input type="checkbox"/> express my thoughts, ideas, information, knowledge, and feelings through different media forms</li> <li><input type="checkbox"/> understand that the form of media depends on the purpose of the message and the audience</li> <li><input type="checkbox"/> choose media forms that suit different audiences and purposes</li> <li><input type="checkbox"/> understand the impact of technology in communication</li> </ul>	
	<p><b>Personal-Career Development</b></p> <p>Overview: I think about my interests, strengths and areas for growth. I take responsibility for my personal and career development by setting goals and working to achieve them. I understand how culture plays a role in my personal life and my future work life. I think carefully about the choices I make when it comes to my health, well-being and career pathways.</p> <p>I can</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> connect my learning to my personal and career development</li> <li><input type="checkbox"/> make choices in my actions and behaviors that support my well-being and the well-being of others</li> <li><input type="checkbox"/> form healthy personal and work/school relationships</li> <li><input type="checkbox"/> develop skills and habits to support my physical, spiritual, mental and emotional well-being</li> <li><input type="checkbox"/> develop strategies to help me with my work-life balance and well-being</li> <li><input type="checkbox"/> come up with a personal, education, career, and financial plan to help achieve my goals</li> <li><input type="checkbox"/> learn and work individually and in groups in different settings</li> </ul>	
	<p><b>Creativity and Innovation</b></p> <p>Overview: I am open to new experiences. I take part in creative processes. I make connections between ideas. I generate new and dynamic ideas, techniques and products. I value aesthetic (artistic) expression and appreciate the creative and innovative work of others.</p>	

	<p>I can</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> gather information through my senses to imagine, create, and innovate (come up with new ideas, solutions, products)</li> <li><input type="checkbox"/> develop and apply my creative abilities to communicate ideas, perceptions, and feelings</li> <li><input type="checkbox"/> take responsible risks, accept feedback, reflect, and learn from trial and error</li> <li><input type="checkbox"/> think outside-the-box</li> <li><input type="checkbox"/> accept that I will need sometimes need to think about complex and ambiguous ideas</li> <li><input type="checkbox"/> recognize that creative processes are important for innovation</li> <li><input type="checkbox"/> use creative techniques to innovate</li> <li><input type="checkbox"/> collaborate to create and innovate</li> <li><input type="checkbox"/> reflect on and analyze creative and innovative works and processes</li> <li><input type="checkbox"/> see the contribution that creativity and innovation make to personal, social and economic well-being</li> </ul>	
	<p><b>Critical Thinking</b></p> <p>Overview: I carefully consider evidence, arguments, and ideas using different types of reasoning and thinking to ask questions, make decisions, and solve problems. I think about <i>the way</i> that I think so I can better understand myself and how I interact with the world.</p> <p>I can</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> think carefully before I ask questions, make decisions, and solve problems</li> <li><input type="checkbox"/> recognize that careful thinking is purposeful</li> <li><input type="checkbox"/> be curious, inquisitive, creative, flexible, persistent, open-minded and fair-minded</li> <li><input type="checkbox"/> be tolerant of ambiguity not rush to judgment</li> <li><input type="checkbox"/> ask powerful questions to help me inquire, make decisions, and solve problems</li> <li><input type="checkbox"/> find, interpret, and use relevant and reliable information from a variety of sources</li> <li><input type="checkbox"/> analyze and evaluate evidence, arguments, and ideas</li> <li><input type="checkbox"/> use different types of evidence, reasoning, and strategies to come to conclusions, make decisions, and solve problems</li> <li><input type="checkbox"/> reflect on the types of thinking processes used and recognize assumptions that are made</li> <li><input type="checkbox"/> communicate ideas, conclusions, decisions, and solutions effectively</li> <li><input type="checkbox"/> value the ideas and contributions of others who hold diverse points of view</li> </ul>	

	<p><b>Technological Fluency</b></p> <p>Overview: I use and apply technology to collaborate, communicate, create, innovate, learn and solve problems. I use technology in a legal, safe and ethically responsible way.</p> <p>I can</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> recognize that technology includes a range of tools used for different purposes</li> <li><input type="checkbox"/> use and interact with technology to create new knowledge</li> <li><input type="checkbox"/> apply digital technology to gather, filter, organize, evaluate, use, adapt, create, and share information</li> <li><input type="checkbox"/> select and use technology to create and innovate</li> <li><input type="checkbox"/> analyze how technology and society influence each other</li> <li><input type="checkbox"/> adopt, adapt, and apply technology in an efficient and effective way</li> </ul>	
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## Appendix C: Application Exemplar

### ISC Application Form

You might find it helpful to have the support document open while you complete the application form. Some sections will need further explanation in order for you to complete the application form with enough detail for approval.

#### Section 1: Applicant Information

<b>Student Name:</b>	Jane Smith			
<b>Student's School:</b>	TOSH	<b>Grade</b>	11	
<b>Supervising Teacher:</b>	John Doe			
<b>School Counsellor:</b>	James Buckley			
<b>Principal:</b>	Jill Smithers			
<b>Indicate with an X which course you are applying for:</b>	<b>ISC521A</b>	X	<b>ISC621A</b>	
<b>Application Date:</b>	April 2, 2019			
<b>*Target Completion Date:</b>	January 30, 2020			

*\*The Target date is only an estimate. If you need more or less time, that is acceptable.*

#### Section 2: Your Rationale for Independent Study

##### 2a. Independent Study Course Curriculum Area and Topic.

<b>Curriculum Area:</b> (in the space below)	Topic: Topic: Cultural Eutrophication
Biology	

##### 2b. Why have you selected this theme or topic for Independent Study?

My brother was taking ENV 621A last year and in class they talked about the farming practices that are often blamed for fish kills and other negative impacts on river systems, and we talked about it at the table one night at dinner. He said it was due to cultural eutrophication. He explained what that was and we had a lively discussion about it because I live along the Dunk River and my parents operate a potato farm.

I want to determine scientifically whether or not rain events on my parents' farm cause an increase in turbidity, pH, dissolved oxygen, or nitrate measurements. If it is true, others could use my information to try to mitigate farming effects on river systems. If it is not true, this information could be used by watershed groups to try to investigate other possible sources of river pollutants.

I hope to be able to answer a question that has a direct impact on my life and my community. I want to be able to gather real-world data about something that I have studied in another course. I also want to be able to use real measuring devices to gather data, interpret the findings, and analyse the results. I hope that the information that I discover will help answer a real question (effects of cultural eutrophication) and provide evidence that others can use to try to help the environment. I feel that this experience will help me to understand what scientists actually do, and how the information that they gather can affect environmental policy and regulations. I also hope to be able to learn from people from the agricultural and watershed communities, to see their different perspectives, and to use their experiences and backgrounds to help me conduct my experiment.

## **2c. Describe Yourself as a Learner.**

I remember going to a tree nursery when we were in elementary school. I learned about planting trees from the man at the nursery and then we planted some outside. I remember the feel of the soil (it was cold and damp because it was fall) and even how the earth smelled in my hands. We got to take a seedling home and I planted mine right away. I learned a lot by actually "seeing and doing" that day, and we still have my tree at our house. It has grown so much.

I like to learn about things from books and then try them out in the real-world to see if they actually work. I like to talk about what I've learned with different people and debate my point of view with others who may think differently. I like to get my hands dirty and work outside. I like to learn about how my local environment is affected by the actions of my community. Most of all, I like to have real evidence that proves or disproves something that we learn in class. I have discovered that my strongest skills are in math, speaking/debating and thinking about big ideas in simpler ways.

## **Section 3: Your Driving Question and Related Processes**

### **3a. What is your Driving Question?**

It should show the purpose of your ISC, be challenging, open-ended in nature and achievable within the timeframe that you have set.

How do rain events affect the chemical and physical properties of a section of the Dunk River?

**3b. Outline and where applicable, explain the steps you will need to take from the beginning to the end of your ISC. You can put your steps in order according to a potential timeline or you can discuss the steps in different process categories.**

Provide as much detail as you can.

For my project I plan to monitor the turbidity, pH, dissolved oxygen, and nitrate levels of the Dunk River before and after major rain events. I plan to pick a section of the river that is adjacent to agricultural land. My research will help determine if rain events lead to cultural eutrophication and what affects that may have on the river. I plan to work with a local watershed group to research the history/changes on the river. I will create a procedure to use school equipment to monitor the river levels and analyse and interpret the data that I collect. My final product will be a lab report analysing my findings and outlining proposed next steps based on my results. This will require different processes as outlined below:

What steps are you taking and why?
<p><u>Research Processes:</u></p> <ul style="list-style-type: none"><li>• Speaking to Experts<ul style="list-style-type: none"><li>◦ Contact John Hancock to get historical information from BBEMA on the Dunk River</li><li>◦ Contact a local farmer(s) to find out what procedures they follow to prevent cultural eutrophication</li><li>◦ Reach out to the Department of Agriculture and Land and the Department of the Environment to ask about buffer zone regulations, history, enforcement, etc.</li></ul></li><li>• Learning Library Research Skills<ul style="list-style-type: none"><li>◦ Find out the known effects of elevated and diminished turbidity, pH, dissolved oxygen, and nitrate levels on aquatic organisms by doing research at the library or UPEI.</li></ul></li></ul>
<p><u>Scientific Processes:</u></p> <ul style="list-style-type: none"><li>• Learning How to Safely Use Equipment:<ul style="list-style-type: none"><li>◦ Determining how to safely operate the science equipment needed to make my measurements (mentors/Mr. Doe)</li></ul></li><li>• Learning Data Collection Skills<ul style="list-style-type: none"><li>◦ Find the best method for collecting data</li><li>◦ Find out when to collect it in order for it to be useful for in experiment</li><li>◦ Determine a suitable sampling site on the Dunk River to take my water measurements</li><li>◦ Conduct water measurements to establish a comparative baseline as recommended by my mentor.</li><li>◦ Conduct water measurements around rain days as recommended by my mentor</li></ul></li><li>• Learning How To Best Analyze Data and Draw Appropriate Conclusions<ul style="list-style-type: none"><li>◦ Decide what type of analysis I will need to do that suits the data I have collected..</li><li>◦ Process and determine what my data shows me</li><li>◦ Discuss possible sources of error (repeat measurements as needed)</li><li>◦ Form conclusions and recommendations that are based on my results</li></ul></li></ul>

Writing Processes:

- Write a properly formatted lab report draft and submit a draft copy of my final lab report for review and revision. I will consult with my supervising teacher and mentors to help guide me.
- I will learn how to properly format a business-style thank you letter.

Self-Management Processes:

- Time management
  - I will need to develop good time management skills in order to adhere to deadlines. I will ask Mr. Doe if I find myself struggling.
- Goal Setting
  - I will learn how to manage my task list through goal setting.

Communication Processes:

- I will learn how to effectively use PowerPoint to plan a presentation. I will ask Mr. Doe or our ITC teacher for guidance if need be.
- I will do a practice presentation with Mr. Doe and/or some friends to get honest feedback about my pacing and way of presenting.
- Conduct formal presentation of learning
- I will learn appropriate communication habits for dealing with professionals (different to interacting with my peer group and/or family, friends).

*\*Add rows below as necessary. Right click in the bottom row and choose Insert Row Below from the menu box that opens.*

**3c. What will your final product be?**

Formal lab report and a Project Board Display

**3d. Who is the intended audience for your presentation of learning?**

Watershed groups, environmentalists, agricultural experts, my mentor, our school principal and Mr. Jones from the Department of Education and Early Years.

**3e. Who will act as your Community Mentor(s) or Expert(s)?**

Mentor Name(s)	What is the mentor's role in the community? How will this mentor support you in your Independent Study Course?
John Hancock	Bedeque Bay Environmental Management Association (BBEMA). This mentor has expertise in my area of exploration. He is willing to review my procedure and provide some supervised use of his laboratory for equipment that I can't access at school.
Jenna Moore	UPEI Biology Department. This mentor has done work related to P.E.I. river health.



## Section 4: Your Independent Study Course Learning Plan

### 4a. What do you hope to learn and be able to do by the end of your ISC?

I will know:

- the main causes of cultural eutrophication
- the effects of elevated or diminished levels of turbidity, pH, dissolved oxygen, and nitrates on aquatic organisms (plant life and fish life)
- the practices and prevention strategies that farmers use to prevent chemicals and soil from entering water systems
- the monitoring systems that watershed groups use to gather information on the health of local rivers and the regulations that are in place to keep rivers safe

I will be able to:

- create and execute a plan to complete my investigation in the time allowed
- use scientific equipment properly and safely to collect data on specific variables
- analyse my data and interpret its results
- account for errors in my data and other possible explanations for the results
- interview local experts from the agricultural and environmental communities
- present and defend my findings to a group of local experts

### 4b. Connection to the Essential Graduation Competencies.

EGC	Mark with an X	Explain why/how completing your independent study will help you to develop your chosen EGCs
Citizenship		
Citizenship	X	I will need to communicate with different people throughout my ISC. From working with my mentor to my final presentation, I will have to work on and hopefully improve my skills.
Personal-Career Development	X	I will be able to explore different careers related to biology, and engage in the real-life practices of being a research and field scientist.
Creativity and Innovation		
Critical Thinking		
Technological Fluency	X	I will need to use data logging instruments, spreadsheet software, and produce not only a well-formatted lab report, but also create a presentation. I hope to embed video into the presentation as well which will be new for me.

## Section 5: Assessment and Evaluation Plan

### 5a. Assessment For Learning and Assessment Of Learning: Formative and Summative Tasks in your ISC.

This part of your application is about assessment, including the rubrics that you plan to use as part of your assessment. **Ideally you will submit the rubrics that you plan to use when you submit your application form, but if you aren't sure what you want your rubrics to be just now, please note this in the table below and share a specific date by which you will have your rubrics ready.**

You can include a hyperlink to the rubrics in the table below and/or add your rubric files to your ISC Google Drive folder.

Formative Tasks	Optional or Required	Details	
The Learning Log	Required	Please indicate in this space the format that you would like to use for your learning log:	
		My Format will be: Google Docs	
Meetings with your Supervising Teacher	Required	Please provide an approximate schedule of the meetings you will have with your supervisor in Section 6c.	
Meetings with your Mentor(s)	Required	Please provide an approximate schedule of the meetings you will have with your mentor(s) in Section 6c.	
Other?	Optional		
Summative Assessment**	Rubric	Possible Range	Your Choice
	You can also add links to your rubrics here or upload your rubrics into your ISC Google Drive folder.		
The Final Product	I would like to wait to submit my rubric. I will upload to my ISC folder after June exams	30%-40%	40
Formal Presentation of Learning	I would like to wait to submit my rubric. I will upload to my ISC folder after June exams	40%-50%	40
Student Final Reflection	I would like to wait to submit my rubric. I will upload to my ISC folder after June exams	20%-30%	20

## Section 6: Action Plan

### 6a. Resources

List the main resources (material, human, community, technological, etc.) that will be used to support learning throughout the Independent Study Course. Include a brief explanation as to why the resources are necessary.

For example, if your ISC is about the prevalence and impact of radon gas on P.E.I., you might need

- Radon Survey at Selected Sites Across Prince Edward Island (2008) report to look at the levels of radon measured at different locations across P.E.I.
- Access to the Chief Public Health Officer: Interview to discuss impact of Radon on individual health
- Access to a radon detection kit to take my own measurements
- etc

My List:

- access to school facilities and equipment to measure the turbidity, pH, dissolved oxygen, and nitrate levels of the Dunk River;
- access to a school science teacher who can show me how to use the equipment listed above;
- a contact person with the BBEMA (John Hancock) who can provide me with historical trends of the river, demonstrate safe sampling procedures, and outline existing environmental policies and regulations related to cultural eutrophication;
- access to local agricultural experts (farmers) who can explain what steps they take to prevent chemicals and soil from entering the river;
- Access to the Department of the Environment staff to help me understand the buffer zone regulations that are in place on PEI;
- access to a school computer to conduct research and prepare my lab report;
- my own transportation to conduct site visits and sampling at the Dunk River (note: all sampling will be done from the river bank and not from a boat).

### 6b. Learning Activities

List the activities that will be involved in this Independent Study Course and provide a brief description of each.

e.g.

- Literature Review: I will review the Radon Report (2008) and note in my Learning Log any observations that are important
- Research: I will do a search for more recent reports and/or incidents of high radon levels in pockets across P.E.I.
- Interview: I will prepare questions based on my research and arrange a meeting with the Chief Public Health Officer
- Interview: I will visit a local company that offers Radon Testing to talk about their experience with radon levels on PEI.
- Interview: UPEI Geology Professor to discuss soil compositions and vulnerability to radon

### My List:

- Get My Support Team in Place
  - Secure a teacher supervisor (Mr. Doe)
  - Secure a community mentor
- Complete the application form and submit for approval
- Start Research once approval is secured
  - Maintain an annotated bibliography of my research within my learning log
- Meet with my mentor to determine the best way and the best time to connect water samples and weather patterns in order to see the relationship between them.
- Collect water samples regularly over a period of time from start through to the end of harvest.
  - Get baseline readings in a way that is recommended by my mentor
  - With each visit, take photos/video while samples are being collected to get evidence of the physical condition of the river..
  - Collect related weather data on collection days as guided by my mentor.
- For each water sample collected, do an analysis.
  - Water samples will not be collected once the full cycle of planting and harvesting is done.
- Start analyzing the data to find any correlations/causation between the weather events and water quality on the Dunk
- Work with Mr. Doe or the ITC teacher to learn better how to graph in Excel or Google Sheets with a focus on scientifically appropriate graphs, including error bars.
- Write up the lab report, and include the data and analysis.
  - Check with Mr. Doe to ensure that the lab report is being properly formatted and referenced.
  - Check with mentor at least twice during the writing process.
- Once the lab report is finished, submit to Mr. Doe and my mentor for feedback.
- Prepare final copy of lab report for assessment.
  - Send the lab report to Mr. Doe and my mentors along with the rubric for grading.
- Work on the Presentation
  - Check with Mr. Doe or the ITC teacher for presentation tips
  - Do a practice presentation and get some feedback.
- Invite the audience to the presentation
- Book the space for the presentation
- Do the presentation, handing out the presentation rubric to the audience members who will be assessing this task.
- Prepare the presentation board and finalize the presentation
- Complete my final reflection after all is done and submit to Mr. Doe

### 6c. Timeline

Create a detailed timeline including approximate dates for the specific activities listed below. Additional activities and timelines may be added.

<b>Date</b> (Can be specific, or be a bit broader such as <i>"the week of ..."</i> or <i>"the month of ..."</i> )	<b>Activity</b> A <b>bolded</b> task is required
The week after March Break	<b>Student/Teacher Meeting to review ISC Application Form before submission</b>

The first week of April (once approval is received)	<b>Commencement of the course</b> (Written approval must be received before a course can begin. Please allow at least one week between submission and course start dates)
Mid-April	<b>Hold a meeting with my supervisor and my Mentors - set up a video link for UPEI mentor to review my plan/outline and get suggestions from my experts (sample frequencies, best times to collect data, etc.)</b>
Third week of April and ongoing.	<b>Start collecting and analyzing the water samples and tracking corresponding weather. This will be ongoing throughout the planting, growing and harvest season.</b>
Mid May	<b>Student/Teacher Progress Meeting</b> (remember to update your learning log)  <b>Meet with Mr. Doe to quickly go over where I am with my project.</b>
Mid May	<b>Video conference with mentors to review my progress.</b>
After June Exams	<b>Student/Teacher Progress Meeting</b> (remember to update your learning log)  <b>Have a meeting with Mr. Doe and my mentors to outline plans for the summer work. I will video conference with those who can't travel to Summerside.</b>  <b>Finalize rubrics for assessment and upload to my ISC folder</b>
Over Summer Break	<b>Begin a rough outline of the lab report Introduction and Procedure. Frame out the other sections of the report.</b>
Second week of September	<b>Student/Teacher Progress Meeting</b> (remember to update your learning log)  <b>Meet with Mr. Doe to update on summer work and ask/answer questions.</b>
End of October	<b>Data collection and water sample analysis ends and data analysis begins</b>
Second week of November	<b>Student/Teacher Progress Meeting</b> (remember to update your learning log)  <b>Meet with Mr. Doe to discuss state of data analysis</b>
First week of December	<b>Product Draft Submitted to Mentor(s) and Mr. Doe for feedback</b>
Second week of December through Christmas Break	<b>Student/Teacher Progress Meeting</b> (remember to update your learning log)

	<p><b>Take feedback from and finish the lab report.</b></p> <p><b>Start planning out the presentation.</b></p>
First week back after Christmas Break	<b>Give final report to Mr. Doe and my Mentor(s) to mark.</b>
The second week of January	<b>Meet with the ITC teacher to get some PowerPoint tips and ideas for the presentation.</b>
After last January exams	<p><b>Formal Presentation of Learning</b></p> <p><b>Give the presentation rubric to the three guests who will be assessing the presentation component of my work. The rubrics will be given to Mr. Doe once the presentation is over.</b></p>
January 25th	<b>Finish my final ISC reflection and give it to Mr. Doe. Ask if he wants to see my learning log.</b>
End of Semester	<b>Mr. Doe will be able to give me my final mark once he finishes marking the final reflection.</b>

*~ End of Sample Application Form ~*

## **Appendix D: Application and Approval Forms**





## Grade 11 and Grade 12 Approval Form

### Signatures of Support and Approval

After your application has been thoroughly reviewed and revisions are made, complete the checklist below and get the signatures necessary for the final page of the application. These include your own, as well as your parent/guardian(s), supervising teacher, school counselor, and principal. The final signature of approval will come from a representative at the Department after they have reviewed your application. If you need to make any final adjustments based on the review from the Department of Education and Early Years representative, you will be contacted and can make any needed adjustments.

1. Complete the "Name" sections for each person by typing in their names
2. PRINT THIS DOCUMENT for the purpose of getting people's signatures and checking off your application checklist.
3. ONCE YOU HAVE SIGNATURES and you have checked the boxes below, scan or take a picture of both pages and add to your ISC Google Folder. Your supervising teacher or school counsellor can help you with this task.

**IMPORTANT NOTE:** Please remember that final **written** approval must be obtained from the Department before you start your Independent Study Course. This will come in the form of an email to the student, supervising teacher and principal. A copy of your approval will be kept on file at the Department of Education and Early Years.

### Student Section

#### Application Checklist

- ☐ My application form is complete
- ☐ I chose a topic area with a curricular connection
- ☐ My driving question is meaningful, worthy of study and of a rigorous standard.
- ☐ I have provided sufficient details in my outline, learning plan, assessment and evaluation plan and action plan.
- ☐ I have submitted an assessment rubric for my final project.
- ☐ My supervising teacher has seen my final application and assessment rubric

Student Name:	PLEASE PRINT:	Date:
Student Signature:	PLEASE SIGN:	

### Parent/Guardian Section

*I am aware that my child is intending to pursue an Independent Study Course and I support their proposal.*

Parent/Guardian Name:	PLEASE PRINT:	Date:
Parent/Guardian Signature:	PLEASE SIGN:	

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**Supervising Teacher Section**

*I am aware that this student is intending to pursue an Independent Study Course and I support their proposal.*

Supervising Teacher Name:	PLEASE PRINT:	Date:
Supervising Teacher Signature:	PLEASE SIGN:	

**School Counsellor Section**

*I am aware this student is intending to pursue an Independent Study Course and I support their proposal.*

School Counsellor Name:	PLEASE PRINT:	Date:
School Counsellor Signature:	PLEASE SIGN:	

**School Principal Section**

*I am aware this student is intending to pursue an Independent Study Course and I support their proposal.*

School Principal Name:	PLEASE PRINT:	Date:
School Principal Signature:	PLEASE SIGN:	

**To be completed by the Department of Education and Early Years (DEEY) once the application is approved:**

*This application adequately meets the requirements for an Independent Study Course. If all of the requirements for the course are successfully completed as outlined in this application, (circle one) ISC521A ISC621A shall be awarded to the student.*

DELL Director or Specialist	PLEASE PRINT:	Date:
Signature:	PLEASE SIGN:	

## Grade 10 Student ISC Application: School-Based Signatures of Support

*In exceptional circumstances, a grade 10 student can apply for an ISC521A course. It is important that everyone understands what is necessary for a student to be successful in an ISC course. Please review the linked document below before signing this support page.*

**Please print, scan and submit the following signature page with your ISC application. You can type in the names before you print if that is easiest. You must print before collecting signatures, however. You and your supervising teacher will be informed by email once approval has been given. You will receive a signed approval form from the Department that you can add to your ISC Google Drive folder.**

We have reviewed the document "[Before You Begin: Is an Independent Study Course for you?](#)" and acknowledge that the applicant has shown the ability and level of maturity needed to handle an independent study course at the 11th grade academic level.

### Student Section

Student Name:	PLEASE PRINT:	Date:
Student Signature:	PLEASE SIGN::	

### Parent/Guardian Section

*I am aware my child is intending to pursue an Independent Study Course and I support their proposal.*

Parent/Guardian Name:	PLEASE PRINT:	Date:
Parent/Guardian Signature:	PLEASE SIGN:	

### Supervising Teacher Section

*I am aware this student is intending to pursue an Independent Study Course and I support their proposal.*

Supervising Teacher Name:	PLEASE PRINT:	Date:
Supervising Teacher Signature:	PLEASE SIGN:	

### School Counsellor Section

*I am aware this student is intending to pursue an Independent Study Course and I support their proposal.*

School Counsellor Name:	PLEASE PRINT:	Date:
School Counsellor Signature:	PLEASE SIGN:	

### School Principal Section

*I am aware this student is intending to pursue an Independent Study Course and I support their proposal.*

School Principal Name:	PLEASE PRINT:	Date:
School Principal Signature:	PLEASE SIGN:	

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## Appendix E: FAQs

Do I need to submit my rubrics with my application?

There are three rubrics associated with an Independent Study Course. Two are provided by the Department of Education and Early Years for your Final Reflection and the Presentation of Learning. The other one is for your final product. You will design this based on what your final product is.

Ideally you will submit the rubric for your final product at the time of your application but if you aren't ready, don't worry. You might need to start doing your research before you are sure what your final product is going to be, or you may not have had a chance to work with your teacher enough to review any potential rubrics. No problem! If you aren't planning to submit your rubric with your application, just let us know on your application document that you will submit your rubric as soon as possible and not later than mid-way through your ISC work.

Can I change my driving questions or my approach to my driving question once I start my research?

Research is *very rarely* a straight line. You might start researching in one area and find yourself pulled in a different direction, or find that your initial idea won't work out. You might meet with your mentor or your teacher and they might suggest a different approach than what you had planned. Eventually you will need to settle on a direction and work with that, but until then, know that it is okay to change things up a bit.

Important: If you change significantly from your approved idea, you might have your supervising teacher connect with the Department of Education and Early Years to make sure that your new driving question still meets the expectations of an Independent Study Course.

Can you pick any topic of study and driving question for an Independent Study Course?

No. The driving question has to be open-ended - a question that doesn't have a yes or no answer. You need to be able to do about 110 hours of work for this course. If you can look up the answer on the Internet or if the answer is self-evident/obvious, it would not be appropriate for an Independent Study Course. Your topic can't duplicate any existing curriculum either - even if you aren't taking the subject. It can extend it, but not duplicate it. Try to think about a driving question where you have to do research in order to create a product that is uniquely yours.

The digital site for the Independent Study Course has a living version of the Q&A document.

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## Appendix F: Essential Graduation Competencies

Excerpt from: [https://www.ednet.ns.ca/files/curriculum/atlantic\\_canada\\_essential\\_grad\\_competencies.pdf](https://www.ednet.ns.ca/files/curriculum/atlantic_canada_essential_grad_competencies.pdf)

# Essential Graduation Competencies

Attitudes, skills, and knowledge that prepare learners to successfully participate in lifelong learning and life/work transitions





## Citizenship

Learners are expected to contribute to the quality and sustainability of their environment, communities, and society. They analyze cultural, economic, environmental, and social issues; make decisions and judgments; solve problems; and act as stewards in a local, national, and global context.

Learners are expected to

- recognize the principles and actions of citizens in just, pluralistic, and democratic societies
- demonstrate the disposition and skills necessary for effective citizenship
- consider possible consequences of decisions, judgments, and solutions to problems
- participate in civic activities that support and promote social and cultural diversity and cohesion
- promote and protect human rights and equity
- appreciate the complexity and interconnectedness of factors in analyzing issues
- demonstrate understanding of sustainable development



## Communication

Learners are expected to express themselves and interpret effectively through a variety of media. They participate in critical dialogue, listen, read, view, and create for information, enrichment, and enjoyment.

Learners are expected to

- listen and interact purposefully and respectfully in formal and informal contexts
- engage in constructive and critical dialogue
- understand, interpret, and respond to thoughts, ideas, and emotions presented through multiple media forms
- express ideas, information, learnings, perceptions, and feelings through multiple media forms, considering purpose and audience
- assess the effectiveness of communication and critically reflect on intended purpose, audience, and choice of media
- analyze the impact of information and communication technology
- demonstrate the provincially-defined level of (to be completed by provinces)





## Personal-Career Development

Learners are expected to become self-aware and self-directed individuals who set and pursue goals. They understand and appreciate how culture contributes to work and personal life roles. They make thoughtful decisions regarding health and wellness, and career pathways.

Learners are expected to

- connect learning to personal and career development
- demonstrate behaviours that contribute to the well-being of self and others
- build healthy personal and work relationships
  - establish skills and habits to pursue physical, spiritual, mental, and emotional well-being
  - develop strategies to manage career balance and wellness
  - create and implement a personal, education, career, and financial plan to support transitions and achievement of personal, education, and career goals
  - demonstrate preparedness to learn and work individually, cooperatively, and collaboratively in diverse, evolving environments



## Creativity and Innovation

Learners are expected to demonstrate openness to new experiences; to engage in creative processes; to make unexpected connections; and to generate new and dynamic ideas, techniques, and products. They value aesthetic expression and appreciate the creative and innovative work of others.

Learners are expected to

- gather information through all senses to imagine, create, and innovate
- develop and apply creative abilities to communicate ideas, perceptions, and feelings
- take responsible risk, accept critical feedback, reflect, and learn from trial and error
- think divergently, and embrace complexity and ambiguity
- recognize that creative processes are vital to innovation
- use creation techniques to generate innovations
- collaborate to create and innovate
- critically reflect on creative and innovative works and processes
- value the contribution of creativity and innovation to personal, social and economic well-being

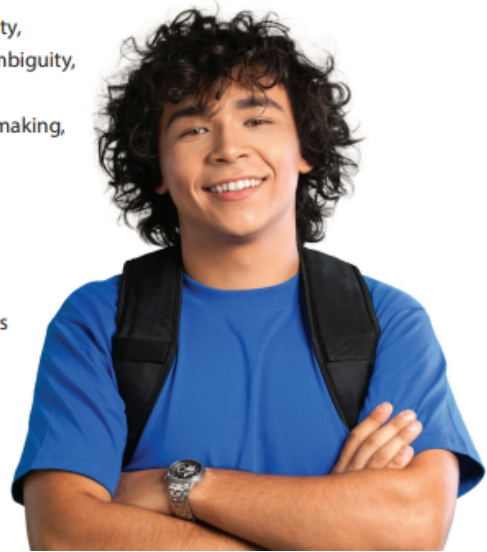


## Critical Thinking

Learners are expected to analyze and evaluate evidence, arguments, and ideas using various types of reasoning and systems thinking to inquire, make decisions, and solve problems. They reflect critically on thinking processes.

Learners are expected to

- use critical thinking skills to inquire, make decisions, and solve problems
- recognize that critical thinking is purposeful
- demonstrate curiosity, inquisitiveness, creativity, flexibility, persistence, open- and fair-mindedness, tolerance for ambiguity, and suspension of judgment
- ask powerful questions which support inquiry, decisionmaking, and problem solving
- acquire, interpret, and synthesize relevant and reliable information from a variety of sources
- analyze and evaluate evidence, arguments, and ideas
- use various types of evidence, reasoning, and strategies to draw conclusions, make decisions, and solve problems
- reflect critically on thinking processes used and acknowledge assumptions
- effectively communicate ideas, conclusions, decisions, and solutions
- value the ideas and contributions of others who hold diverse points of view



## Technological Fluency

Learners are expected to use and apply technology to collaborate, communicate, create, innovate, learn, and solve problems. They use technology in a legal, safe, and ethically responsible manner.

Learners are expected to

- recognize that technology encompasses a range of learning tools and contexts
- use and interact with technology to create new knowledge
- apply digital technology to gather, filter, organize, evaluate, use, adapt, create, and share information
- select and use technology to create and innovate
- analyze how technology and society impact and advance one another
- adopt, adapt, and apply technology efficiently, effectively, and productively