

Improving Apprentices' Success in Training and on the Job

Knowledge Sharing Webinar

Jessi Zielke

*ITA Essential Skills: Removing Barriers to
Apprenticeship Continuation and Completion*
Industry Training Authority in British Columbia

Click box to listen
Length: 55:46



Corina Walsh

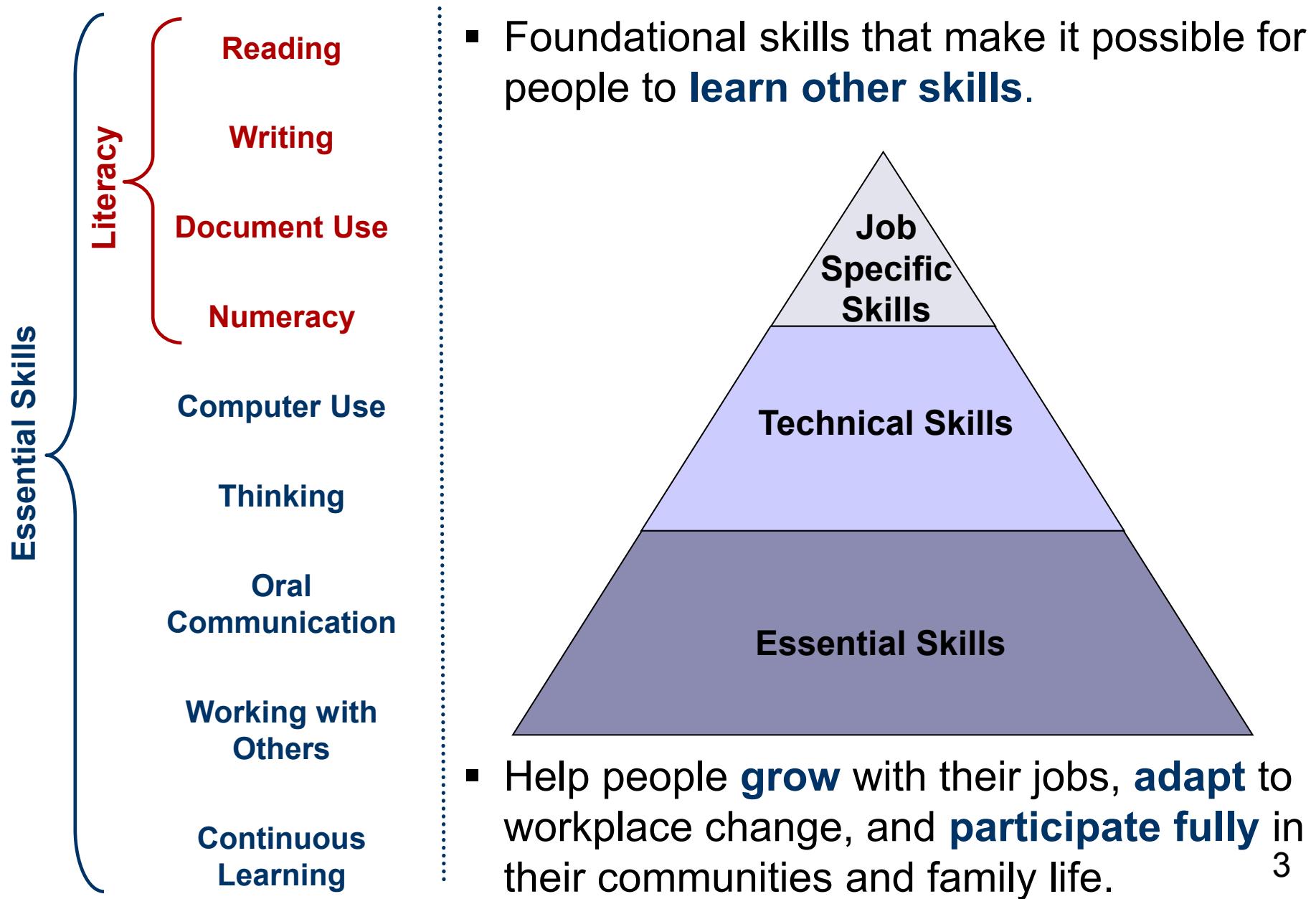
Essential Skills in Apprenticeship
Apprenticeship Training Division of Labour and
Advanced Education in Nova Scotia

Webinar Overview

1. Making the Case: Essential Skills in Apprenticeship
2. Essential Skills Integration into Apprenticeship Initiative
3. *Removing Barriers to Apprenticeship Continuation and Completion, ITA Essential Skills*
4. *Essential Skills in Apprenticeship, Apprenticeship Training Division of Labour and Advanced Education in Nova Scotia*
5. Discussion

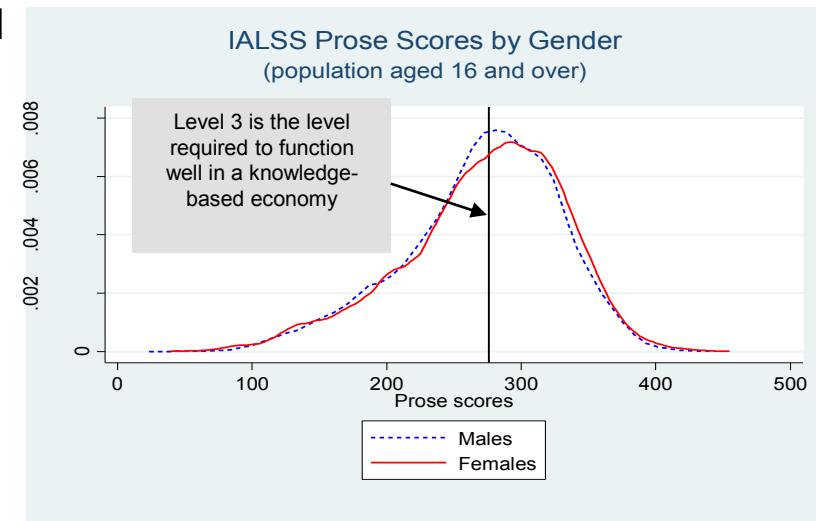


What are Essential Skills?



Understanding Literacy and Essential Skills (LES) in Canada

- The Organisation for Economic Co-operation and Development measures literacy on a five point scale and has determined that level three is the minimum level required to function well in a knowledge-based economy. The following score below this level:
 - 9 million adult Canadians overall, including:
 - Young adults: 2 million new market entrants
 - Immigrants: 2.6 million (40% whose mother tongue is English or French)
 - Aboriginal people: 0.4 million -- More than half (57%) of the adult Aboriginal population
 - Older workers: show significant skills loss after the age of 45 (even when controlling for levels of educational attainment)



Of the 9 million **Canadians** that score below level 3,
6.8 million are **in the labour force** and 5.9 million are **employed**

Industries with Lower Literacy and Essential Skills

Sector/Industry	Share of all workers in sector with low essential skills (< level 3)*	Percentage of people in sector who are employed by small business (< 100)**
Accommodation & Food	53%	66%
Manufacturing	51%	35%
Construction	49%	73%
Forestry	47%	77%
Health care	32%	88%

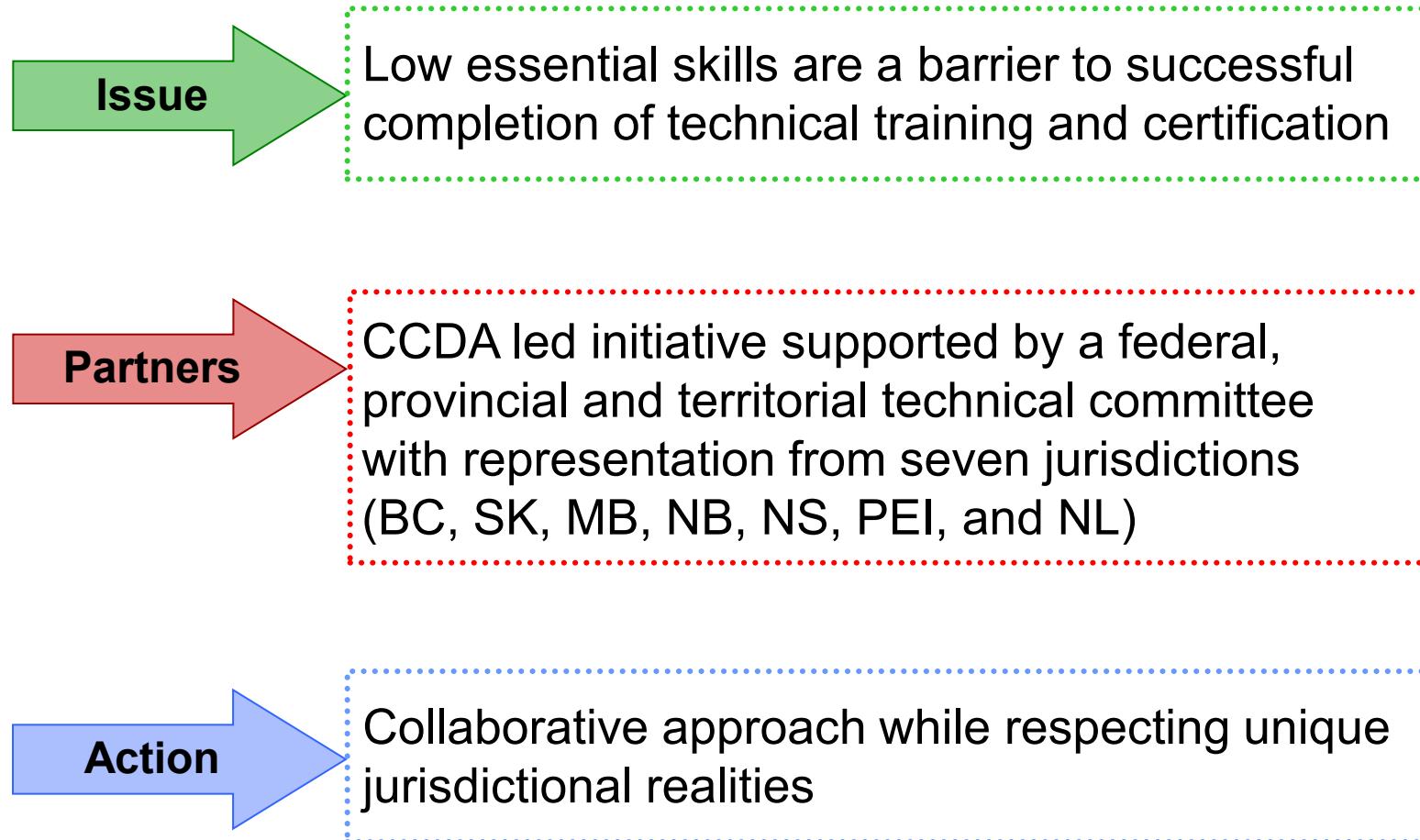
*. Source: International Adult Literacy and Skills Survey, 2003

**Source: Statistics Canada, Survey of Employment, Payrolls and Hours (SEPH), April 2012, and calculations by Industry Canada

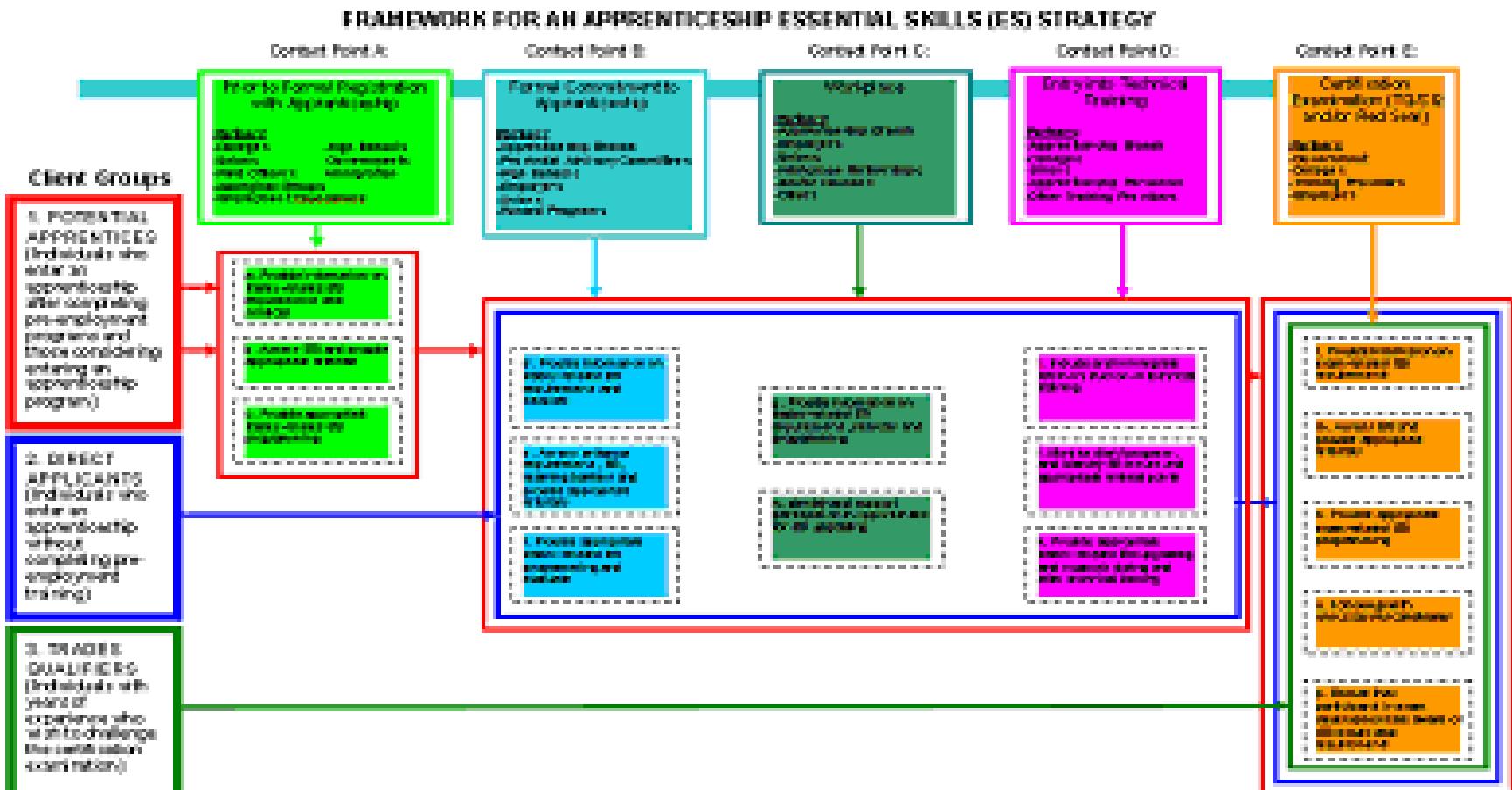
A Need in the Skilled Trades

- Low essential skills identified as a **barrier to success** in apprenticeship training programs.
- Strong evidence linking **essential skills** with success in apprenticeship:
 - **Canadian Apprenticeship Forum (CAF)**
Case Studies (June 2007): Results from seven case studies demonstrate link between Essential Skills upgrading and greater success in apprenticeship training, ongoing career development, and workplace success.
 - **Northern Alberta Institute of Technology Studies (NAIT)**
98% of apprentices who received Essential Skills training completed 1st year technical training – compared to 68% completion rate for apprentices who did not receive Essential Skills training.
 - **Canadian Apprenticeship Forum (CAF)**
Causal Effect of Literacy and Essential Skills on Labour Market Outcomes (2013)

Context



Overview of Initiative



Prior to formal registration

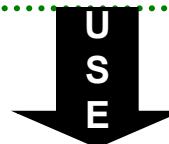
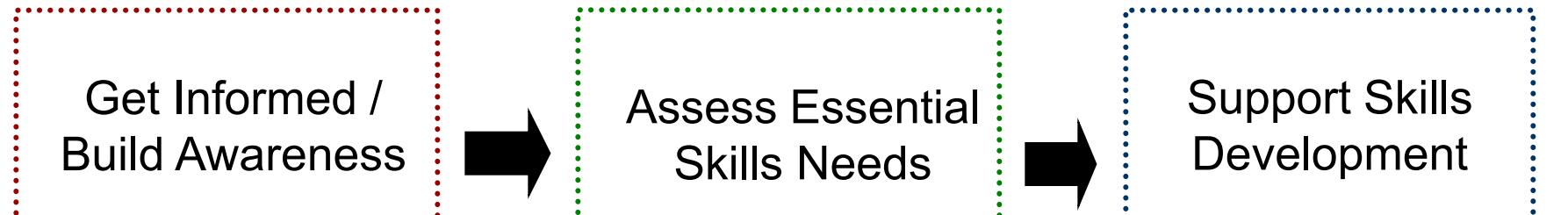
Formal commitment

Entry into technical training

Workplace

Certification examination

Essential Skills Tools for the Skilled Trades



Awareness/Inform Tools + Essential Skills Profiles

Human Resources and Skills Development Canada
Resources humaines et Développement des compétences Canada
Now and Tomorrow Excellence in Everything We Do

Essential Skills and Apprenticeship
Using Essential Skills:
On the Job with a Plumber

Are you starting an apprenticeship in plumbing or are you thinking about a career in this trade? Pursuing a career as a plumber requires strong Essential Skills such as reading, document use, numeracy and critical thinking.

Use this booklet to:

- learn how plumbers use Essential Skills;
- follow the daily routine of a plumber; and
- find out how your Essential Skills compare to those of a journeyperson in plumbing.

How plumbers use Essential Skills

Plumbers use Essential Skills to perform a variety of job-related tasks, for example:

- document use to read assembly drawings and instructions on how to install plumbing fixtures and appliances;
- oral communication to discuss scheduling, system failures or alterations on previously installed fixtures with other tradespeople on a job site; and
- problem solving to solve water flow problems.

Plumbers install, repair and maintain pipes, plumbing fixtures and other plumbing equipment used for water distribution and waste removal. They work in homes, businesses and industrial buildings. Plumbers may be employed by plumbing contractors or by government or public works departments of institutions or organizations; they may also be self-employed.

Essential Skills

Reading	Document Use	Working with Others
Numeracy	Thinking	Computer Use
Writing	Communication	Continuous Learning

Plumber

Human Resources and Skills Development Canada
Resources humaines et Développement des compétences Canada
Now and Tomorrow Excellence in Everything We Do

Essential Skills and Apprenticeship
Needs Assessments

Learning and Training Supports

Human Resources and Skills Development Canada
Resources humaines et Développement des compétences Canada
Now and Tomorrow Excellence in Everything We Do

Essential Skills and Apprenticeship
Using Essential Skills:
Preparing for Your Interprovincial Red Seal Exam

As part of your apprenticeship program, you will get in-class training and you will also write several tests and exams. At the end of your training, you may apply to write the Interprovincial Red Seal exam. Getting a Red Seal allows you to practice your trade in any province or territory in Canada where the trade is deregulated.

Having strong Essential Skills, such as reading, writing and thinking, can increase your chances of succeeding in these exams. The following tips and strategies will maximize these skills by helping you:

- make a study plan;
- study and prepare for your exam; and
- apply what you know on the exam.

Making your study plan

Study plans help you make the most of the time you have to prepare for an exam. A good study plan will help you focus on the topics that will most likely be on the exam and those that you have the most trouble with. Remember that a good plan is only good if you stick to it!

Step 1: Find out which topics will be on the exam and how much of the exam will focus on each topic.

Interprovincial Red Seal exam questions are based on a set of blocks (subject areas or topics), as defined in the National Occupational Analysis for that trade.

Find out the percentage of questions for each block (topic) on your exam by:

- checking with your instructor; or
- going to the Red Seal Web site at www.red-seal.ca, clicking on the link to Interprovincial (IP) Red Seal Examination and selecting your trade.

Note that Red Seal exams:

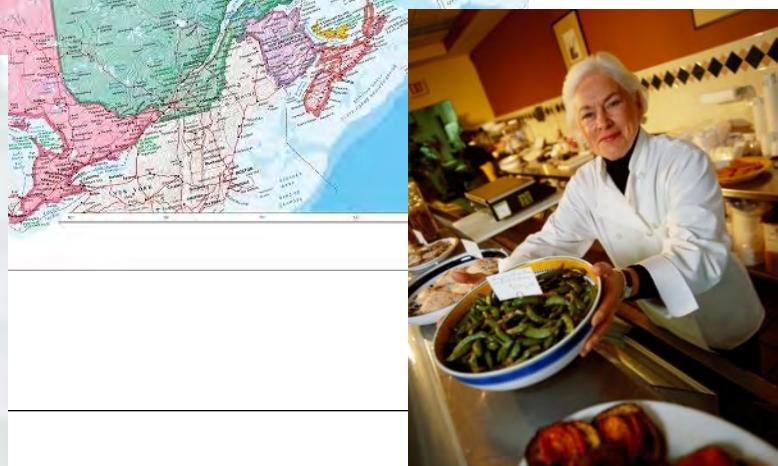
- include 100 to 150 multiple choice questions;
- are subject to time restrictions; and
- have a passing grade of 70%.

Moving Forward

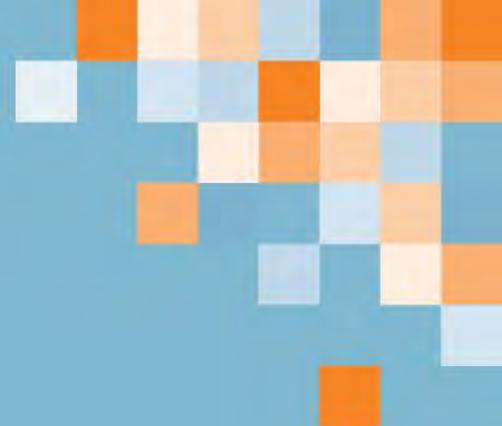
- In 2012, the Essential Skills Integration into Apprenticeship Initiative completed a review to evaluate the effectiveness and efficiency of the initiative and inform future directions.
- Results of the research confirmed:
 - There is a need for a national approach on the issue of essential skills in apprenticeship;
 - There is need for both provincial/territorial and federal involvement; and
 - There is a need to increase awareness and capacity building of intermediaries.
- Activities to address recommendations from the review include:
 - Communications plan
 - Case studies
 - Webinar



Apprentices' Success in Training and on the Job



ita
YOUR TICKET.



ITA Essential Skills

Removing Barriers to Apprenticeship Continuation and Completion

March 2013



ITA Strategic Plan

- **Reduce barriers to participation**

- There are a number of groups that face barriers to participation in the industry training system, including women, immigrants and Aboriginal people.
- Issues such as access to assessment and skill recognition, poor essential skills, the stigma of the trades, culture and socio-economic factors and geography can all impact participation.

- **Address Essential skills deficiencies**

- Research strongly suggests that addressing essential skill (i.e. literacy and numeracy) deficiencies will help remove common barriers to entry into and completion of industry training and certification.



WOMEN IN TRADES TRAINING: NOW IS THE TIME



Initiative funding provided by the Industry Training Authority (ITA), through the Canada-B.C. Labour Market Agreement between the Government of Canada and British Columbia. For more information about the ITA and its programs, visit www.labourbc.ca.

Canada

BRITISH COLUMBIA
The Best Resource

ita
industry training authority



ITA Immigrants in Trades Training

Supporting immigrants to pursue trades training

IMMIGRANTS
TRADES TRAINING

Canada



Initiative funding provided by the Industry Training Authority (ITA), through the Canada-B.C. Labour Market Agreement between the Governments of Canada and British Columbia. For more information about the ITA and its programs, visit www.labc.ca.

DRIVE YOUR FUTURE

With an Automotive Apprenticeship

Dan Baker, Squamish
Heavy Equipment Mechanic - 3rd Year

Get the tools you need for a career in:

- Automotive Service Technician
 - Heavy Duty Equipment Technician
 - Truck and Transport / Commercial Vehicle Mechanic
- ...at most BC Colleges

Or get into one of 23 other trades related to the repair and maintenance of vehicles and engines including cars, trucks, motorcycles, boats, and large equipment.



Start your *Journey in the trades*
Find out how at:
www.itabc.ca



Funding for the ITA Aboriginal Initiative is provided under the Canada-BC Labour Market Agreement.

Essential Skills Project Objectives

1. Develop a trades specific essential skills product suite that can assist apprentices to develop the essential skills they need to succeed at training and work
2. Build on the learning to date and utilize existing resources
3. Develop an effective tool with a modest budget





<http://www.itabc.ca/discover-apprenticeship-programs/ita-essential-skills>



PROJECT BACKGROUND

Phase 1 – May to August 2009

Determine scope/vision for the project through research and consultation

Results

- Personal and customized reports related to trades training level one and two
- Accessibility and usability
- Integration of existing resources
- Self-scoring and cost-free tests



PROJECT BACKGROUND

Phase 2 – October 09 to March 10

Tool Development

- Desired specifications used as guide
- Build team hired
- Validation processes established
- Tool components built
- Tool field-test ready on Feb 1st.



PROJECT BACKGROUND

Phase 3 –March 10 to November 2010

Tool Field Test

- Develop models for delivery with LMA contractors
- Conduct Psychometric analysis
- Tool components built
- Develop roll out strategy



PROJECT BACKGROUND

Phase 4 – December 2010 to present

Refinement and Continuous Improvement

- Conduct Psychometric analysis
- Tool components updates
- Develop additional profiles
- Develop additional questions
- Build awareness and use
- Added 500 point scale to results



- General Information and Trends
- Q11: October 1 to December 31, 2012

- Record number of website visitors (9,250) this quarter. The previous record was 6,000 visitors, established in Q4 (January 1 to March 31, 2010).
- 889 assessments were completed this quarter, which is also a record high. It is more than double the number of assessments completed last year at the same time (Q7). It is five times higher than the number of assessments completed during the last quarter (Q10).
- The vast majority of people who use the website are from British Columbia. However, the proportion of users from other provinces has increased over the past two quarters.
- On average, about 67 percent of all test takers are male. This statistic has remained consistent.
- The number of Aboriginal test takers remains consistent at about 26 percent.
- Q11 had the highest percentage of workers with less than 100 hours of work experience.
- Majority of test takers are still 16-24 years of age, older people are becoming more frequent users. Less than 60 percent of all test takers are now under the age of 25. This is a drop of about 5 percent.
- While test takers still tend to gravitate towards the same occupations, there was a wider variety of occupational selections during the past quarter.
- Normally, the top 10 occupations account for about 75 percent of all selections. This quarter, they represented 65 percent of career selections.



PRODUCT OVERVIEW

What does the Tool do?

1. Provides learners with the Essential Skills requirements for the first two years of ITA technical training... for 50 trades.
 2. Allows learners to compare their skills to the Essential Skills required of various trades
 3. Provides learners with Essential Skills Passports which outline their skills and gaps
 4. Provides learners with personalized learning plans
- Continued...



PRODUCT OVERVIEW

What Does The Tool Do? Continued

6. Allows learners to retest their skills and establish new goals
7. Provides learners with access to a tool they can use long after their LMA training is over
8. Collects vital information about the skills of learners and the impact these skills have on training and apprenticeship success
9. Allows for future expansion... additional trades can be added, more skills can be tested, etc.



PRODUCT OVERVIEW

Product Components

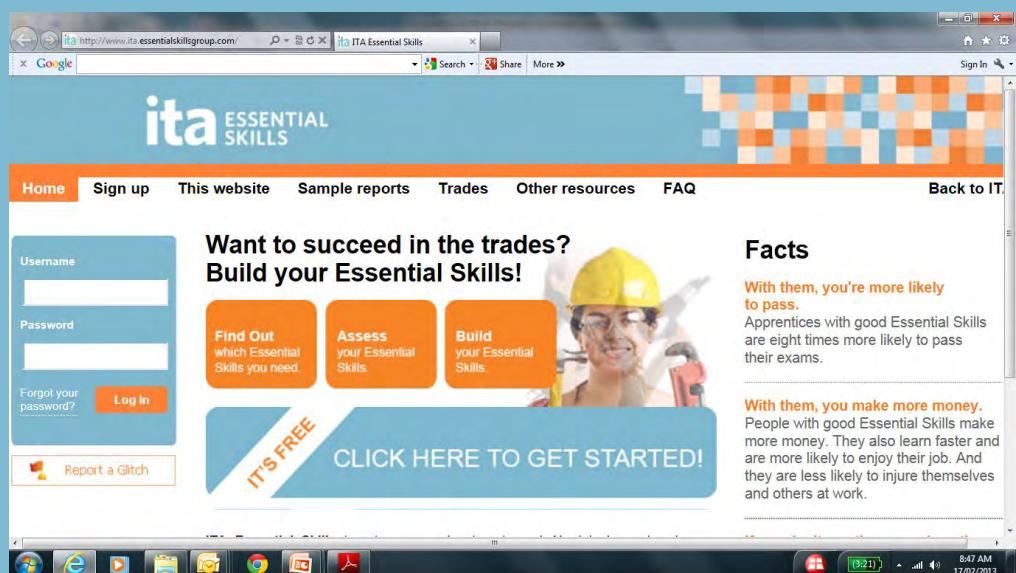
- Website
- Essential Skills Outlines
- Assessments
- ITA Skills Passports
- Personalized Learning Plans



PRODUCT OVERVIEW

Website

- Provides information about the tool
- Access point for reports, tests and resources created by others
- Passwords and logins allow for individual learner accounts



PRODUCT OVERVIEW

Essential Skill Outlines (ESO)

- Created for 60 trades. More can be added at any time.
- Each is fully customized and match ITA program outlines
- List the reading, document use and numeracy skills requirements for first two-years of technical training
- Viewable online and printable



Essential Skills Outline for Each Trade

http://www.itaessentialskillsgroup.com/itaRep/ Essential Skills Outline

Google Search Share More > Sign In

Reading

Ability to understand short instructions and warnings written on signs, labels and packaging. (Complexity: 1)

Ability to understand written instructions about the use of [personal protective equipment](#). (Complexity: 2)

Ability to understand written instructions in safety [bulletins](#) and [material safety data sheets](#). (Complexity: 2)

Ability to understand written manufacturers' instructions about the set-up, use and maintenance of power tools and shop equipment. (Complexity: 2)

Ability to understand regulations that govern occupational health and safety. (Complexity: 3)

Document Use

Ability to identify [icons](#) used in WHMIS, fire control and other hazard management systems. (Complexity: 1)

Ability to interpret warning and directional signs. (Complexity: 1)

Line B: Documentation and Organizational Skills

Windows Taskbar: Internet Explorer, File Explorer, Media Player, Control Panel, Chrome, PDF Reader, 8:49 AM, 17/02/2013



Sample learning enhancement

Example:

Ability to understand written instructions about lockout/tag out procedures.

Ability to locate information such as dimensions, elevations, spans and the locations of fixtures using complex isometric and orthographic drawings.	
Line C: Use Tools and Equipment	
Reading	Ability to understand written manufacturers' instructions about the use and maintenance of hand tools such as chisels and levels.
Trade Mathematics	<h3>Lockout/tag out procedure</h3> <p>Lockout/tag out is a safety procedure that is used to make sure dangerous machines are shut off and not started up again before maintenance or service work is done. A lock is placed on the power switch so it can't be turned on. A tag is placed on the lock to indicate that there is a problem with the machine.</p> 
Arithmetic - Whole Numbers	Ability to add, subtract, multiply and divide whole numbers.
Arithmetic - Fractions	Ability to add, subtract, multiply and divide fractions.
Arithmetic - Decimals	Ability to add, subtract, multiply and divide decimals.
Arithmetic - Percents	Ability to use percent to locate numbers; add, subtract, multiply and divide signed numbers; and complete mixed operations with whole numbers, fractions, percents and decimals.

PRODUCT OVERVIEW

Assessments

- Tests reading, document use and numeracy skills
- Customized to trade families and individual trades
- Test results available immediately
- Adaptive algorithms used to save time and reduce frustration



PRODUCT OVERVIEW

Assessments Continued

- 350 item test bank, each test experience is different
- Timing: 40-80 minutes, depending on trade.
- Can be completed in multiple sessions
- Locator test



Question Example

http://www.ita.essentialskillsgroup.com/index.p ita ITA Essential Skills ita Essential Skills Outline

Google Search Share More > Sign In

Carpenter

Section 1 of 5

Question 9 of 16

[Report a Glitch](#)

Trailer wheels are attached with six wheel nuts.

How many wheel nuts are needed to install 36 wheels?

- 42 wheel nuts
- 152 wheel nuts
- 242 wheel nuts
- 216 wheel nuts

Previous Question Next Question Exit

8:52 AM 17/02/2013



Reading Example

Workers read safety bulletins posted in lunchrooms and work areas. Look at the Hazard Alert.



HAZARD ALERT



Young worker dies when crane tips while moving load on bridge

A crew of workers was using a small carry-deck crane to lower a pallet load of hardware down to a pedestrian/bicycle path under construction. The path runs along the side of a rapid transit bridge spanning the Fraser River. A young worker was operating the small carry-deck crane. He had received a very short orientation before being authorized to operate the crane. His operating experience since the orientation was very limited. The weight of the load had not been determined. As the load swung over the side of the bridge deck, the crane overbalanced, tipping onto its driver's side. The worker was fatally crushed.

Reduce image area

RH03101

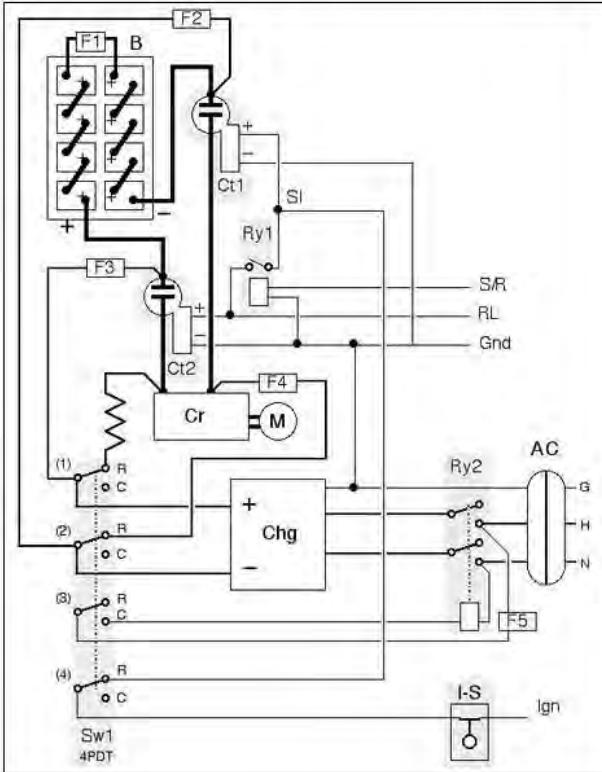
Hazard Alert. © WorkSafeBC. Used with permission.

What was the worker doing when the accident happened?

- loading a pallet of hardware
- receiving an orientation
- standing on the pedestrian/bicycle path
- operating the carry-deck crane
- none of the above

Document Use Example

Workers use wiring diagrams to locate switches and power sources. Use the wiring diagram to answer the question that follows.



Reduce image area

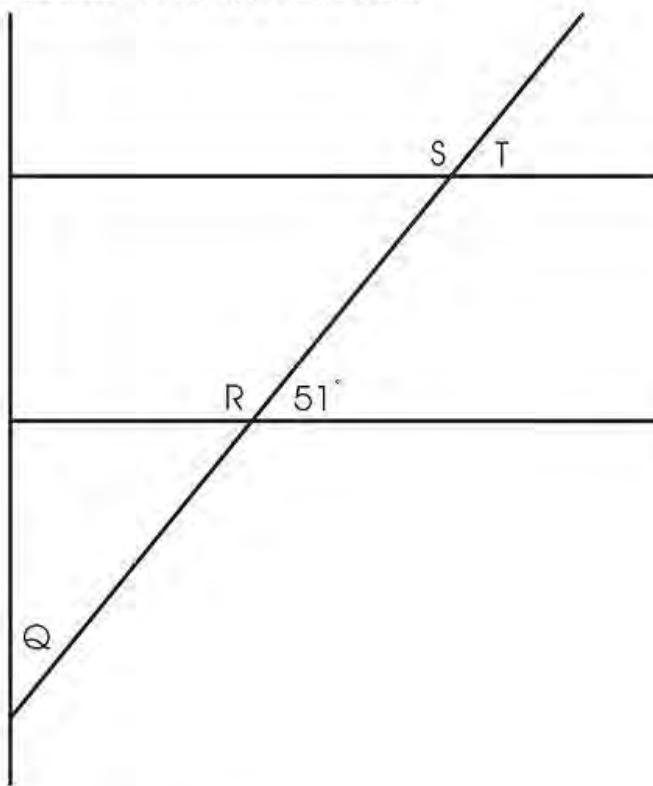
Print

Which switch controls power to Ct1 and Ct2?

- 1
- 2
- 3
- 4

Numeracy Example

A welder is constructing a brace for shelves, as shown below.



Reduce image area

NU(40)

How many degrees is the angle marked R?

- 49
- 39
- 139
- 129



PRODUCT OVERVIEW

Essential Skills Passports

- Present test results
- Report format matches ESO outline
- Simplified reporting
 - ✓ indicates likely skill met
 - ✗ indicates possible skill gap



Result Reports

Log in if you have not already done so.

Go to the top left-hand side of the page and click **Your reports**.

That takes you to the **Your Reports** page. It lists each of the assessments you have completed.

Your Reports

Each time you assess your Essential Skills, a series of customized reports appear that you can view and print.

Trade Name	Essential Skills Passport	Short Learning Plan	Long Learning Plan	Assessment Date
Electronics Technician * <i>Red Seal</i>				10-30-2010
Automotive Service Technician * <i>Red Seal</i>				10-04-2010

Result Reports

Page 1 of 2

Essential Skills Passport

Name: Kristin Street
Trade: Rig Technician - Motorhand
Date: Dec 09, 2012

These are the results of your Essential Skills assessment. They compare the skills you have now with what you need to perform the job you chose. There are separate scores for reading, document use and numeracy (math).

RESULTS AT A GLANCE

This table lists your overall score in each skill tested. There are two scores provided for each skill tested:

- A level, like Level 2, that you what level of skills you have - Level 1 is low and level 3 is high.
- A number in brackets like this (276) which is your score on a scale of 0 to 500.

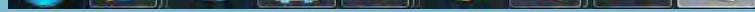
Skill Area	Desired Skill Level	Your Skill Level
Reading Text	High - Level 3 (276 or higher)	Medium - Level 2 (265)
Document Use	Medium - Level 2 (225 or higher)	High - Level 3 (285)
Numeracy (Math)	High - Level 3 (276 or higher)	Low - Level 1 (220)

A CLOSER LOOK AT YOUR NUMERACY SCORES

This table lists the various kinds of math needed for your trade and whether or not you likely have these skills. Here's what the symbols mean:

- ✓ You likely have these math skills.
- ✗ You likely do not have these math skills.
- N/A Not applicable. These math skills were not tested because you don't need them for this job.

Skill Area - Numeracy	Required Skill	Your Outcome
Whole Numbers	Yes.	✓
Fractions	Yes	✓
Decimals	Yes	✓
Percent & Mixed Operations	Yes	✓
Geometry - Basic Skills	Yes	✓
Geometry - Plane Figures	Yes	✗
Geometry - Solids	Yes	✗
Geometry - Advanced Topics	N/A	N/A
Algebra	Yes	✓
Data Analysis	Yes	✗
Measurement	Yes	✗
Trigonometry	N/A	N/A



Result Reports

http://ita.essentialskillsgroup.com/samples/Skills_Passport_Sample.pdf - Windows Internet Explorer

File Edit Go To Favorites Help

Google Search More >

Favorites TradeSET training.gov.au - 80970ACT... Appendix D International F... CETA Construction Educati... TAQA Assessor Courses http://www.sagolingtonz.co.... Recognition of current comp... NZITO New Zealand Indust...

http://ita.essentialskillsgroup.com/samples/Skills_Pass...

3 / 4 173% Find

Assessment Results

Note: Information is grouped into categories (e.g., safety, tools and equipment, work organization, trade mathematics, etc.) that are similar to those found in the ITA Program Outlines and ITA Profiles

Occupational Health and Safety

Ability to understand short instructions and warnings written on signs, labels and packaging. (Complexity: 1)	✓
Ability to understand written instructions in Material Safety Data Sheets. (Complexity: 2)	✗
Ability to understand and interpret written regulations that govern food and health safety. (Complexity: 3)	✗
Ability to identify icons WHMIS and other health and safety hazard symbols. (Complexity: 1)	✓
Ability to interpret warning and directional signs. (Complexity: 1)	✓

PRODUCT OVERVIEW

Learning Plan

- Customized report that lists online resources that can address identified skill gaps
- Lists resources that are available for free
- Learning Plans for list only free resources



Learning Plan with Links to Resources

To open a link, click on the **website address**. It is highlighted in blue and underlined. It takes you directly to the lesson, which you complete at your own pace. The website program does not monitor your progress.

READING RESOURCES

Level 1 - Low Complexity

Source: SkillPlan

Learning Activity: Manual Reference
Direct Link: <http://www.skillplan.ca/measureup/pdfs/NOC-BND-9497-AS2-T1-3.pdf>

Learning Activity: Bus Driver's Handbook
Direct Link: <http://www.skillplan.ca/measureup/pdfs/NOC-BND-7412-AS3-T1-3.pdf>

Learning Activity: Rate Change Problem
Direct Link: <http://www.skillplan.ca/measureup/pdfs/NOC-BND-3411-AS3-T1-3.pdf>

You don't have to do all of the lessons listed. Choose the ones that appeal to you. It's a good idea to do several lessons at each skill level to ensure you have mastered the skill. You are welcome to do the Essential Skills assessment again to see if your skills have improved.

Site Demonstration

The screenshot shows a web browser window displaying the ITA Essential Skills website at <http://www.ita.essentialskillsgroup.com/>. The page has a blue header with the ITA logo and the text "ESSENTIAL SKILLS". Below the header is a navigation bar with links for Home, Sign up, This website, Sample reports, Trades, Other resources, FAQ, and Back to IT. On the left, there is a login form with fields for Username and Password, and links for "Forgot your password?" and "Log In". Below the login form is a "Report a Glitch" button. The main content area features a large call-to-action banner with the text "Want to succeed in the trades? Build your Essential Skills!" and three orange buttons: "Find Out which Essential Skills you need.", "Assess your Essential Skills", and "Build your Essential Skills". To the right of the banner is a photo of a smiling person wearing a yellow hard hat and safety glasses, holding a wrench. A large blue button at the bottom right of the banner says "CLICK HERE TO GET STARTED!" with the words "IT'S FREE" written diagonally above it. To the right of the banner is a section titled "Facts" with two bullet points: "With them, you're more likely to pass." and "Apprentices with good Essential Skills are eight times more likely to pass their exams.". Further down is another section titled "With them, you make more money." with the text: "People with good Essential Skills make more money. They also learn faster and are more likely to enjoy their job. And they are less likely to injure themselves and others at work." At the bottom of the browser window, the taskbar shows various icons for Windows applications like Internet Explorer, File Explorer, and Google Chrome.

http://www.ita.essentialskillsgroup.com/ ita ITA Essential Skills

Google Search Share More > Sign In

Home Sign up This website Sample reports Trades Other resources FAQ Back to IT

Username

Password

Forgot your password? Log In

Report a Glitch

Find Out which Essential Skills you need.

Assess your Essential Skills

Build your Essential Skills

IT'S FREE

CLICK HERE TO GET STARTED!

Facts

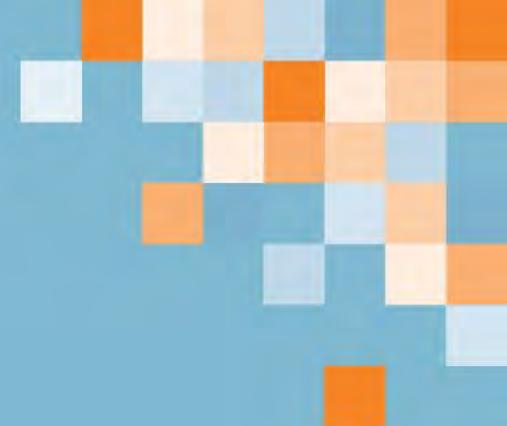
With them, you're more likely to pass.

Apprentices with good Essential Skills are eight times more likely to pass their exams.

With them, you make more money.

People with good Essential Skills make more money. They also learn faster and are more likely to enjoy their job. And they are less likely to injure themselves and others at work.

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YOUR TICKET.



Contact information
jzielke@itabc.ca

<http://www.itabc.ca/discover-apprenticeship-programs/ita-essential-skills>



Essential Skills in Apprenticeship

Apprenticeship Training Division
Nova Scotia Department of Labour and
Advanced Education

Corina Walsh



NS Apprenticeship at a Glance

- 66 designated trades
- 5874 active apprentices
- Entry into Apprenticeship
 - Youth
 - Direct entry (with HS diploma)
 - Pre-employment Grad
- Trade Qualifier route



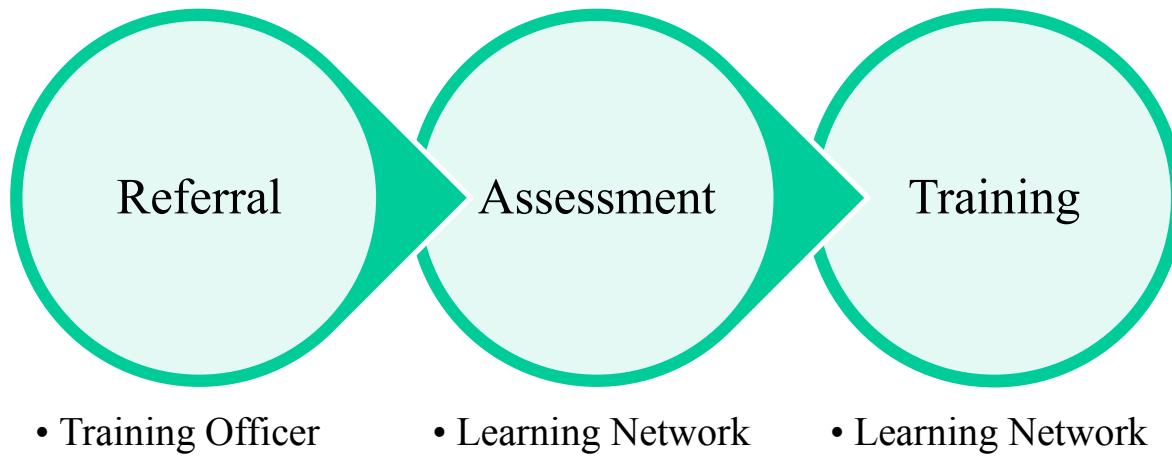
Apprenticeship Essential Skills Initiative

- Initiated in 2008
- Informal, trade specific, written assessment
administered by Division's Training Officers
- No formal training pathways
- Math and Document Use refresher course

Essential Skills Integration into Apprenticeship – Pilot Project

- 2012 – Collaborative initiative between Apprenticeship and Adult Education divisions
- Formal, written assessment
- Training pathways delivered via Adult Learning Network
- Data collection – Answering key questions regarding ES and our apprentices

Essential Skills Integration into Apprenticeship – Pilot Project



Essential Skills Integration into Apprenticeship – Pilot Project

- Training pathways
 - Home study
 - Classroom tutoring
- Forms for data collection

Results to date

- Participation rate slow, but increasing
- 'Pass' rate is high
- Assessment anxiety
 - Information sheet on ES helpful

Going Forward

- Assess all new apprentices
- Assess pre-employment and block / level classes
- Online assessment
- Mandatory assessment and training options

Thank You



walshcm@gov.ns.ca

<http://nsapprenticeship.ca/>

<http://careers.novascotia.ca/>