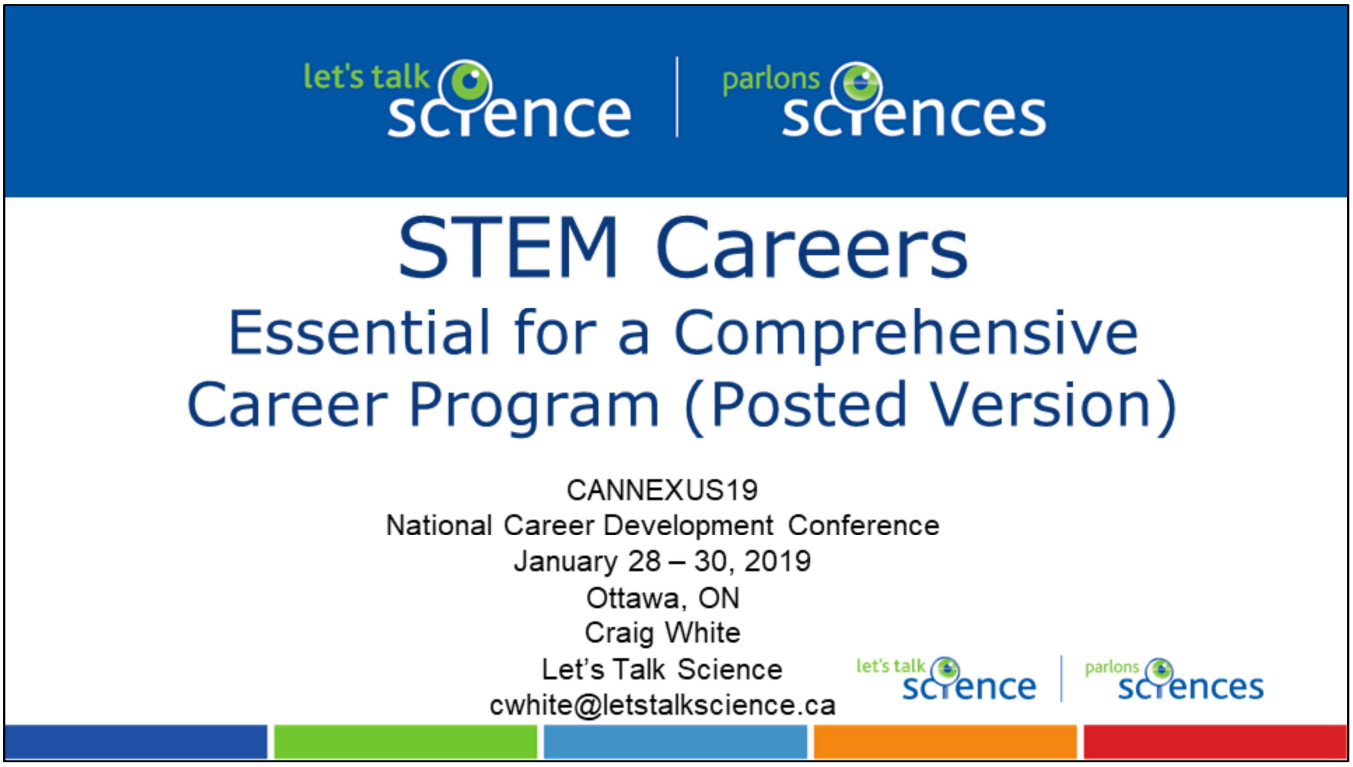


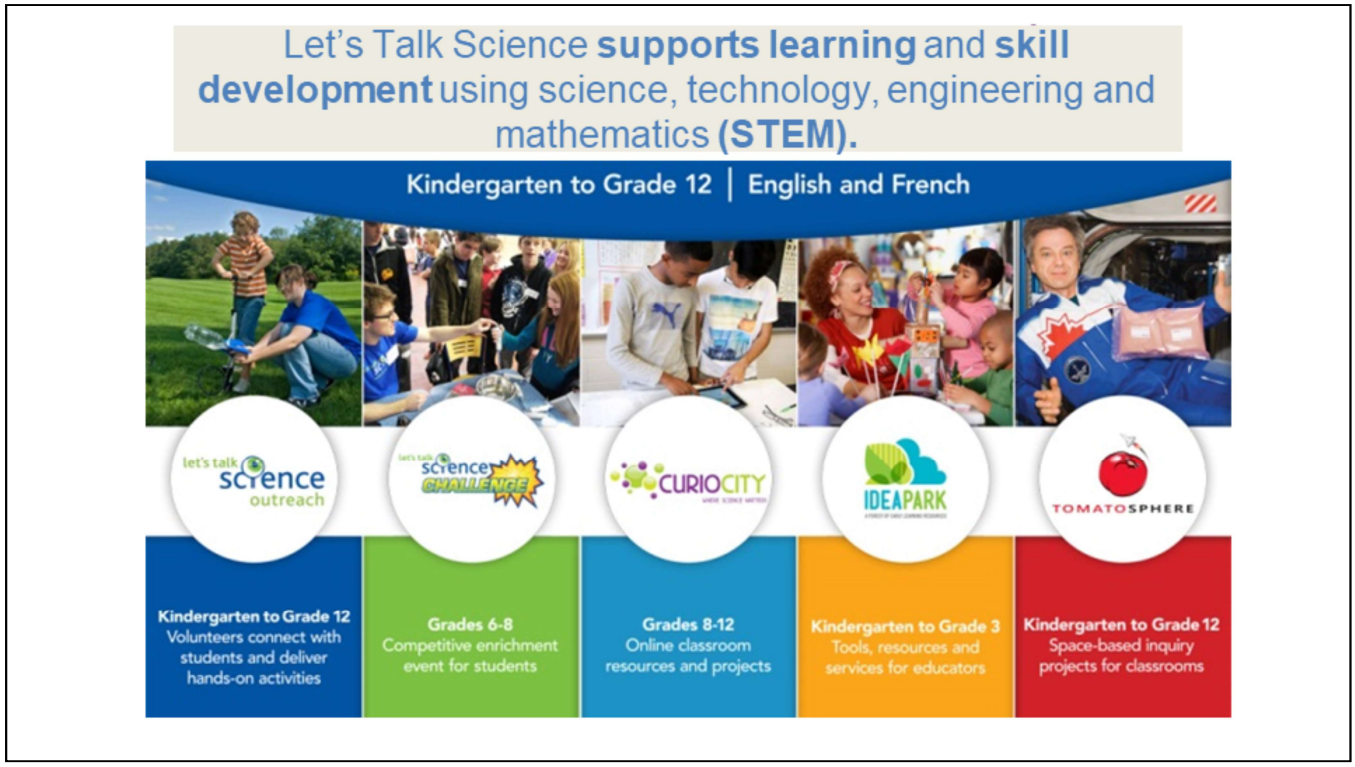
70% of the top jobs in Canada require some science, technology, engineering, math (STEM) education. Some STEM careers are obvious (e.g., health and medical professionals, engineers, scientists), but many are not (e.g., journalists, welders, computer animators, chefs). Students limit their career options by opting out of STEM courses. Discuss the issues, explore free resources and experience 360 virtual reality workplaces.

Let's Talk Science supports STEM education

Children, Youth & Educators from Early Years, Grades K – 12, Post-Secondary

let's talk science | parlons sciences

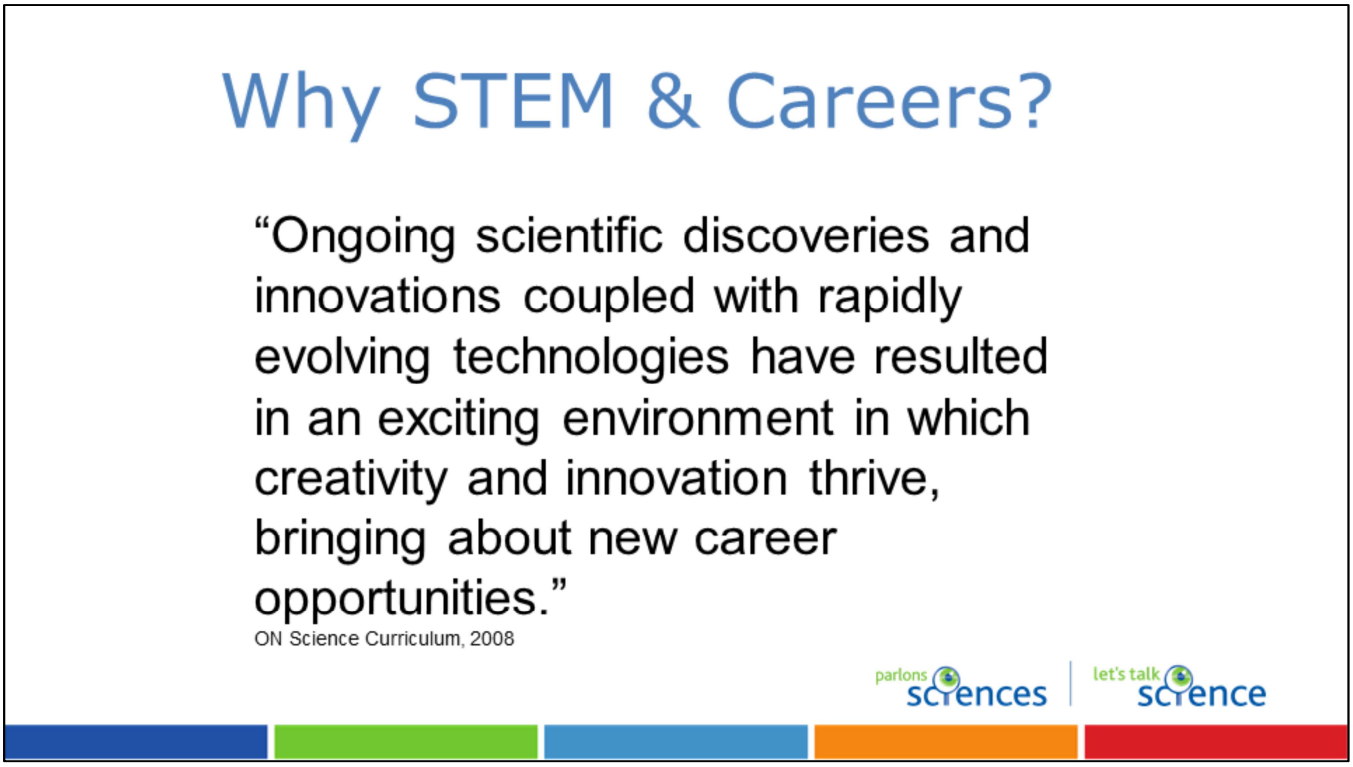
- Let's Talk Science is a national, charitable organization committed to building youth interest and engagement in science, technology, engineering and math (STEM).
- Our goal is to ensure youth do not shut the doors on their futures… Not about creating more scientists and engineers… STEM opens doors. In the past we would say need high school diploma; then it was need academic program. Now it is need STEM background – many doors get closed for youth that do not have strong STEM background.
- In the first part of this presentation we will look at the impacts of students not having good STEM background when graduate high school.



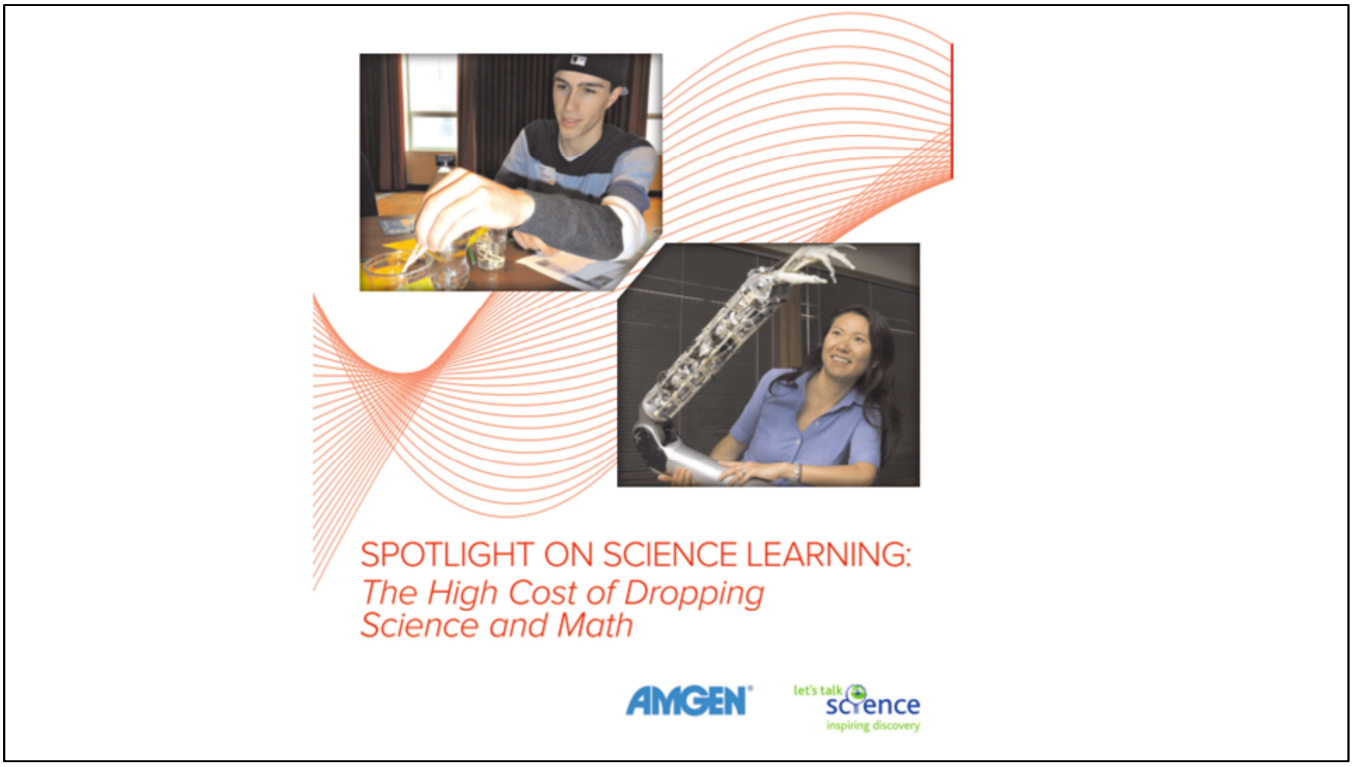
- Let's Talk Science has developed effective educational programs and support for science, engineering and technology across the learning continuum — from infants and toddlers to post-secondary students.

- Bridge STEM communities and education communities.

This presentation is going to draw primarily from resources that are on CurioCity. At the end there are additional slides that will walk you thru how to access career resources on the www.explorecuriocity.org site.



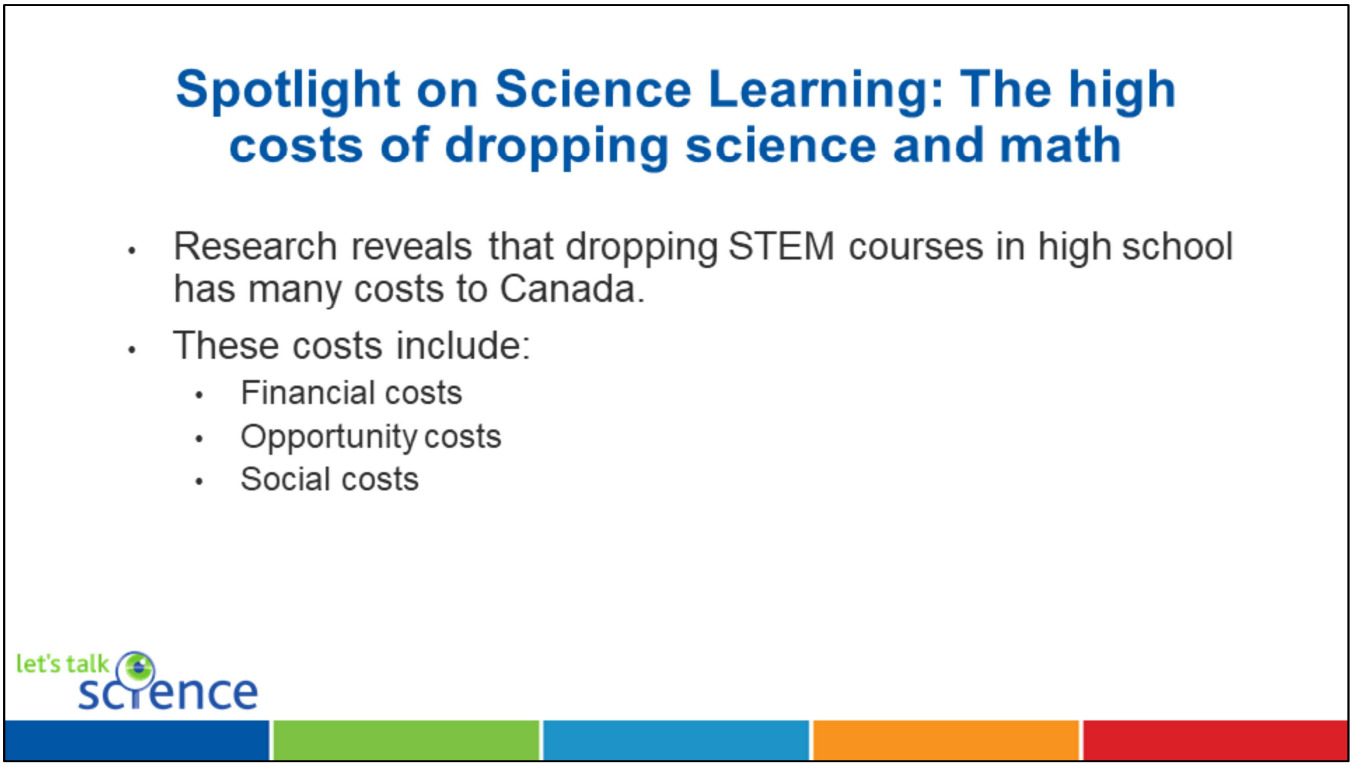
- Similar statements are made in various curriculum documents across Canada. Think about the technologies we use today: Microwave ovens, cell phones, anti-lock braking systems (indeed all the systems in automobiles today… used to be you could get most of your work done by backyard mechanic… much rarer today as the technology involved is beyond any who have not completed post secondary program… and continue with on the job learning and courses).



- LTS also does research. We have completed several “spotlights”. The one shown, identifies the real costs associated when students don’t complete sufficient STEM courses; how it limits future post-secondary and career options. These reports are available on our main www.letstalkscience.ca site.

- This report also documented the types of careers, some surprising, that require STEM training or background.

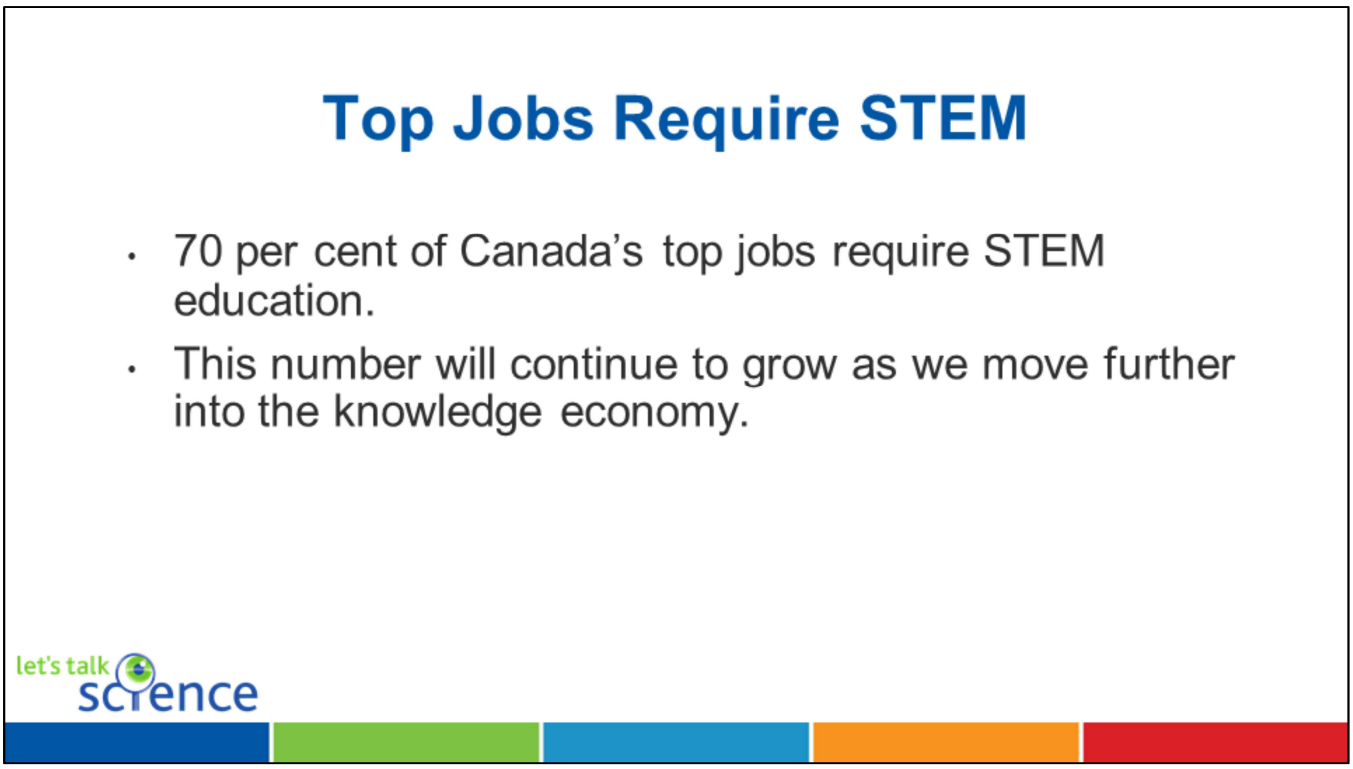
- We’ll refer to some of this research in this presentation. For more information access this, and other Spotlights, at http://letstalkscience.ca/About-Us/Research-and-Publications



research by Let's Talk Science, made possible by Amgen Canada. Survey included adolescents and parents in ON as well as a review of literature.

This research reveals that the economic impact of dropping STEM courses in high school is costing Canada much more than anticipated.
From the financial costs (e.g., making up lost courses, being in the wrong program, costs to institutions) to the opportunity costs (e.g., lost future earnings, workers with STEM are employed more and make more) to the societal costs (e.g., reduced innovation in Canada and unfilled jobs dues to incompatible skills). Bottom line – we all lose when STEM education is not pursued.

Access this report at http://letstalkscience.ca/About-Us/Research-and-Publications for specific details.



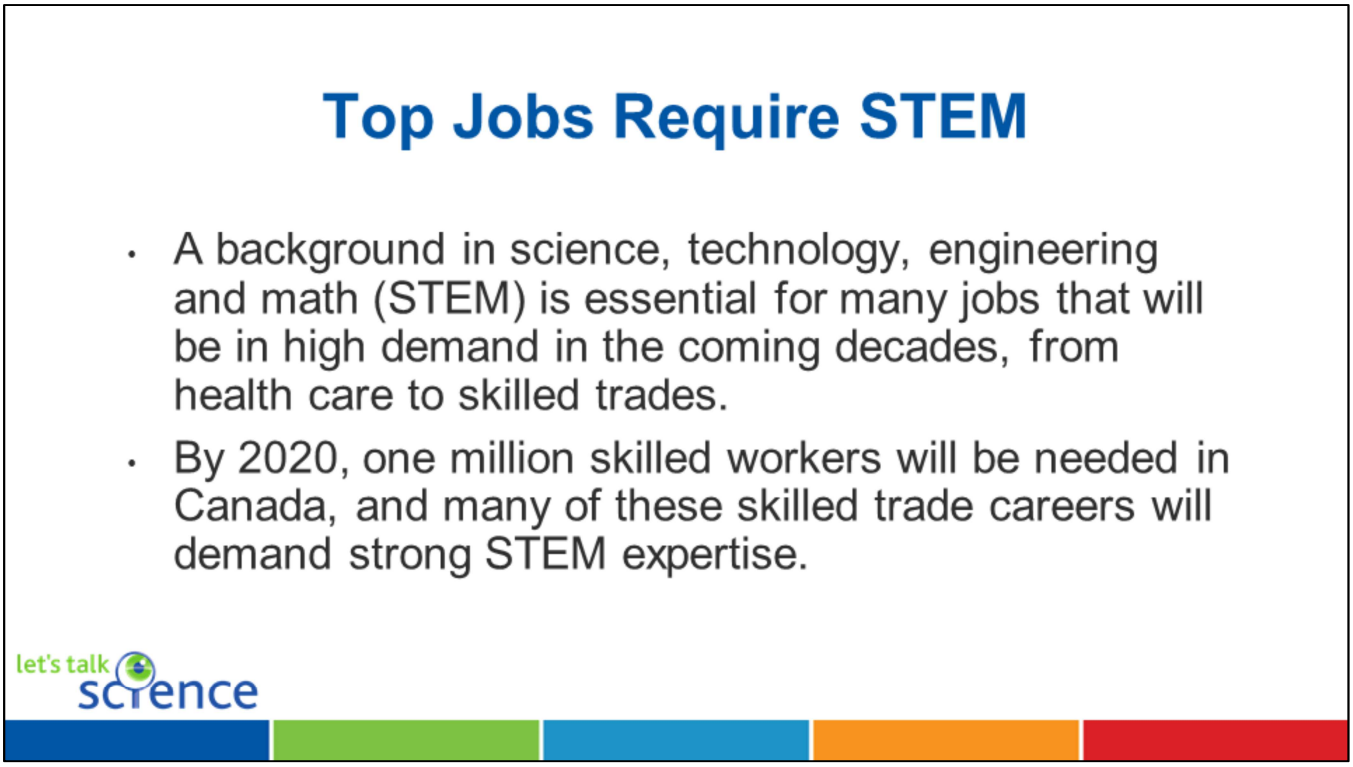
- Science and technology are increasingly important to Canada's economic well-being and quality of life. In fact, 70 per cent of Canada's top jobs require STEM education, and this number will continue to grow as we move further into the knowledge economy.
- Many institutions require STEM courses (particularly math and science) in order for students to gain entry. This is a reflection of the fact that the training for many programs requires advanced levels of math, science and technology than in the past.
- As a society we have the misconception that only "university degreed careers" require STEM. As the next couple of slides show, this is far from correct.

1. Top-paying jobs in Canada	2. Top starting salaries	3. Canada's top jobs	4. U.S. top jobs	5. Jobs of the future	6. Career satisfaction	7. Recession-proof careers	8. Most respected occupations
Specialist physicians $179,514	Doctor $100,000	Oil and gas drilling supervisor	Dentist	Mining, oil & gas supervisor	Real estate agent	Computer software engineer	Nurses/doctors (tied)
Judge $178,053	Dentist $90,000	Head nurse and health care manager	Registered nurse	Pilot	Senior quality assurance engineer	Veterinarian	Farmers
Senior managers – communications, financial and other business services $162,376	Petroleum engineer $86,200	Petroleum engineer	Pharmacist	College instructor	Senior sales representative	Financial analyst	Scientists
Senior managers of goods production, construction, utilities, transportation $160,947	Data security analyst $83,250	Electrical and telecommunica-tions contractor	Computer systems analyst	Railway & transportation supervisor	Construction superintendent	Database administrator	Veterinarians
General practitioner and family physician $132,615	Lawyer (first-year associate, large firm) $81,750	School principal and administrator	Physician	Power systems operator	Senior application developer	Dental hygienist	Dentists
Dentist $131,552	Website developer/ user experience designer $80,000	Lawyer	Database administrator	Health care managers	Logistics manager	Forensic science technician	Teachers
Senior managers of trade, broadcasting and other services $124,080	Mobile applications developer $72,500	Real estate and financial manager	Software developer	Education administrator	Construction manager	Mental health counsellor	Engineers
Lawyer $123,632	Chemical engineer $72,407	Senior government manager	Physical therapist	Head nurse	Executive admin-istration assistant	Performance makeup artist	Military officers
Engineering manager $113,403	Financial controller $70,000	Chemical engineer	Web Developer	Railway conduc-tor & brakemen/ women	Network engineer	Skin care Specialist	Architects
Credit, investment, banking manager $101,845	Lawyer (first-year associate, midsize firm) $64,000	Aerospace engineer	Dental hygienist	Dental hygienist	Assistant controller	Personal and home care aide	Police officers

BOX COLOUR KEY:
- STEM career
- Skilled Trade
- Requires STEM literacy/skills
- STEM background not required but skills may be beneficial

- This is from the Spotlight "The high cost of dropping out of math and science". Provide a copy as a handout

- Refer to the spotlight document "the high costs of dropping math and science" available at http://letstalkscience.ca/About-Us/Research-and-Publications.

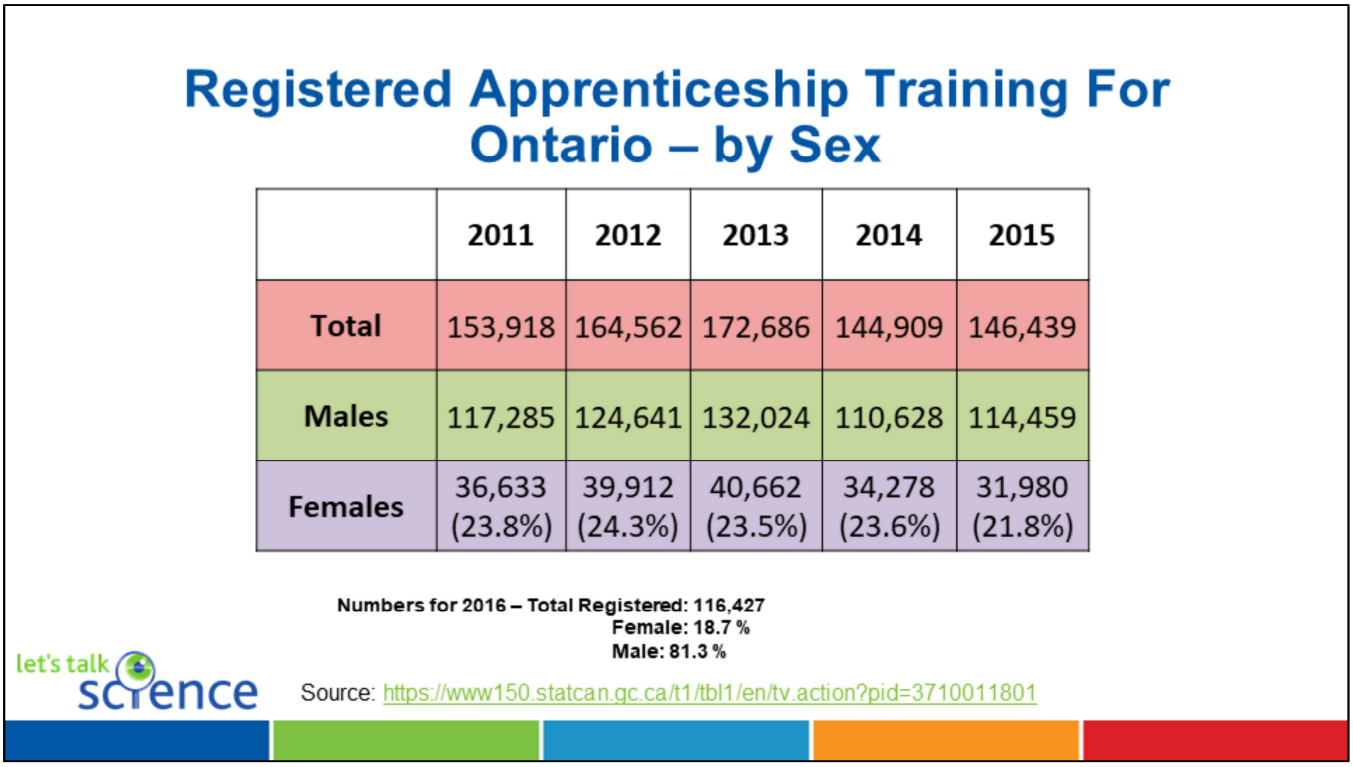


- A background in science, technology, engineering and math (STEM) is essential for many jobs that will be in high demand in the coming decades, from health care to skilled trades.
- By 2020, one million skilled workers will be needed in Canada, and many of these skilled trade careers will demand strong STEM expertise.

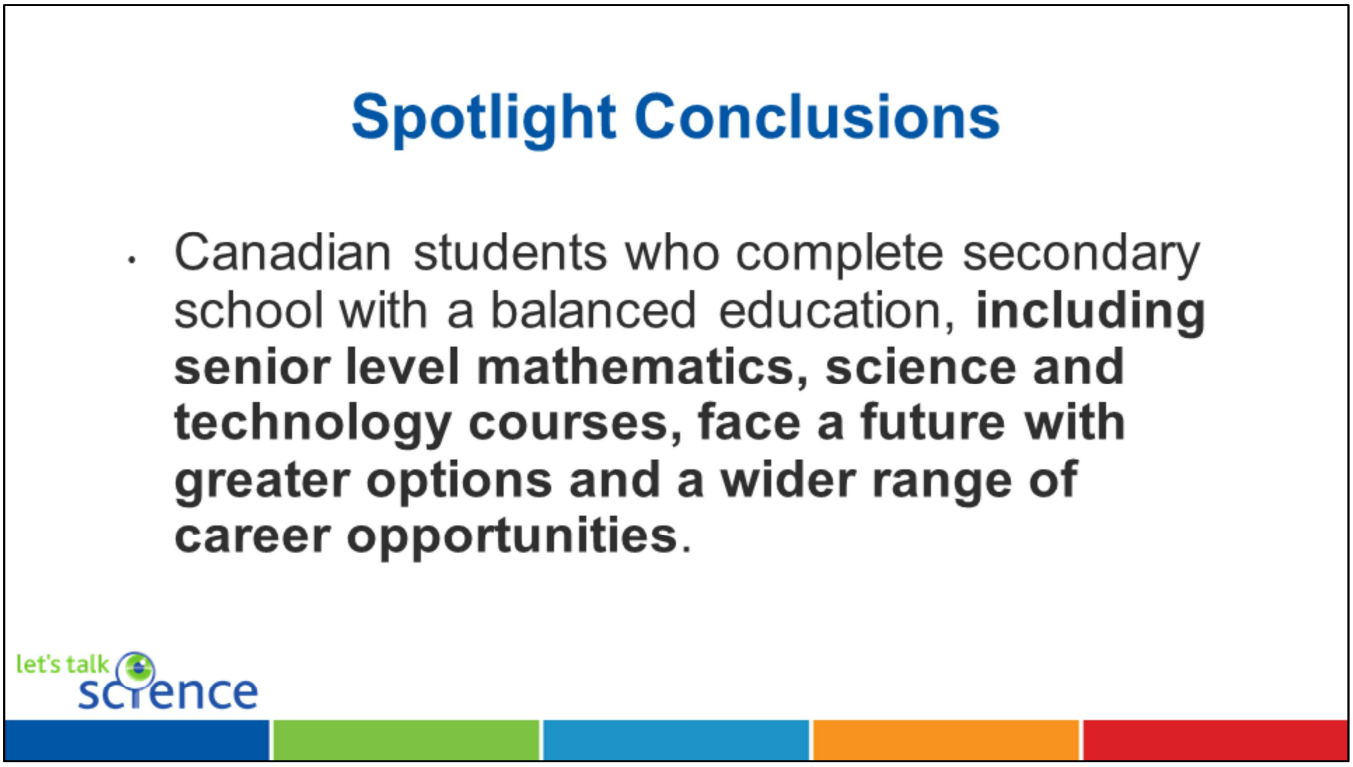
Despite a growing need for a STEM-educated talent pool, less than 50 per cent of Canadian students graduate high school with the STEM background needed to pursue postsecondary STEM fields. Fewer indicate they plan to study for a career that involves STEM.

Program/Career	Course Requirements/ Prerequisites	Also Known As...
Acting for film and television	Introduction to arts and science	Science
	Electronic media	Computer technology
Dance	Anatomy	Biology
Chef/baker	Nutrition	Biology and chemistry
	Math foundations and hospitality math	Mathematics
	Fermentation theory and application	Chemistry
Carpenter	Estimating and planning	Mathematics
Welder	Trade math	Mathematics
	Production and properties of metals	Chemistry
Esthetician	Anatomy and physiology	Biology
	Diseases/pharmacology	Biology and chemistry
	Epidemiology	Mathematics
	Nutrition	Biology and chemistry
Journalism	Quantitative research methods	Science and mathematics
	Digital design	Computer technology
Fitness/health promotion	Anatomy and physiology	Biology
	Nutrition	Biology and chemistry
	Business management	Mathematics and computer technology
Industrial design	2D/3D modeling	Mathematics
	Quantitative research methods	Science and mathematics
	Computer aided design	Computer technology
Crime scene investigator	DNA analysis	Biology and chemistry
Agriculture/agribusiness	Genetics	Biology
	Nutrition	Biology and chemistry
	Plant and soil science	Biology and chemistry
	Farm management	Science, mathematics and computer technology
Computer animation	Anatomy and biomechanics	Biology and physics
	Computer science	Computer technology
Early childhood education	Health, safety and nutrition	Science
Business administration/ retail management	Mathematics of finance	Mathematics
	Accounting	Mathematics
	Business economics	Mathematics
Weather forecaster	Understanding weather	Science
	Climate change	Science
	Atmospheric chemistry	Chemistry
	Cloud physics	Physics

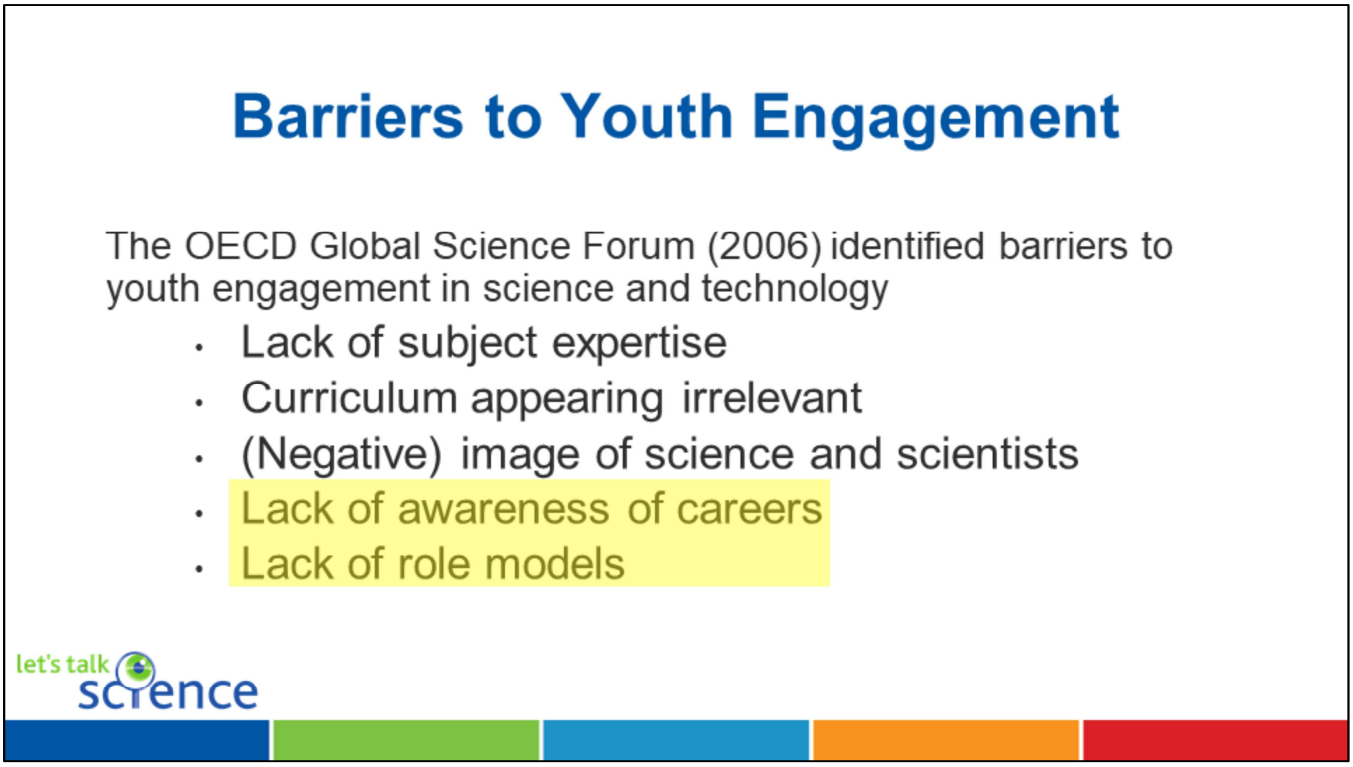
- Notice that some of these jobs are ones that we might not think as “science based” (e.g. dance, esthetician).
- Table from the 2013 Spotlight (high cost of dropping out of math and science) http://letstalkscience.ca/About-Us/Research-and-Publications
- We’ve got to change our thinking that “if your good at Math and Science in high school then you have to go to university”. There are many challenging and satisfying careers that require strong math and science background that are not university-based.



- https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710011801 Note: slide uses ON data but other provinces and territories info are available at this site.
- In Canada the average percent female enrolments are: 2009 (12.6%); 2010 (13.4%); 2011 (13.7%); 2012 (14.2%); 2013 (14.1%); 2014 (13.7%); 2015 (13.5%)
- Ratio of Male:Female is 3.6 to 1 in 2009 and 3.2 to 1 in 2013. How long will it take to make this closer to 1:1?
- http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/educ66a-eng.htm



- The first conclusion is oft cited by other reports. The second one is more unique in that it points out that students need to do more than just graduate; they need to have a good STEM background to take advantage of the programs and careers that are now available.

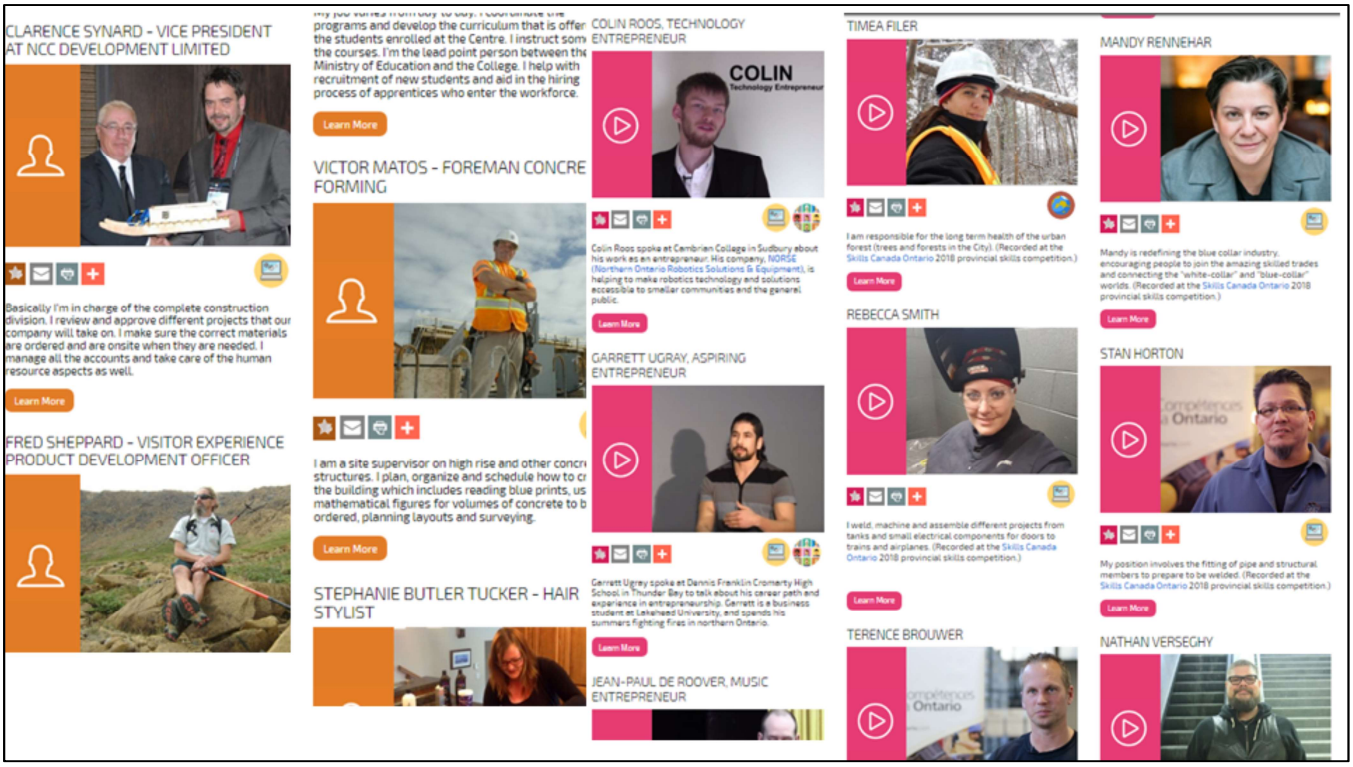


- Through our CurioCity web resources, LTS provides resources to help teachers address these barriers. CC resources are intended to help teachers make the link between science curriculum and students' everyday lives (i.e. address the 2nd bullet). To some degree we address the 3rd bullet by providing interesting links to science happening in the real world to try to dispel some misconceptions about science and scientists.

- **Our Careers section addresses the 4th and 5th bullets in that it provides examples** of a variety of career opportunities available to those who have a STEM background; from the traditional BSc to PhD types of "science" careers (e.g., research, medicine, etc) to those that may not have such an obvious link (e.g. agriculture, aquaculture, communication-related, arts-related, skilled trades, etc). The profiles may also help address the 3rd bullet in that it provides snapshots of what the person was like as a student, what they do outside of work and allows the person in the profile to tell them why their job makes a difference and what motivates them.

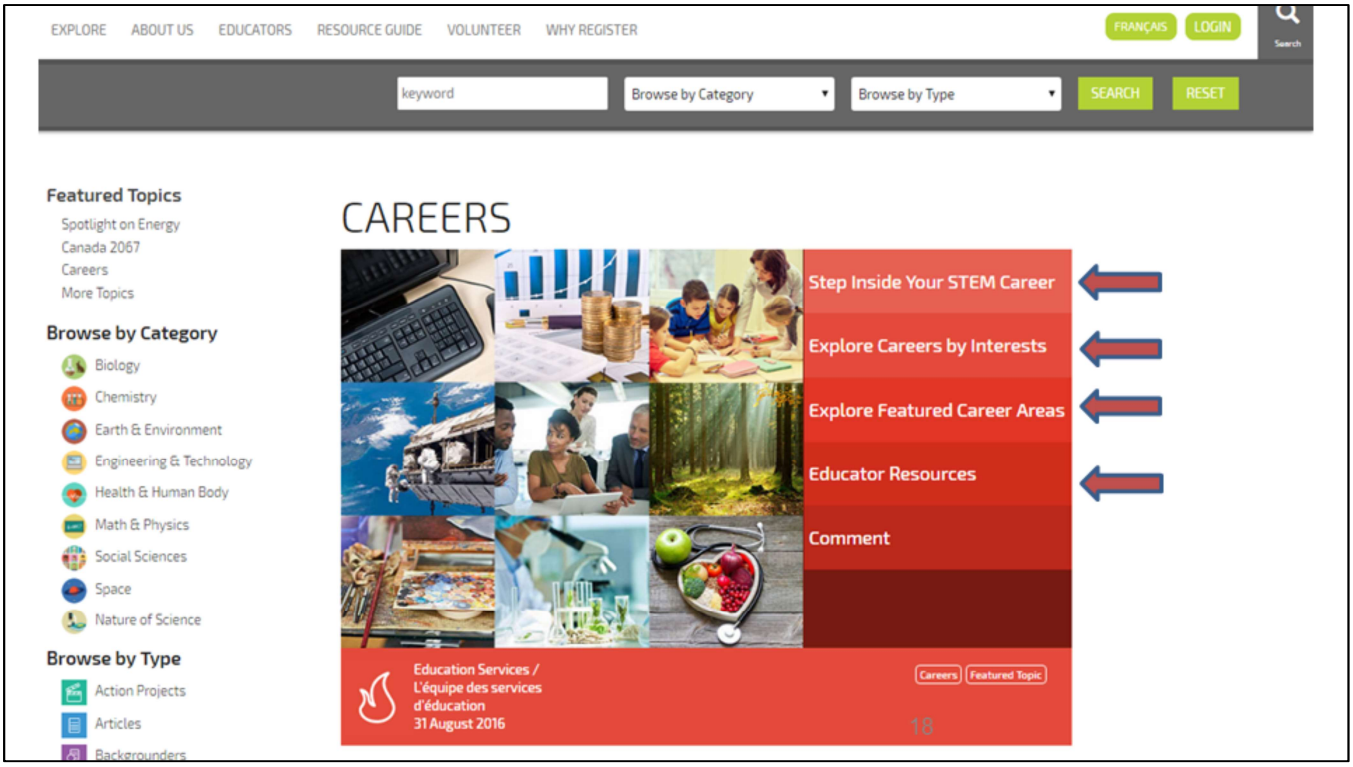
- The following slides are not normally shown in a presentation if live link to the site is available. Our French site is located at http://explorecuriocite.org/
- NOTE: our programs are being consolidated into one page. This site will continue to operate until 2020. The new Careers site will be live by September 2019.
- “CurioCity is an interactive, web-based meeting place where teens can connect with post-secondary students and science professionals to explore and discover the science, engineering and technology behind everyday life.”
- Content on CurioCity intends to both inform and inspire youth about STEM by making it accessible and interesting. We want them to think about issues related to STEM.
- You can start a search from there (magnifying glass icon) or click on Explore to enter the site. You can search from any where once you are into the site.
- The “Careers” link leads to the collection of our career profiles. Ok to browse but not good for quick searching. Best to go to the Explore page.

- French site http://explorecuriocite.org/
- “CurioCity is an interactive, web-based meeting place where teens can connect with post-secondary students and science professionals to explore and discover the science, engineering and technology behind everyday life.”
- Content on CurioCity intends to both inform and inspire youth about STEM by making it accessible and interesting. We want them to think about issues related to STEM.
- You can search for content, browse by topic/category, browse by resource type, browse featured topics. Most of this content can be accessed without logging in.
- For careers there are two ways to access. The first is to browse the various profiles we have collected. There are approximately 300 profiles plus almost 100 videos.
- We’ll look at some samples of profiles using the browse feature (next slide).



- Some screen shots to show the variety of STEM careers. Written profiles have the silhouette. Videos have the triangle.

- The other way (and best) to access career info is by clicking on the “careers” link under the Featured Topics list (at the left of the curiocity page). This slide shows the organization of the page. We’ll look at each section individually.



- Click on page to access the site if have Internet.
- The four horizontal bars at the right are links directly to specific content on the page. We'll look at each section in more detail in following slides.
- http://explorecuriocity.org/Explore/ArticleId/4853/careers.aspx
- We will look at each of the sections from this page starting with the 360 (VR) content

Step Inside Your STEM Career!

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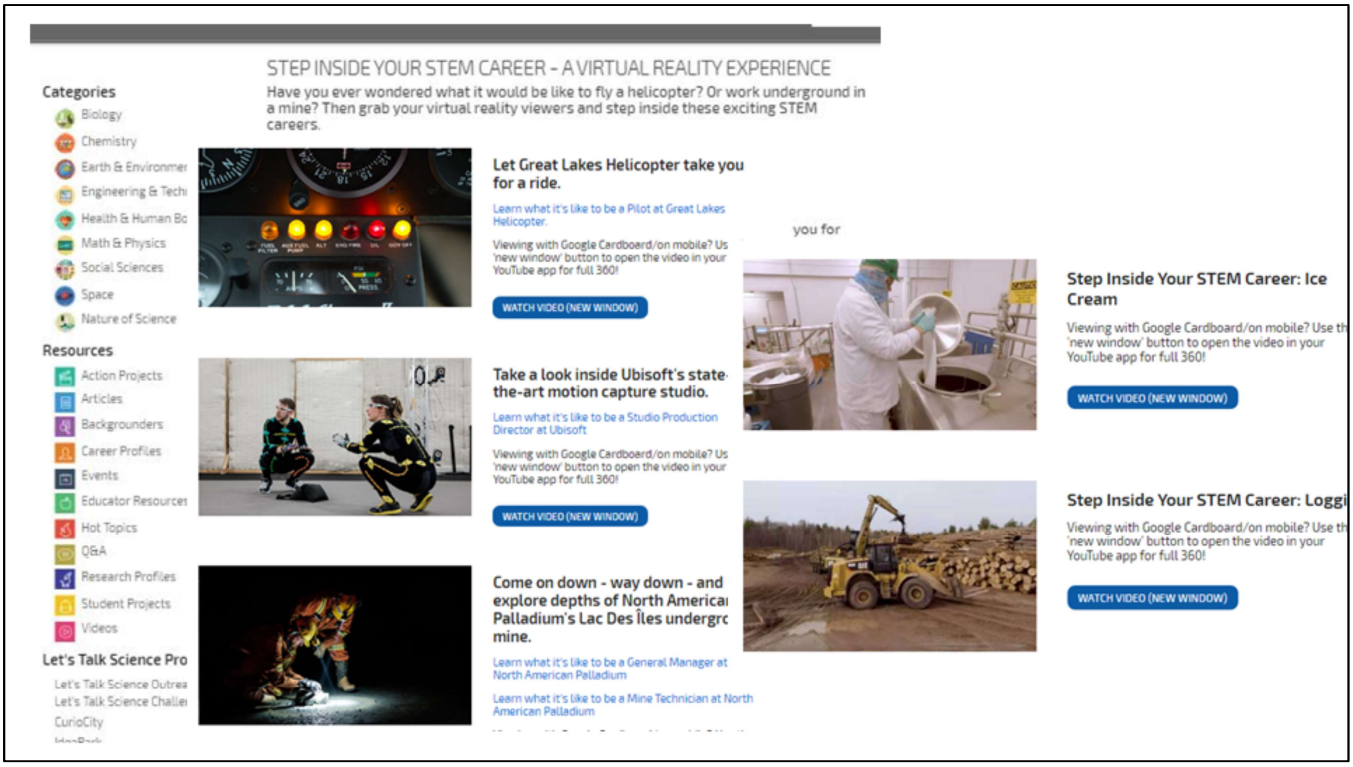
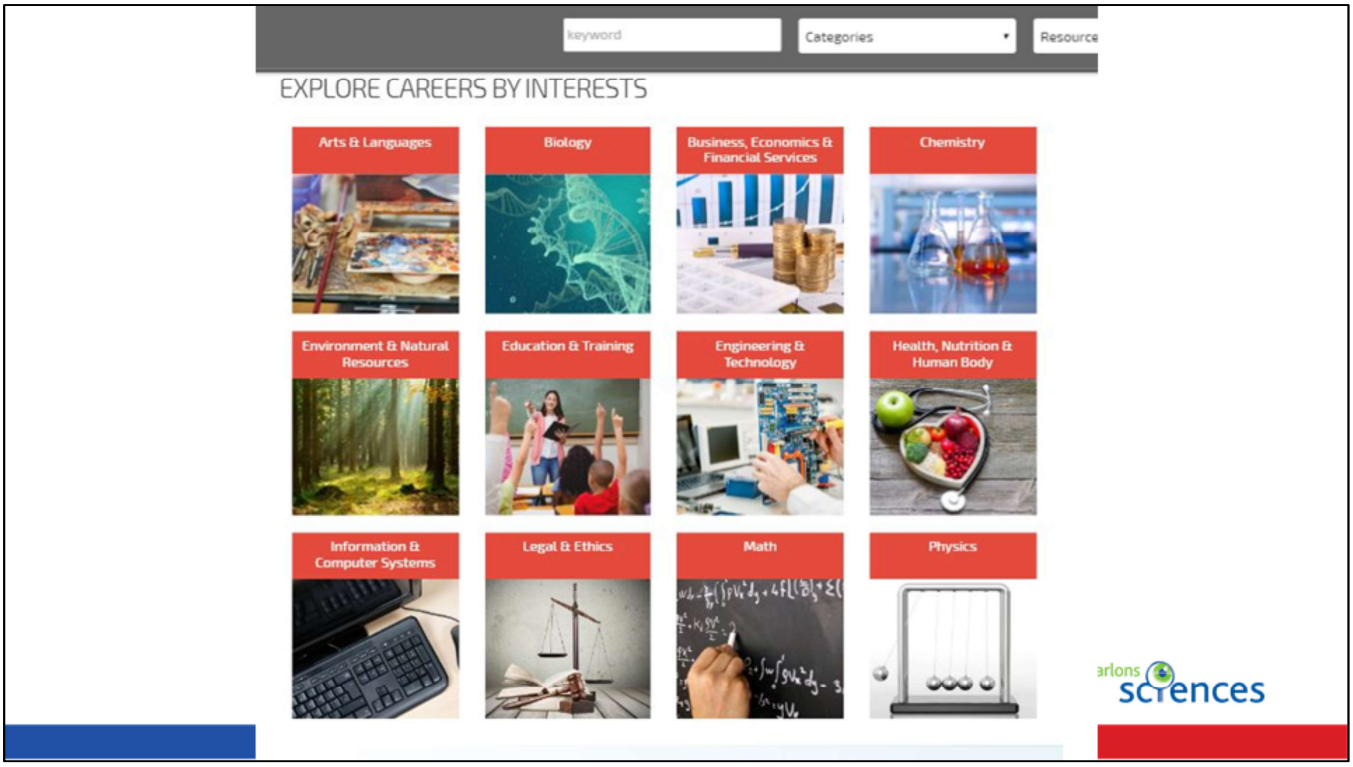
- One of the latest features we've added to CurioCity is 360 VR career videos! We've got three currently available. Let's give them a try!



- We are starting to increase the video content on CC. Some of this will be sourced from other agencies (e.g., www.growingcareers.ca agriculture related careers) while some will be created in-house.

- Currently we have 8 online. Note that these also have links to a career profile and a video. Several new ones are in development including police ROV operator.

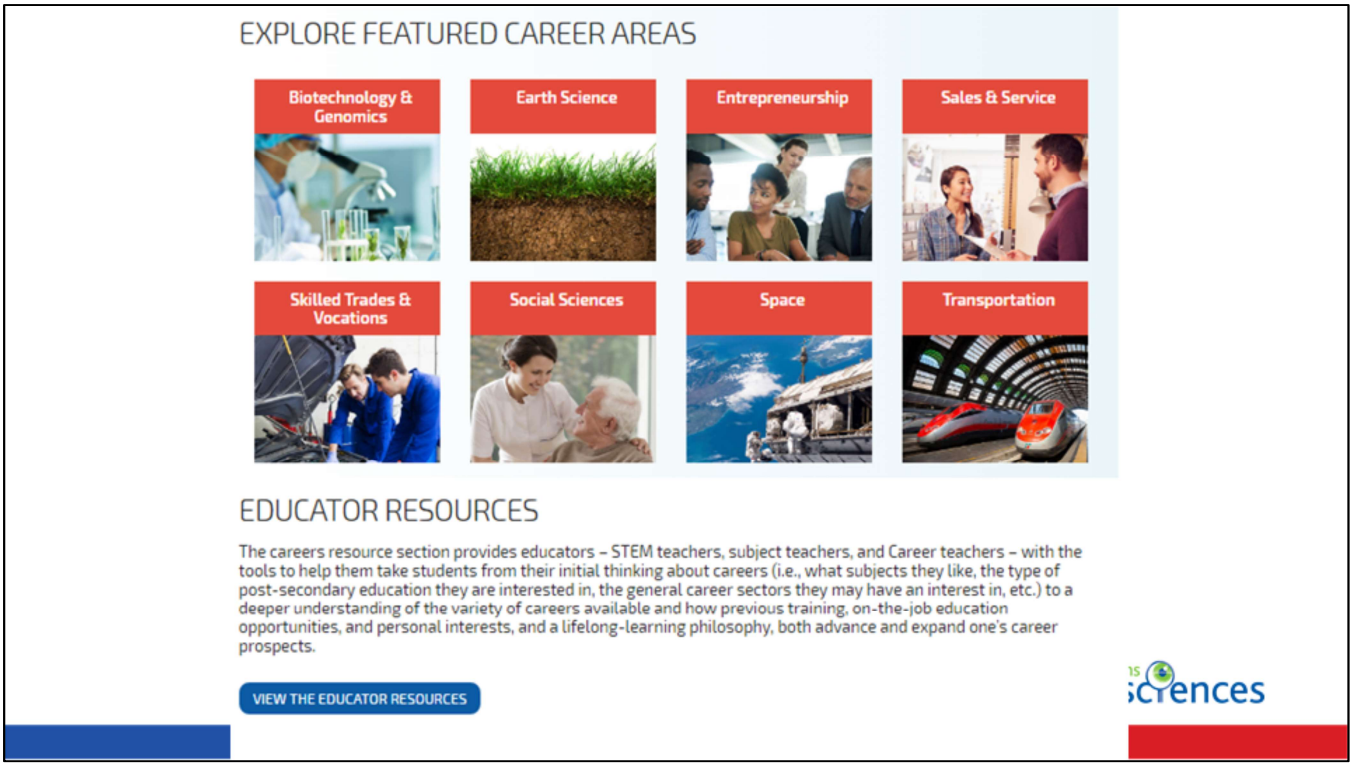


Students can explore careers by their interests.

We are using a modified “career sector” analysis but have added specific listing of direct STEM careers in the math, sciences, and technology.

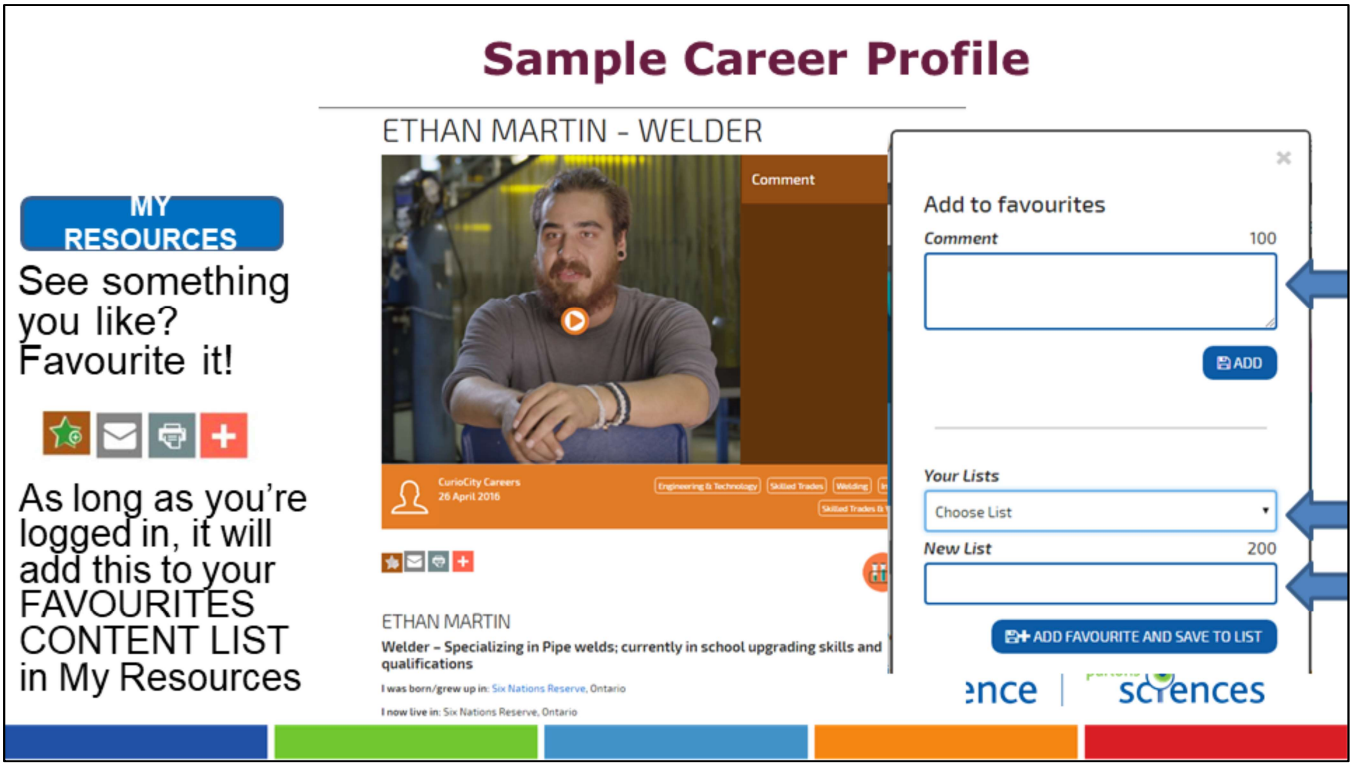
Profiles will be cross linked as appropriate. E.g. Under “Arts & Languages” there will be profiles of both “Medical Artist” and “Medical & Biological Illustrator”. These will also be linked under the “biology” and “Health, Nutrition & Human body” categories.

This is a browsing feature; great for looking at careers that are related to topics students “like” in school.

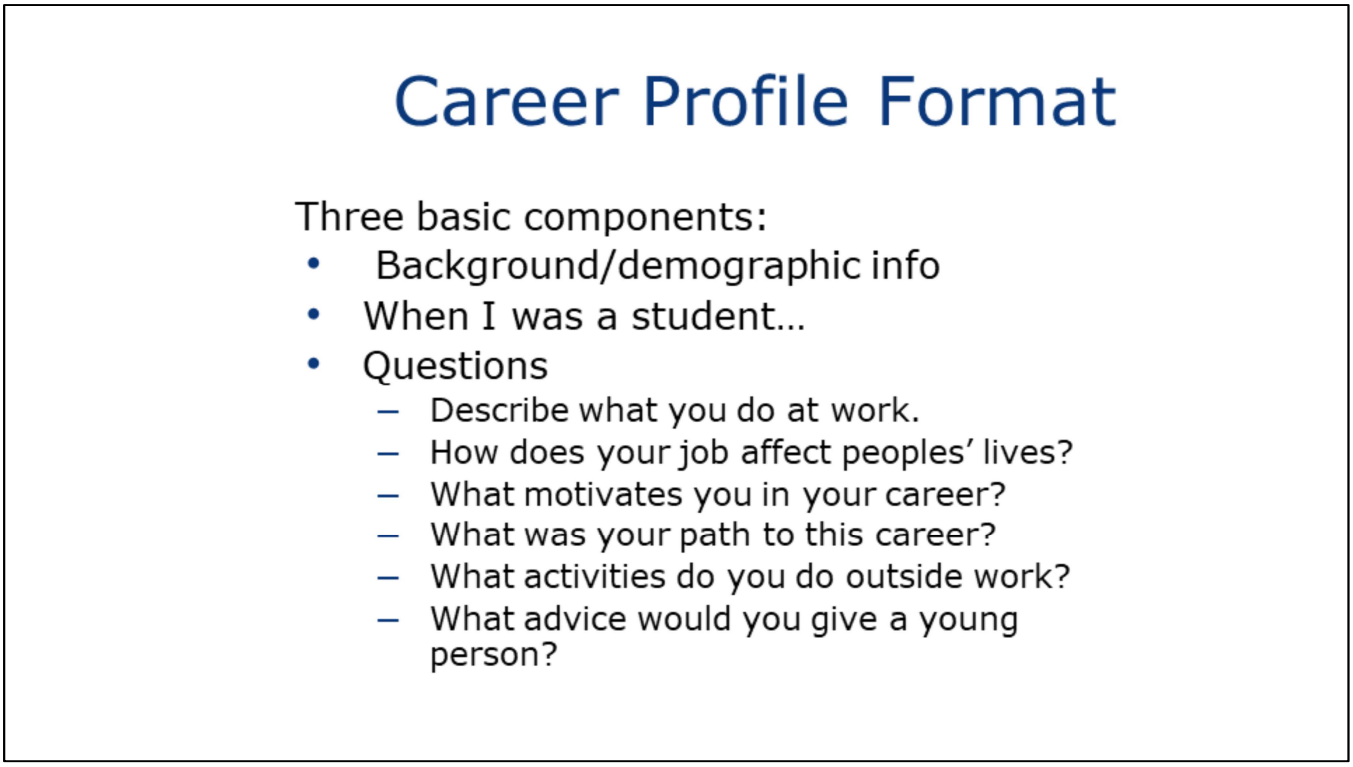


- We also have a section that will highlight careers in specific areas. Some of these are newly emerging career sectors (e.g., “biotechnology”). Others are areas we want to highlight such as “skilled trades” and “Entrepreneurship” which demonstrate different areas where STEM is important but might not be thought of by youth (i.e., traditional vs non-traditional or stereotypic vs non-stereotypic STEM careers).

- It is an extension to the “browse by interest” section.



- This is a sample career profile, of a young welder. We have both a written career profile and also a video of Ethan (notice the "play" button in his photo).
- This shows how to favourite resources. In a later slide we'll look at how to organize a list of favourites.



- In the background info we ask where they were born and now live; where they go their education/training, etc.

- When I was a student… seeks to connect the adult volunteer with the young person. What subjects they liked in school, what they did or how they saw themselves. Sometimes school interests link exactly to the career; sometimes not. E.g. one person works in career that is very math-based but hated math in high school.

- The questions are based on our research on what students want to know about careers and what is important to them. For example, youth don't want a boring job; they want to make a difference in the world, etc.

- The profile is written in a first person format to simulate a conversation with the student. E.g. "I work in the offshore oil industry. I usually arrive at work early…" rather than "Dan works in the offshore oil industry. He normally arrives at work by 7:00am…".

- We aim to have the reading level below grade nine. We have started putting links to the educational institutions so students can check it out directly from the profile if interested. We also have links to terminology that might not be obvious to the reader.

- Profiles are intended to be used online; can be printed but may lose some formatting.

ETHAN MARTIN

Welder – Specializing in Pipe welds; currently in school upgrading skills and qualifications

I was born/grew up in: Six Nations Reserve, Ontario

I now live in: Six Nations Reserve, Ontario

I completed my training/education at: Technical Trades Academy, Brantford, Ontario

Do you self-identify as First Nation, Métis or Inuit (FNMI)? If yes, with which community do you affiliate?

Yes, I am a member of the Six Nations of the Grand River Reserve, Ohsweken, Ontario.

Describe what you do at work.

We start our day with a morning talk about the job we are going to be doing that day. We talk about the types of welds and joints we are going to be making and what safety issues we need to think about. We make sure we are using the correct type of consumable products. For example, we make sure we are using the right welding rods (the stuff that makes the joint) for the metal we are working with.

I use my knowledge of the chemistry of metals on every welding job. You need to know the chemical and physical properties of the metals you are working with or else the weld will not be correct. For example, you can't use a brittle material to weld pipes together. You need to know the thermal conductivity of the metal (i.e. how much heat you can use before it melts). For example, you have to be very careful when welding a metal such as aluminum because has a low melting point; it takes less heat to cause them to distort or melt.

Welders are always solving problems on the job. Sometimes you have to work with weird joint placements. You might have to use a mirror so you can see the back of the joint you are welding! Sometimes the place you have to put the weld is too far away to reach easily so you have to improvise by duct taping the welding touch to a stick so you can reach the spot.

When I was a student I enjoyed:

- ☑ Art
- ☑ Drama
- ☑ Foods and Nutrition
- ☑ Industrial Arts/Shop Programs
- ☑ Math
- ☑ Music
- ☑ Physical Education/Health
- ☑ Science
- ☑ Technology

How does your job affect people's lives?

When you make a weld to join two pieces of metal you have to make sure that weld is safe. If the weld is between pieces of metal used in building construction, the building might become unsafe for the people working or living there if a weld is not done properly. Sometimes you weld metal containers that will be under pressure and sometimes they carry hazardous materials. The weld you make will make the difference between a container that cracks or explodes and one that gets the product to its destination safely.

What motivates you in your career?

It might sound weird but being the best at my job is what motivates me most. The money and all that are great but when it comes down to it, it's your name on the line when you do a welding job. If you mess up on a job, you are the person responsible. And you will know it yourself if something fails because you didn't do the best job possible. I like this pressure to be the best and to show your skills!

When I was a student, I would have described myself as someone who:

- ☑ Brought people together
- ☑ Enjoyed doing things on my own
- ☑ Always wanted to be outside
- ☑ Liked helping people
- ☑ Was motivated by success
- ☑ Liked being given free range to explore my ideas
- ☑ Engaged in volunteer activities
- ☑ Liked reading
- ☑ Felt at home in the outside, natural environment
- ☑ Played video games
- ☑ Was really creative
- ☑ Always threw the best parties
- ☑ Wasn't sure what I wanted to do
- ☑ Liked to take things apart to see how they worked
- ☑ Liked to design or build things
- ☑ Engaged in activities such as fishing, berry picking and hunting

Describe your career path to this career.

I really stumbled into welding as a career. I did have some exposure to it in high school but I didn't like it then. When I started out I got a job helping to run a tobacco company. It was good pay but I really didn't feel satisfied. I guess I wanted to work with my hands. I started by taking a pre-apprenticeship training course. This helps you see different trades and find the things you like doing. I took some courses first and then did some on the job training. After I did the pre-apprenticeship program it all started to fall into place. I planned out what I wanted to achieve and then set out to do it. And now I'm in a career that interests me and which I love!

What activities do you like to do outside of work?

I like to play hockey and baseball. I help out around my community. I've volunteered with Skills Canada Ontario at their provincial competitions. I helped them with a career information booth and with some youth empowerment workshops.

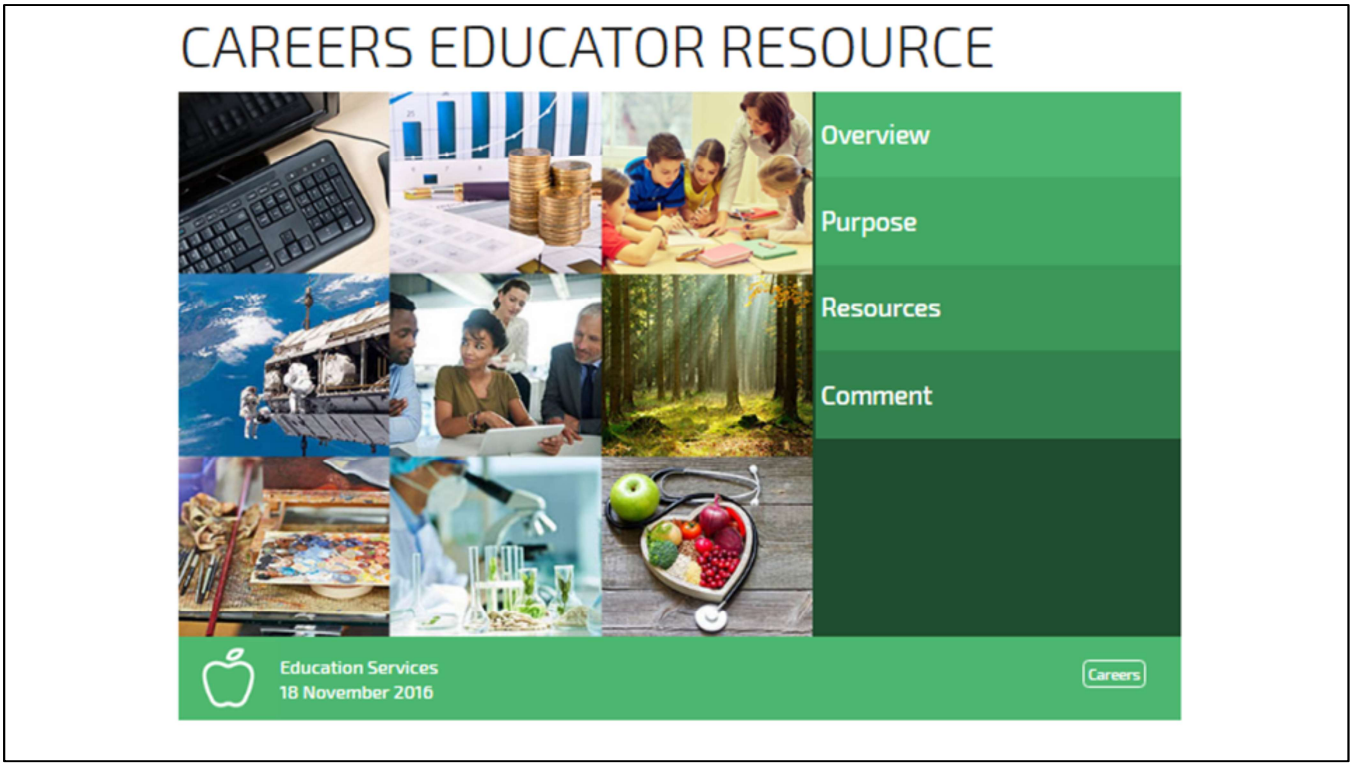
What advice or encouragement would you give others seeking a similar career?

My best advice is to keep at it! If you want to be a welder remember your first weld is not going to be very good. You have to keep at it and keep practicing if you want to be good at it. I guess this is true for any career you take on.

Let's Talk Science is grateful to Skills Canada Ontario for connecting us with this individual.

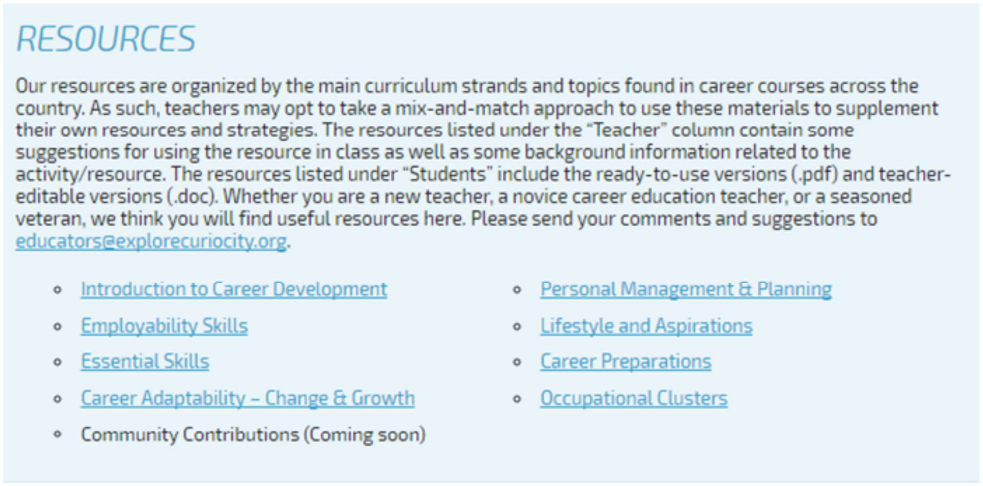
Skills Compétences Canada Ontario

www.skillscanada.com/on



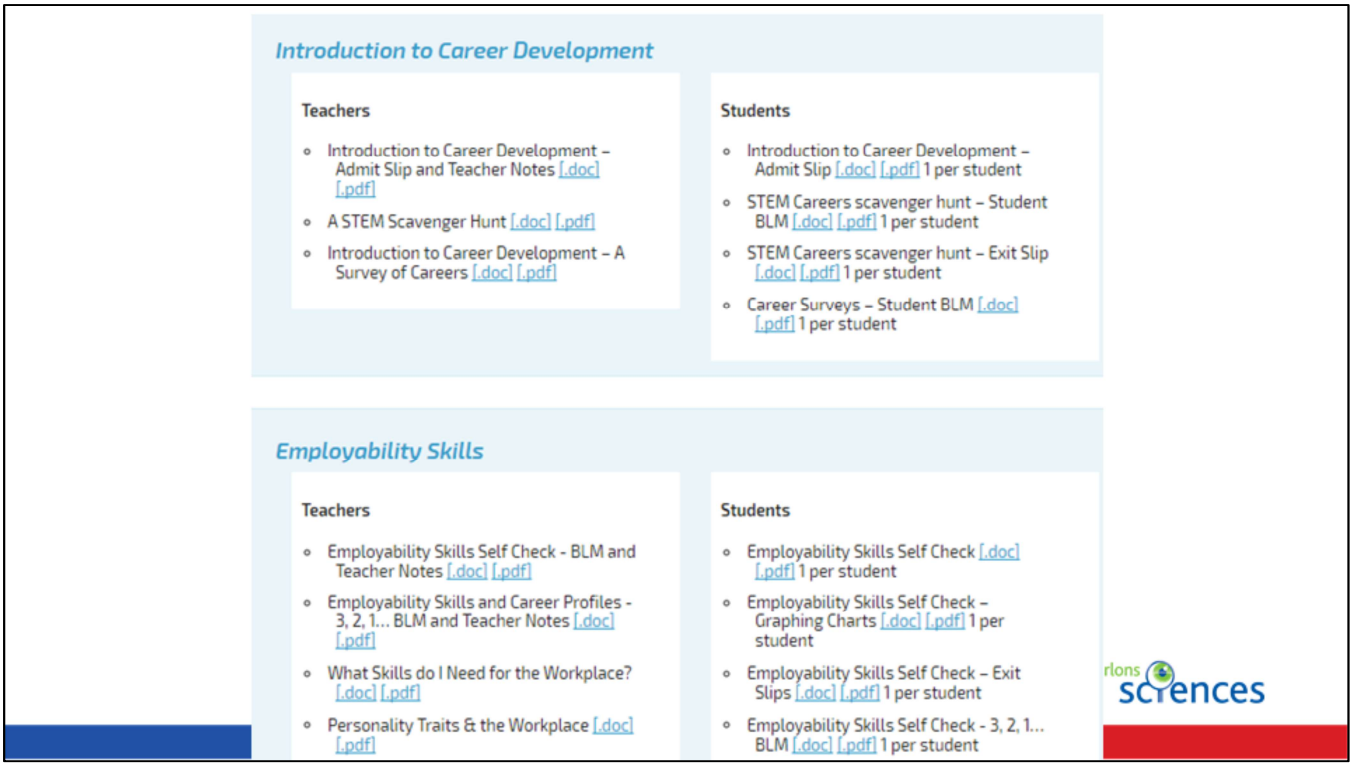
- The careers resource section provides educators – STEM teachers, subject teachers, and Career teachers – with the tools to help them take students from their initial thinking about careers (i.e., what subjects they like, the type of post-secondary education they are interested in, the general career sectors they may have an interest in, etc.) to a deeper understanding of the variety of careers available and how previous training, on-the-job education opportunities, and personal interests, and a lifelong-learning philosophy, both advance and expand one's career prospects.

Educator Resources - Categories

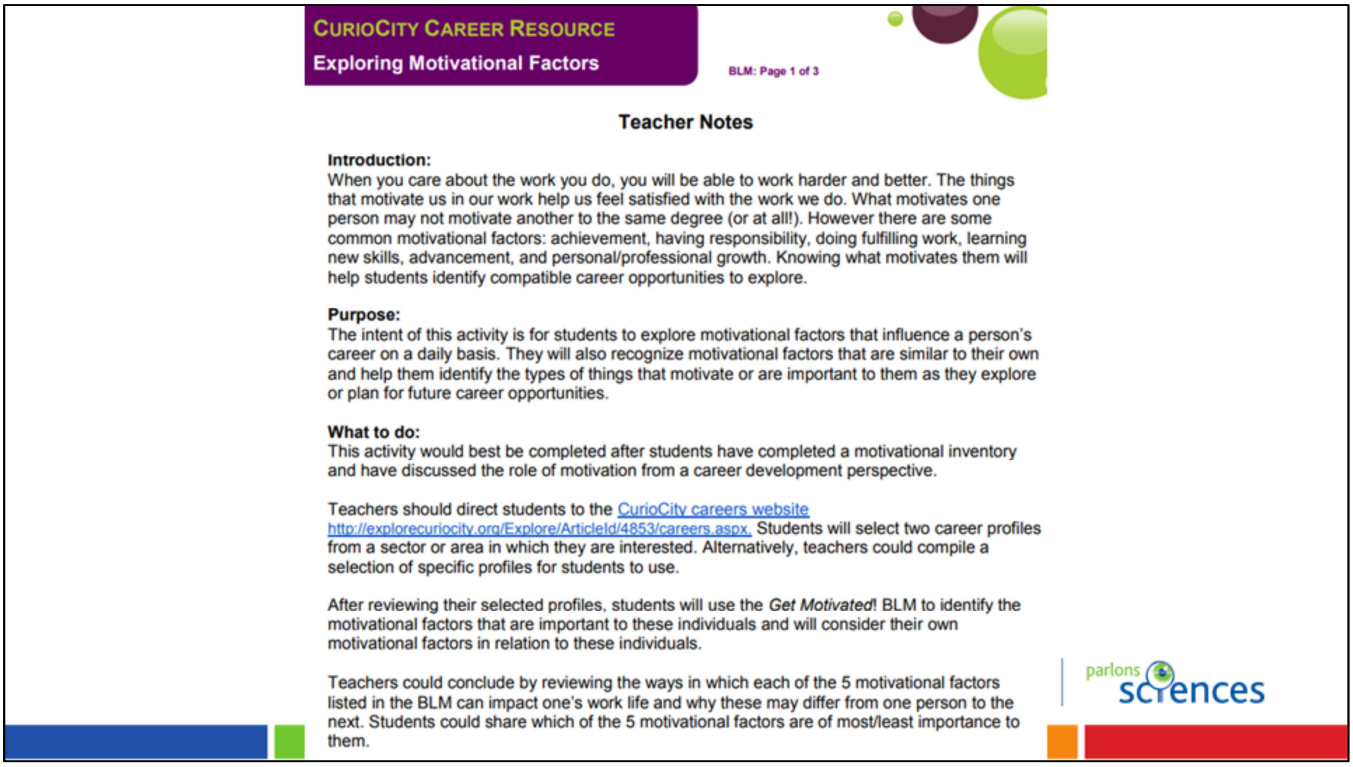


- We would welcome ideas of other things we could add here. Mainly we want our profiles and videos to get used but will also add stuff to make this site relevant to all career teachers: novice to experienced.

- Community contributions: looking at providing opportunity for students to volunteer with LTS. Particularly by creating profiles, videos, etc. What is the interest in this?



- Screen shot of the first two topics and the respective resources available.
- The files under the Teachers column contain some teacher-talk to explain how the developer saw this being used, what area it addresses, etc.
- Under the Students column, there are the student BLMs that the teacher will use with their students (all referenced in the teacher-talk).



CURIOCITY CAREER RESOURCE

Exploring Motivational Factors

Teacher Notes

Introduction:
When you care about the work you do, you will be able to work harder and better. The things that motivate us in our work help us feel satisfied with the work we do. What motivates one person may not motivate another to the same degree (or at all!). However there are some common motivational factors: achievement, having responsibility, doing fulfilling work, learning new skills, advancement, and personal/professional growth. Knowing what motivates them will help students identify compatible career opportunities to explore.

Purpose:
The intent of this activity is for students to explore motivational factors that influence a person's career on a daily basis. They will also recognize motivational factors that are similar to their own and help them identify the types of things that motivate or are important to them as they explore or plan for future career opportunities.

What to do:
This activity would best be completed after students have completed a motivational inventory and have discussed the role of motivation from a career development perspective.

Teachers should direct students to the CurioCity careers website http://explorecuriocity.org/Explore/ArticleId/4853/careers.aspx. Students will select two career profiles from a sector or area in which they are interested. Alternatively, teachers could compile a selection of specific profiles for students to use.

After reviewing their selected profiles, students will use the *Get Motivated*! BLM to identify the motivational factors that are important to these individuals and will consider their own motivational factors in relation to these individuals.

Teachers could conclude by reviewing the ways in which each of the 5 motivational factors listed in the BLM can impact one's work life and why these may differ from one person to the next. Students could share which of the 5 motivational factors are of most/least importance to them.

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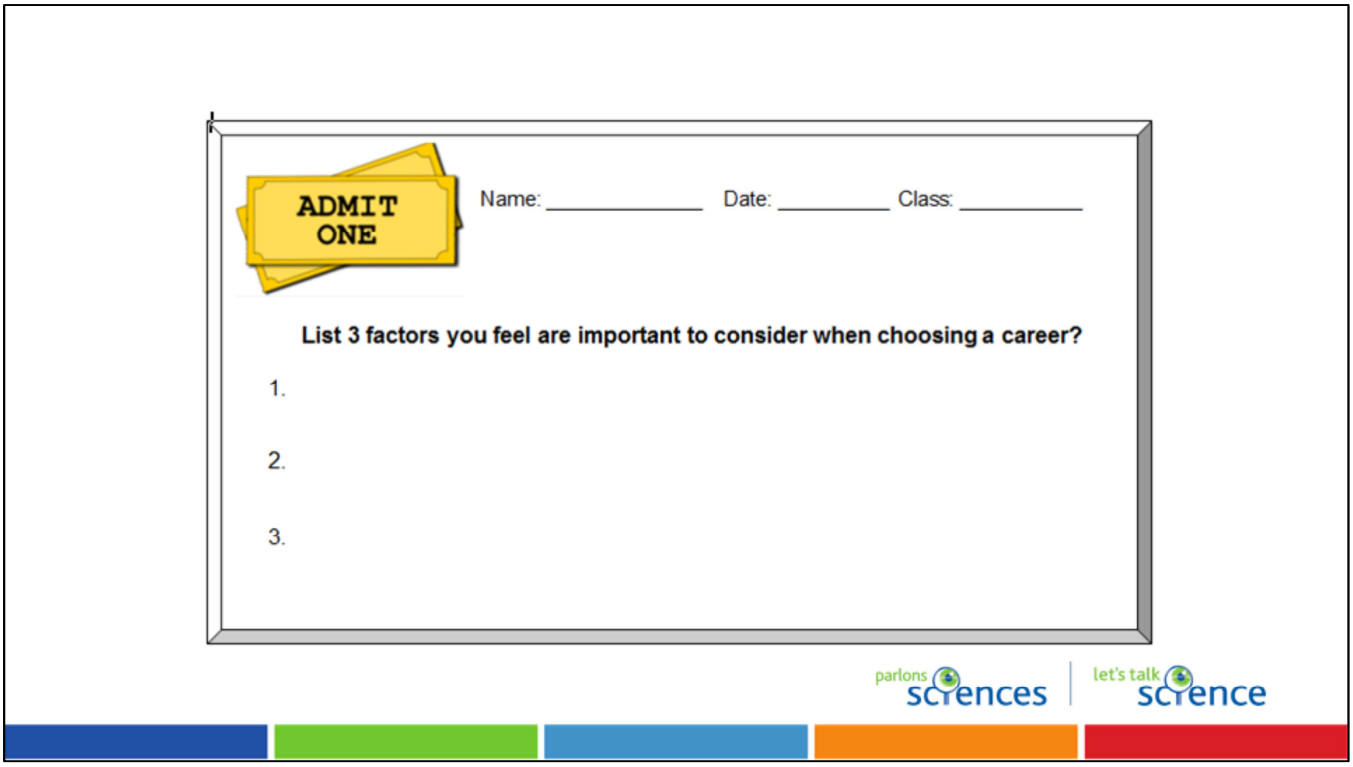
- Next slides show some of the activities and learning strategies employed in the resource.

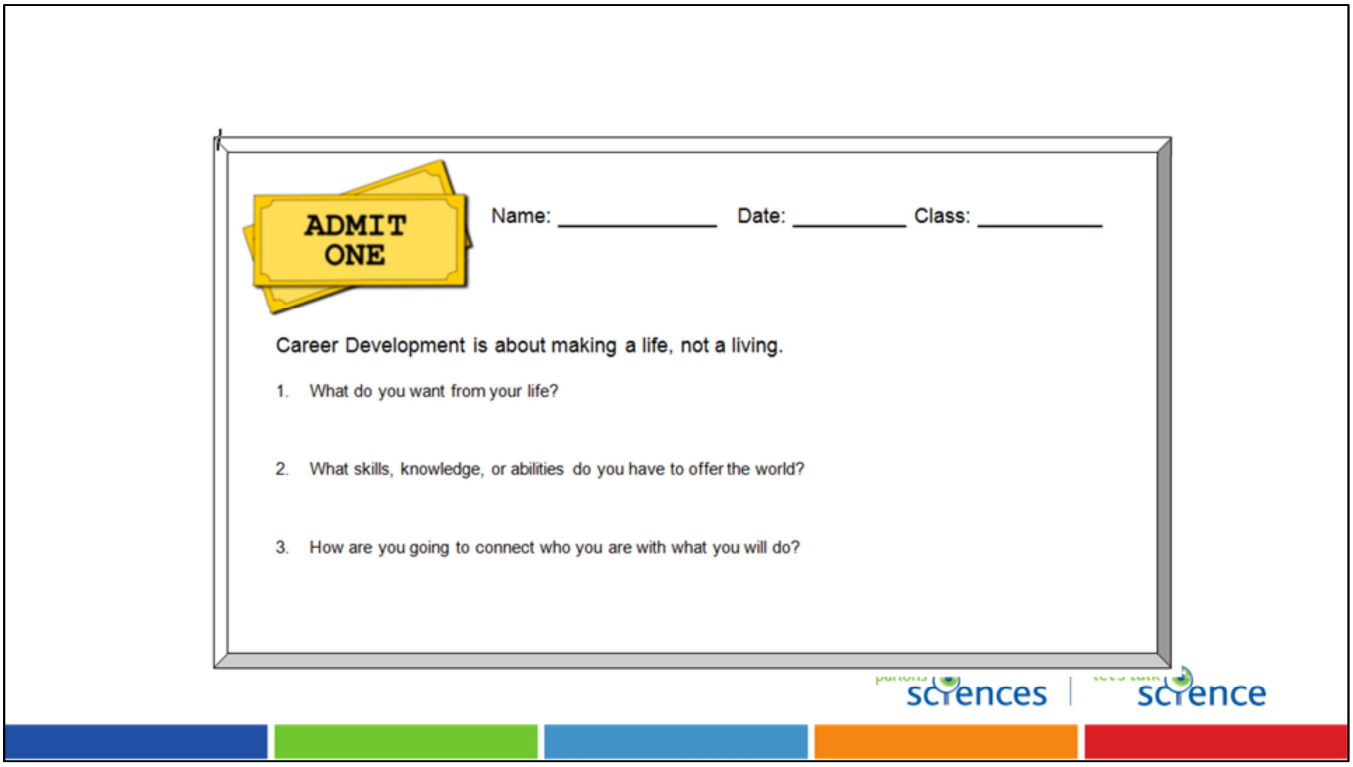


- This is an example of an admit slip… a second example is on the next slide. As all our resources are fully editable by the teacher so you can reword to better align with your students needs/abilities. You can also change the prompt to address a different topic/issue.

- This admit slip is useful to activate students' prior knowledge on a topic before you actually start the topic. It can provide insights into what students are thinking, misconceptions they have, etc. It can also help you tailor specific parts of your lesson to address common themes that may be present in the class (i.e. collect and scan the admit slips).

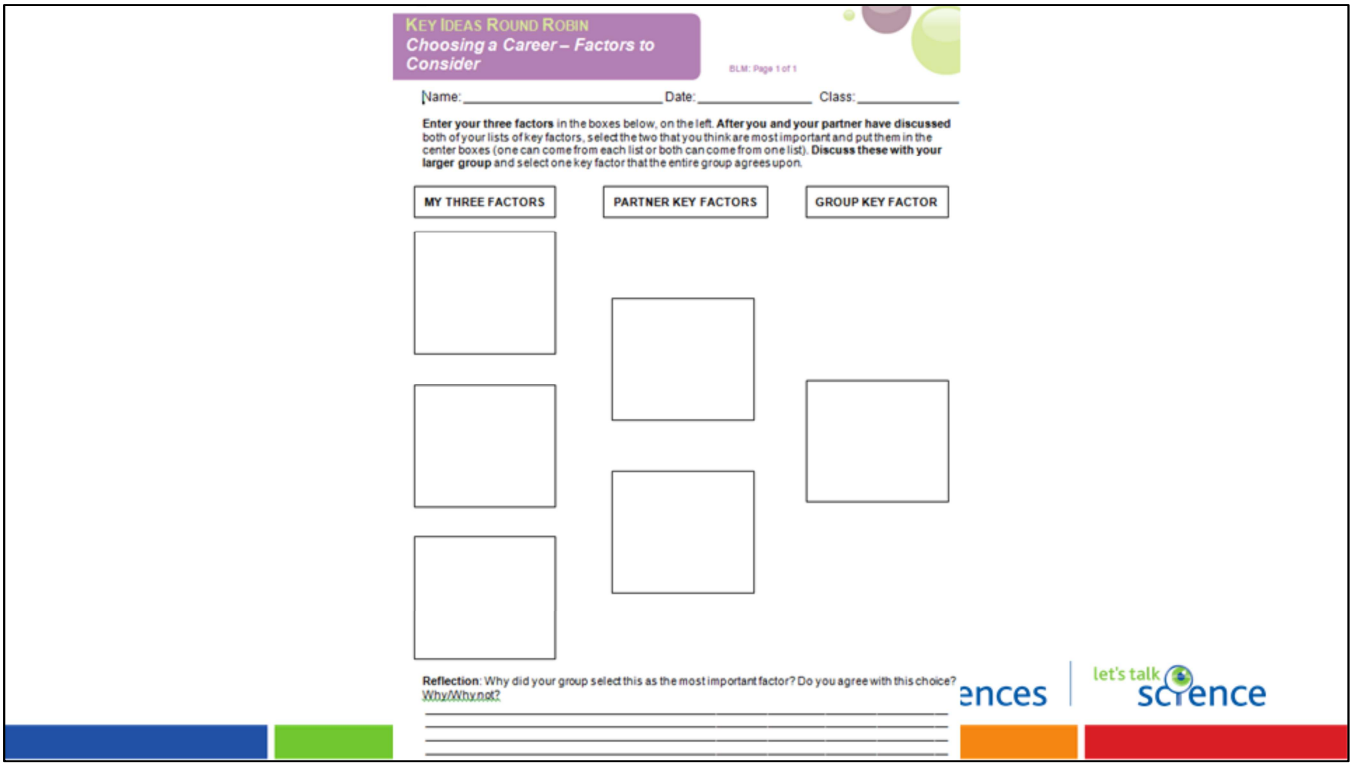
- In a science class this admit slip could be used to stimulate student discussion. Students would start by completing this individually. Then pair them and allow them to share their thinking with one other. This is less threatening for most students. Then the pairs could be grouped into quads where each student shares their #1 factor.

- The student could explain why it is their most important factor. Each in the group could take a turn. You could extend this by having students select the most important factor from their group discussion and explain to the class why they selected this as their choice.



- An alternative Admit slip. This one is intended to be more self-reflective. It is not as conducive to partner or group discussion as it is more personal. The teacher could collect this and review as a means of getting to know their students' thoughts and interests.

- The intent of this admit slip is to help get students to thinking about their future in more concrete terms. It is also intended to help them make an emotional connection to this topic/issue.



KEY IDEAS ROUND ROBIN
Choosing a Career – Factors to Consider

BLM: Page 1 of 1

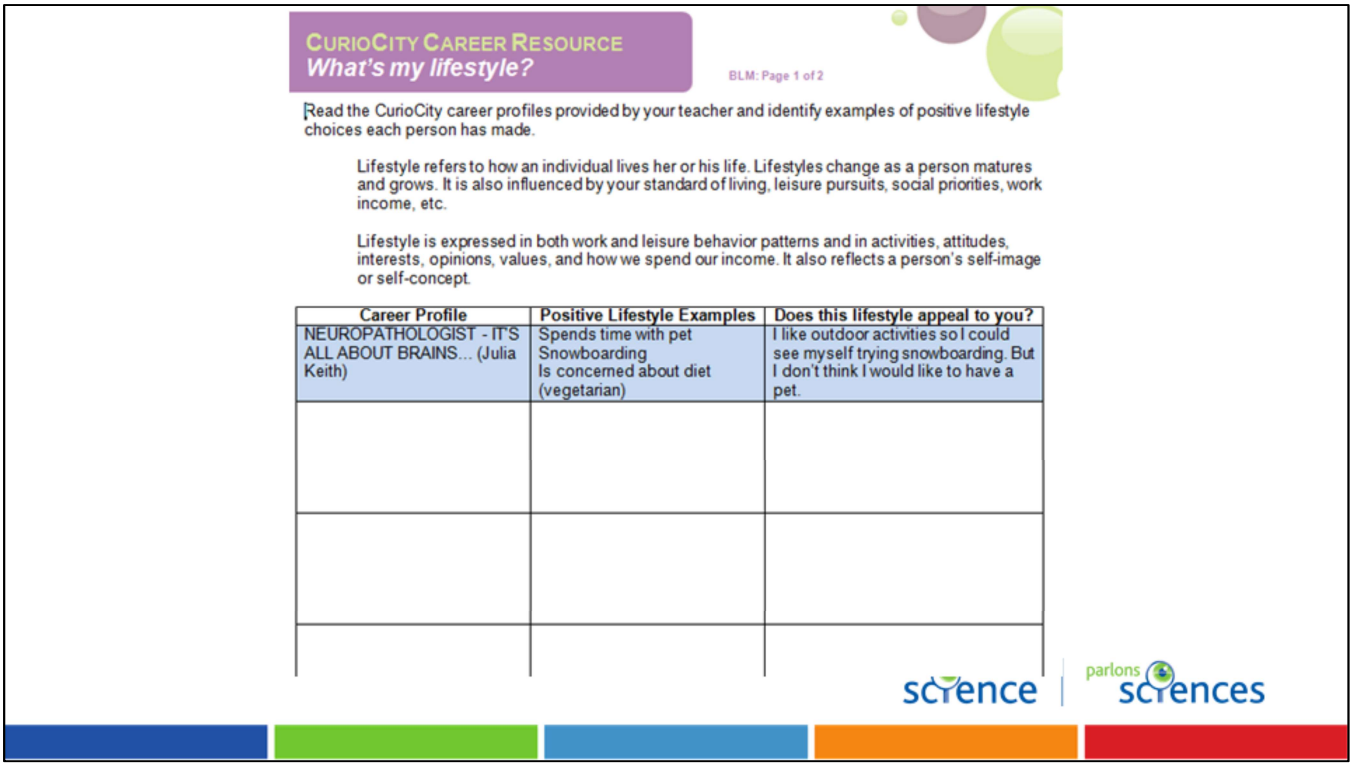
Name:_____ Date:_____ Class:_____

Enter your three factors in the boxes below, on the left. **After you and your partner have discussed** both of your lists of key factors, select the two that you think are most important and put them in the center boxes (one can come from each list or both can come from one list). **Discuss these with your larger group** and select one key factor that the entire group agrees upon.

MY THREE FACTORS	PARTNER KEY FACTORS	GROUP KEY FACTOR

Reflection: Why did your group select this as the most important factor? Do you agree with this choice? Why/Why not?

- Key Ideas Round robin aims to focus students on the key points of importance or that they want to bring forth.
- This starts as an individual activity and then moves into partners and then quads.
- At each stage students are thinking about the issue. When they are sharing their ideas they are also hearing from others. In this way they are learning about other factors they may not have thought about.



CURIOCITY CAREER RESOURCE
What's my lifestyle?

BLM: Page 1 of 2

Read the CurioCity career profiles provided by your teacher and identify examples of positive lifestyle choices each person has made.

Lifestyle refers to how an individual lives her or his life. Lifestyles change as a person matures and grows. It is also influenced by your standard of living, leisure pursuits, social priorities, work income, etc.

Lifestyle is expressed in both work and leisure behavior patterns and in activities, attitudes, interests, opinions, values, and how we spend our income. It also reflects a person's self-image or self-concept.

Career Profile	Positive Lifestyle Examples	Does this lifestyle appeal to you?
NEUROPATHOLOGIST - IT'S ALL ABOUT BRAINS... (Julia Keith)	Spends time with pet Snowboarding Is concerned about diet (vegetarian)	I like outdoor activities so I could see myself trying snowboarding. But I don't think I would like to have a pet.

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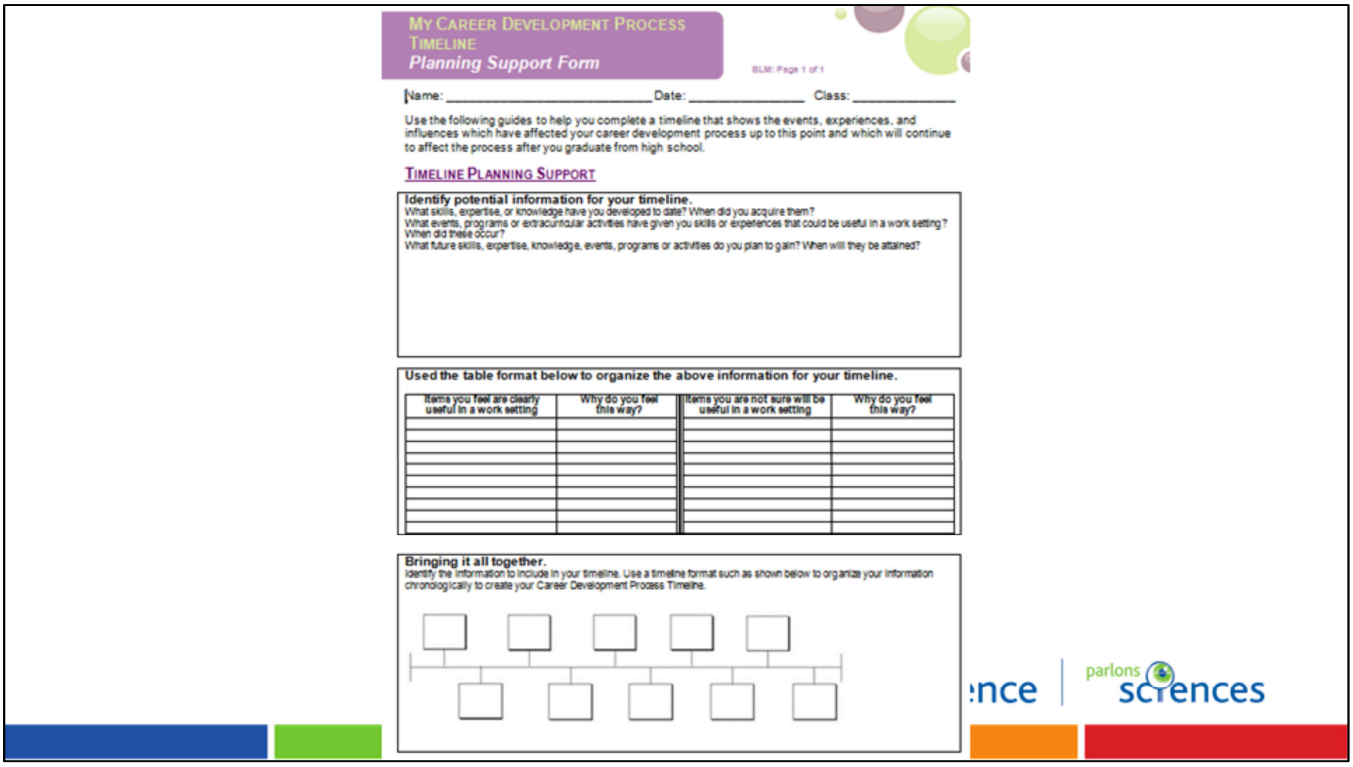
Career development is a lifelong process. In addition to the two Admit Slips, there are other resources to support the use of CurioCity content and to help students begin their own personal career development process. We will look at two more resources. Additional resources are available at CurioCity.

- A hard copy of this BLM should be provided to participants. In the science class, the teacher can initiate a discussion related to lifestyle. What is it? What are different types of lifestyles? Do lifestyles change from younger to older people? Why? What is the role of work in achieving a desired lifestyle? How can work help you have a good lifestyle? How can work get in the way of having a good lifestyle?

- Teachers could select career profiles according to specific needs/topics being discussed in the course. These can be assigned to students as this activity suggest. Alternatively, students could be asked to find 3-5 career profiles related to a career(s) they might be interested in pursuing. They could use these to complete the lifestyle activity.



MY CAREER DEVELOPMENT PROCESS TIMELINE
Planning Support Form

BLM: Page 1 of 1

Name: _____ Date: _____ Class: _____

Use the following guides to help you complete a timeline that shows the events, experiences, and influences which have affected your career development process up to this point and which will continue to affect the process after you graduate from high school.

TIMELINE PLANNING SUPPORT

Identify potential information for your timeline.
What skills, expertise, or knowledge have you developed to date? When did you acquire them?
What events, programs or extracurricular activities have given you skills or experiences that could be useful in a work setting? When did these occur?
What future skills, expertise, knowledge, events, programs or activities do you plan to gain? When will they be attained?

Used the table format below to organize the above information for your timeline.

Items you feel are clearly useful in a work setting	Why do you feel this way?	Items you are not sure will be useful in a work setting	Why do you feel this way?

Bringing it all together.
Identify the information to include in your timeline. Use a timeline format such as shown below to organize your information chronologically to create your Career Development Process Timeline.

- Provide attendees with a hard copy of this BLM.

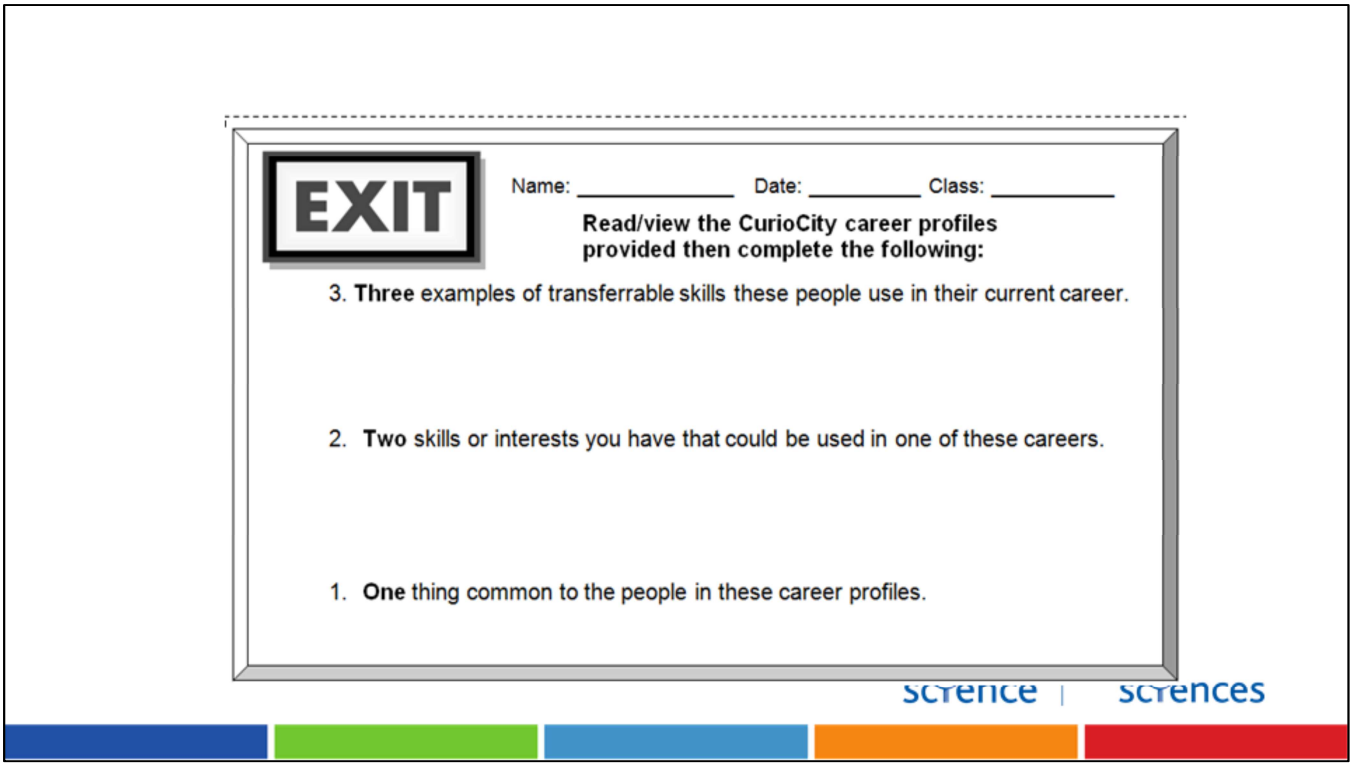
- The intent of this activity is to help students recognize that while formal education and training is an important aspect of entering the world of work, it is only one part. During our lifetime we engage in activities and experiences that provide us with skills and knowledge that are often transferrable to a variety of jobs. These “transferrable skills” are sometimes called “employability skills” and are sometimes as important as the formal education/training the person brings to the workplace. This activity also provides an opportunity for them to visualize themselves as someone who has skills and knowledge that is valuable to entering the world of work.

- For example, playing on a school team provides opportunity to build a variety of skills that may be transferrable to work settings. Team work, dedication to practice, scheduling, able to face failure, stick-with-it-ness, etc. All these are valuable to potential employers. Volunteer activities are another way to develop these skills.

- In this activity, students will list these skills and develop a timeline that will chronicle the development. Students should also include future plans in the timeline; courses they will take as they work towards graduation, post-secondary education or training plans, etc.

- After initial individual work, students could partner with another as they work through the first two components of this BLM. This will provide them opportunity to clarify their ideas, and to receive feedback on the items they feel should be included in the completed timeline.

- Students could be provided with an electronic version at https://explorecuriocity.org/Explore/ArticleId/2824/byo-building-your-own-timeline-2824.aspx.



- Here is an example of an exit slip. This could be used as part of a discussion on transferrable/employability skills. In this activity students would be provided with 3-5 profiles to refer to (or they could select them based on their career interests).

- Exit slips provide opportunity for students to consolidate their learning. It also provide opportunity for self check of understanding (direct feedback to teachers as formative assessment), and reflection time. Teachers can provide specific prompts to target specific information they wish to receive.

- While exit slips are generally thought of as an individual activity there are several variations that can be implemented:

- 1. Students pair up and share their responses with their partner and discuss their responses.
- 2. Completed Exit Slips are collected, shuffled (Card Shuffle) and then passed out to students randomly. Students read the responses on the card and then provide their input/feedback on the response. This could be repeated several times and then the responses are read out loud to the class to discuss.
- 3. A few of the submitted Exits Slips can be read out loud to the class. By having the students give thumbs up or thumbs down, you can get a general picture of the class' understanding of the topic or article.

- Additional suggestions for using exit slips are available at https://explorecuriocity.org/Explore/ArticleId/1497/exit-slip-1497.aspx.

CURIOCITY CAREERS RESOURCE
What skills do I need?

Name: _____ Date: _____ Class: _____

As directed by your teacher, use the CurioCity careers website, to select three career profiles for careers that are of interest to you. After reading each profile, complete the following table by identifying the employability skills and the duties those skills support for each person profiled.

	Employability Skills Demonstrated	Duties Supported	Other Duties that this Skill Supports
Profile 1 Name:_____ Position:_____			
Profile 2 Name:_____ Position:_____			
Profile 3 Name:_____ Position:_____			

Reflections:

1. Do you have any of the employability skills demonstrated in the above profiles? Which ones?
2. Would you like to develop any of the employability skills demonstrated in these profiles? What could you do to develop these skills?

CAREER ADAPTABILITY
What's your Plan B?

Name: _____ Date: _____ Class: _____

It's important to have a planned career path when you graduate. It's also important to have a 'Plan B' in case your original plan doesn't work out. Being aware of different career opportunities in a sector, or across sectors, will give you flexibility and adaptability if your plans don't work out, or when a job doesn't quite measure up to your expectations.

Refer to the career profile(s) assigned to you or your group and use it to find the information below.

Name of person in the profile _____

Current Position

Original Plan

Advice to Others

Programs Studied

Why changed plan

What skills, education or experiences helped this person with their 'Plan B'?

CurioCity Careers Resource
Get Motivated!

Name: _____ Date: _____ Class: _____

Visit the CurioCity careers website and select TWO career profiles from different occupational clusters that are of interest to you.

After reading each profile, complete the following table by identifying the different motivational factors displayed by each of these individuals by providing an example of the factor to support your thinking.

Motivation Factor	**Profile #1** Name:	**Profile #2** Name:
Achievement / Education		
Working Conditions		
Recognition		
Personal / Community Involvement		
Independence On the Job		

1. Which of these motivational factors are most important to you and why?

_____
_____
_____

2. Which of these motivational factors are least important to you and why?

_____
_____
_____

3. Looking at the factors that motivate you personally, do you consider yourself similar or different from those profiled? Discuss.

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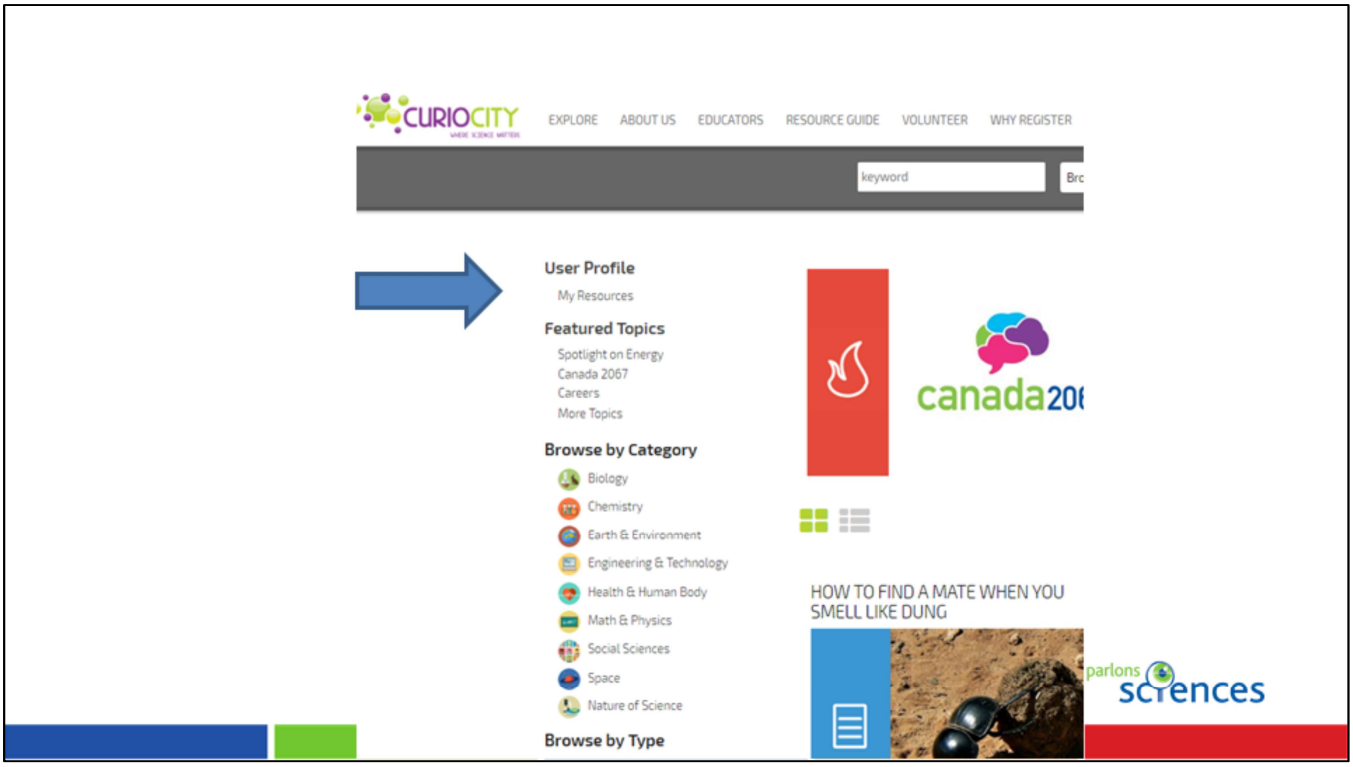
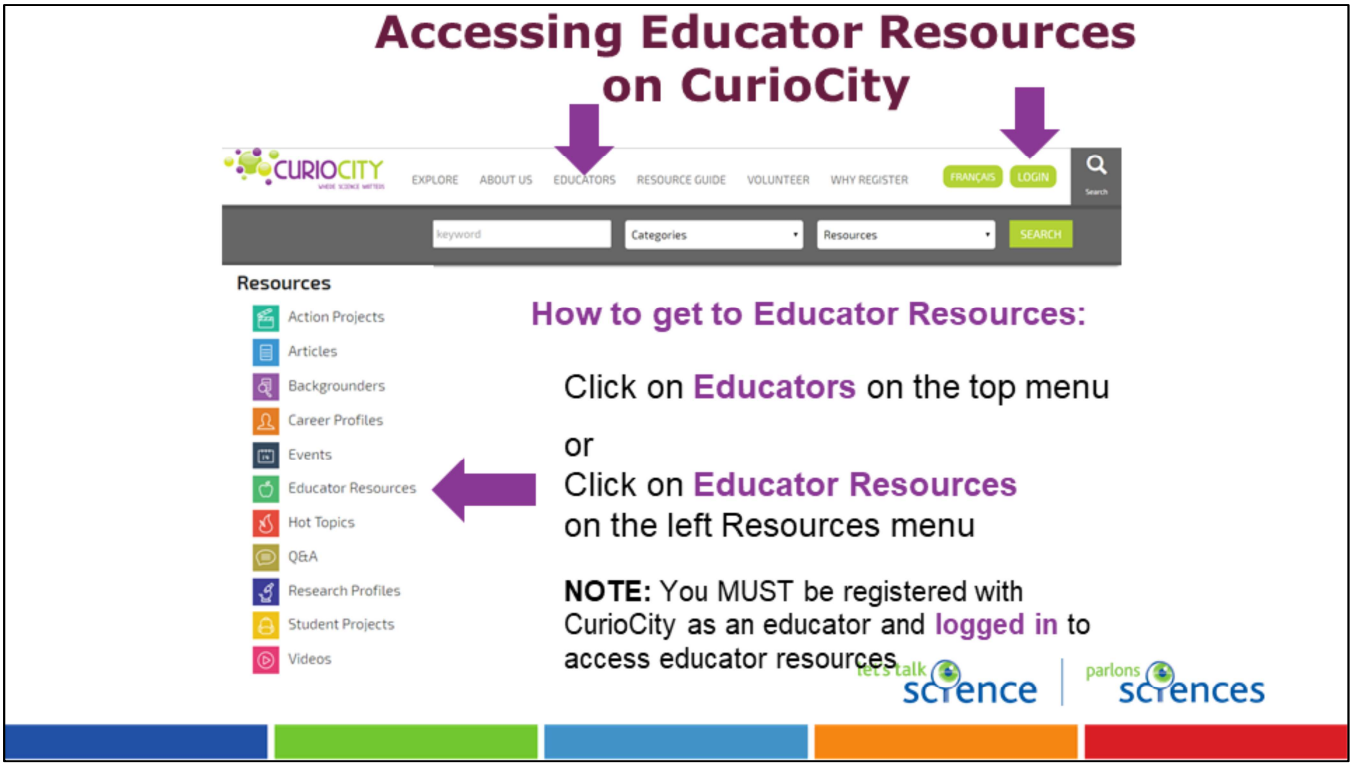


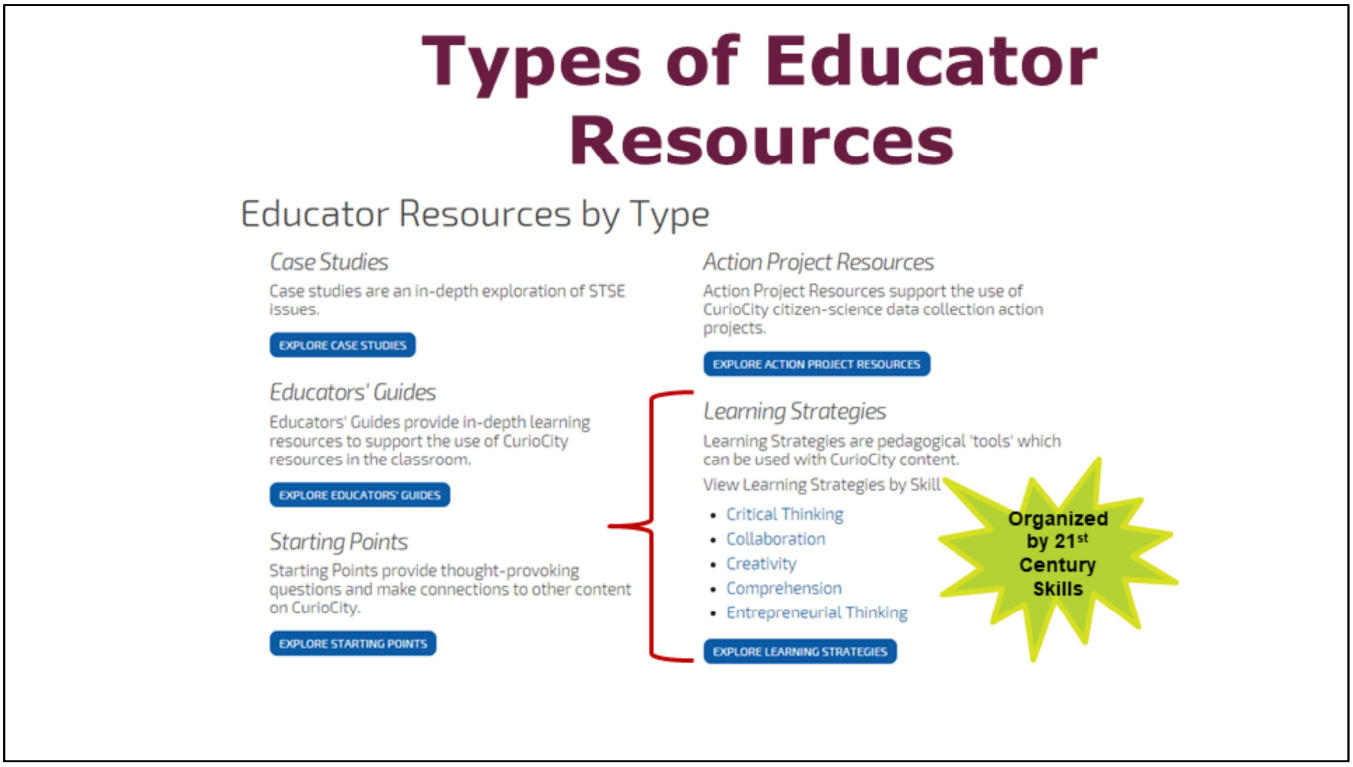
- When you log on you will see the “user profile” in the top left of the explore page. Click on “my resources” to view what you have favorited.

You can organize your shared Favourites in My Zone. For instance, if you're teaching Grade 9 Space, you can create a "Grade 9 Space" list and put all of the CurioCity resources you could use to teach that strand in that list.



- How to get to Educator Resources:
- Click on **Educators** on the top menu

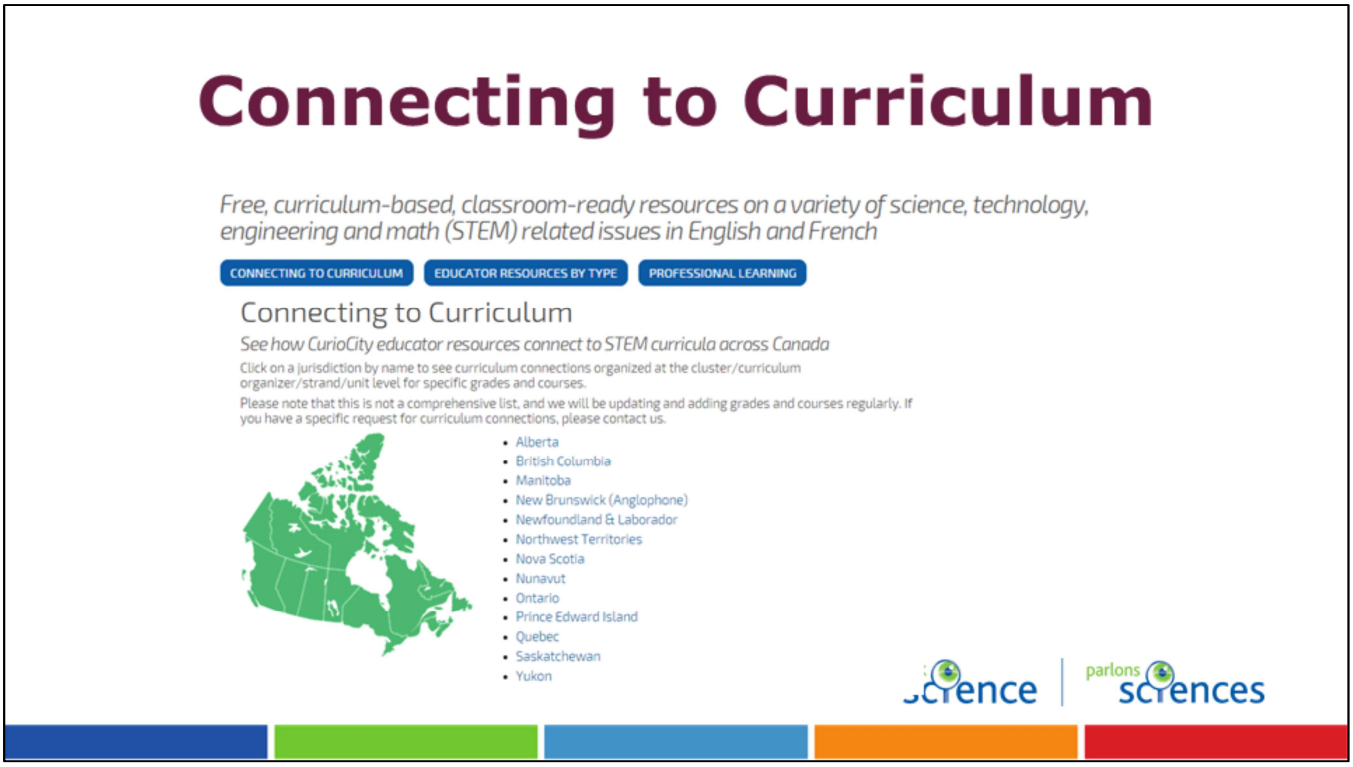
1. Click on the “Resources” button at the lower left.
   - or
   - Click on **Educator Resources** on the left Resources menu
   - **NOTE:** You MUST be registered with CurioCity as an educator and **logged in** to access educator resources



- NOTE: You MUST be registered with CurioCity as an educator and logged in to access educator resources and register for action projects on the site.
- The resources that can be accessed from this page are:

- **Case Studies:** Provide for a deeper study of an issue and help students to develop critical thinking skills as they assess, analyze and evaluate the impact of science and technology-related issues on society and the environment. (MORE and example in **Case Study slide**)
- Educator Guides:
- **Starting Points:** Provide thought-provoking questions for articles and videos (MORE and example in **Starting Points slide**)
- **Action Project Resources:** are student data collection projects. Energy4Travel is featured project (MORE in **Energy4Travel slides**)

- **Learning Strategies:** organized by the 4 C's of 21st Century learning; provides ready-to-use strategies for use with CC content. Also create-your-own templates that can be customized.



- When you click on your province, you get a list of CurioCity resources by grade, course and strand. This is currently only available for science curriculum.

Contact Us

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