



# Trade essentials

More skills ... more opportunities

Canada 



Innovation and  
Advanced Learning



More skills ... more opportunities

# AGENDA

- ☐ Overview of Project
- ☐ Outcomes and Objectives
  - Documents Produced
  - Client Interventions
- ☐ Preliminary Data
- ☐ Project Results and Impacts
- ☐ Key Project Challenges and Lessons Learned
- ☐ Dissemination Strategy
- ☐ Q&A

# Purpose of Session

- ❑ **Focus is on Impacts including:**
  - **New Tools Developed**
  - **Partnerships**
  - **Sustainability**
  - **Impacts on Existing Processes/Practices**
  - **Unanticipated Impacts**
  - **The Future**

# What Is Trade Essentials

***Trade Essentials (TE) is a research project funded under the Pan Canadian Innovations (PCII) Initiative and was designed to increase and maintain participation in trades by incorporating Essential Skills and Recognition of Prior Learning (RPL) into the apprenticeship system.***



# Main Objectives

- ☐ To introduce approach into the provincial apprenticeship system.
- ☐ To increase essential skills of clients.
- ☐ To increase the percentage of trade workers who challenge the Red Seal Certification exam.
- ☐ To create a user-friendly, safe, non-threatening learning environment.
- ☐ To test the model and tools on 125 research subjects

# Main Objectives continued...

- ☐ To increase the confidence of research subjects.
- ☐ To create an individual learning path for each client.
- ☐ To develop and share trade skills records, essential skills inventories and essential skills trades curriculum that can be used in other jurisdictions
- ☐ For 13 Trades....

# Outcomes

- ❑ The project has resulted in the development of assessment tools, curriculum frameworks as well as a seamless process to guide an apprentice through the system, regardless of their point of entry.

**These tools include:**

- *Essential Skills Inventories*
- *Essential Skills Curriculum Guides*
- *Technical Skills Inventories*
- *Professional Skills Records*

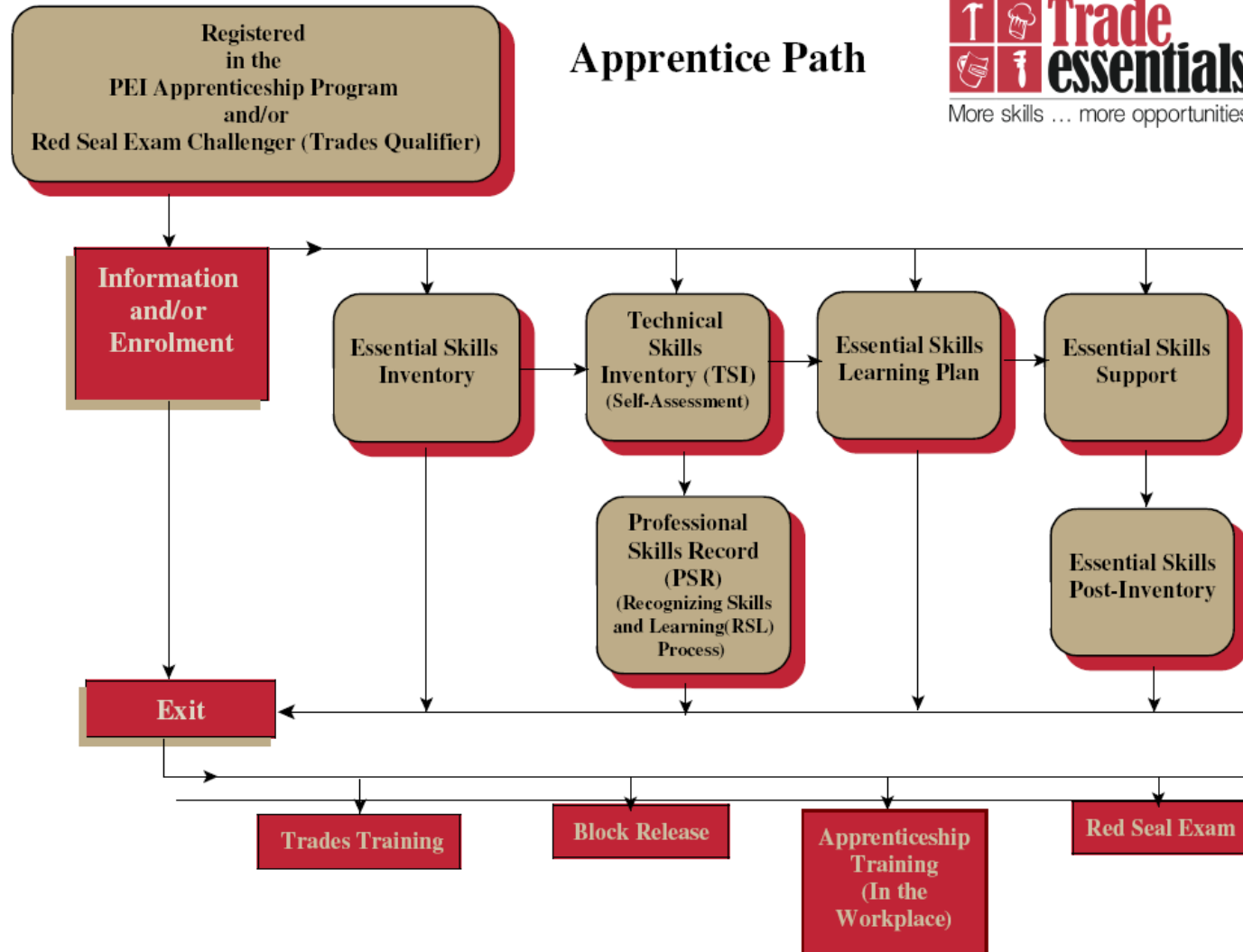
# Indirect Outcomes

- ☐ Database
- ☐ Computerized tools (tentative)
- ☐ Mentoring program



# Model

## Apprentice Path



# Delivery Features for Clients

- ☐ **3 Centres and 1 Classroom dedicated to serving apprentices**
- ☐ **Mobile lab for off-site delivery**
- ☐ **Flexible schedules**
- ☐ **Highly qualified instructional staff**
- ☐ **Learning Resources and Software**



# Overview of Tools

# Validation Process

- ❑ Created teams of licensed journeypersons who have mentored apprentices and/or trades educators
- ❑ Reviewed materials for content and terminology
- ❑ Achieved Consensus on final product



# Essential Skills Assessment

- ☐ Uses trade-specific materials
- ☐ Based on the Essential Skills profile for each trade
- ☐ Provides an alternative to traditional testing
- ☐ Uses an interactive, dynamic approach
- ☐ Assesses apprentices individually
- ☐ Provides information about *how* an apprentice learns

## Most Effective Learning Style/s

| <u>Learning Style</u> | <u>Number</u> | <u>Percent</u> |
|-----------------------|---------------|----------------|
| auditory learner      | 67            | 53.6           |
| visual learner        | 104           | 83.2           |
| kinesthetic learner   | 122           | 97.6           |

# ES Assessment

- ☐ Identifies strengths and weaknesses for the apprentice
- ☐ Builds on what an apprentice already knows
- ☐ Is an assessment *for* learning, not *of* learning
- ☐ Provides immediate feedback for the apprentice which is critical for motivation
- ☐ Provides instructors/tutors and apprentices with the same information
- ☐ Is used as a post–inventory to track improvement and mastery of Essential Skills

# Technical Skills Inventory (TSI)

- ❑ Used the NOA as a foundation
- ❑ Designed so it:
  - can be used as a discussion tool to create a “comfort zone” for tradespeople who are re-entering a learning environment
  - can be used in a group setting
  - can be completed the first night of class
  - can be completed in 15 to 30 minutes
  - requires little or no writing



# TSI Objectives

- ❑ Introduce Trade Essentials (TE) program participants to an overview of the blocks, tasks and sub-tasks of their trade
- ❑ Introduce participants to the self-assessment process
- ❑ Provide the TE instructor with information to guide them in choosing contextualized materials and technical resources to support the essential skills learning needs of their clients
- ❑ Help TE clients create a learning plan to fill any technical skills gaps they identify



# Essential Skills Curriculum Frameworks

- ❑ Frameworks created for **six** skills in 13 trades
- ❑ Based on the Essential Skills profiles and the NOA
- ❑ Identifies the Essential Skills necessary for success in the trade
- ❑ Provides specific examples of how these skills are applied in each trade
- ❑ Identifies trade-related resources
- ❑ Allows for transfer of learning (from the job to the test; from the classroom to the job)



# PSR Objectives

- ❑ Create a trades assessment tool for the workplace that encompasses the whole scope of the trade
- ❑ Enable the transferability of recorded and verified skills and learning so:
  - the journeyperson does not have to spend time and money re-teaching
  - the apprentice does not have to spend time re-learning what they already know and can do

# PSR Objectives

- ❑ Build flexibility into the tool so that, in addition to serving apprentices in the workplace, it can be used to track skills and develop learning plans for:
  - Immigrants
  - learners in post-secondary programs
  - high school students, and
  - award recognition for prior learning in the apprenticeship process

# Teamwork



# RESULTS

# Preliminary Results

- ❑ 150+ clients were assessed
- ❑ 125 were research subjects (first 125 to qualify and assessed)
- ❑ 106 attended interventions
- ❑ 74 challenged the Red Seal exam
- ❑ 48 achieved Red Seal certification
- ❑ 65 % pass rate on IP exam
- ❑ 89% pass rate for Block Exams (Cooks)



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# Subjects - 125

☐ Gender 94% Male

☐ Age:

- 25 were age 20 to 29 years
- 24 were age 30 to 39 years
- 42 were age 40 to 49 years
- 28 were age 50 to 59 years
- 2 were age 60 or more
- and 4 did not respond to this question

☐ Four intervention phases

- Ongoing – likely 5

# Spreading the Word...

- ❑ Data indicates that the most effective modes of information transmission were the Trades Essentials Staff (36%) and word of mouth (34.4%).
- ❑ This finding is not surprising in Prince Edward Island where people are from close knit family and community units.

# Employment Status

- ❑ Clients were also asked to indicate their current employment status. Of the clients, 113 (90.4%) were working for someone else or themselves (self-employed 20.8%) and 2.4 percent were seasonally employed.**

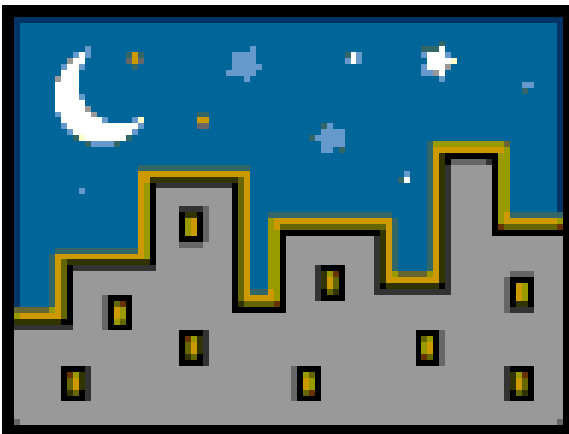
# Education

- ❑ **47 (37.6%) of the clients had attained high school or high school equivalency, and 55 (44.0%) of the clients had attained more than high school education.**
  - Illustrates that having a high school education does not always correspond with having the essential skills required for a trade.
  - This finding does not necessarily mean that what is learned in high school is deficient, but, perhaps, that in a socially complex and highly technological age, the knowledge required to be successful in a trade is becoming more specialized.
- ❑ **82 (65.6%) of the clients had been out of school for more than 15 years.**

# Preferred Time



**94% evenings**



# Hours of Intervention

- ❑ A higher percentage of clients who received between 40.1 and 80.0 hours of intervention passed the Red Seal Certification Exam. This may suggest that:
  - 40 and fewer hours of intervention are not sufficient to learn the necessary skills required to pass the exam
  - those who required more than 80.0 hours of intervention may be in a high deficit position in terms of essential skills and a program of this nature may not meet their needs,
  - those who required more than 80.0 hours of intervention may have a learning disability that has not been diagnosed, and/or
  - those who required more than 80 hours of intervention were not motivated to learn.

# Red Seal Outcomes

## ☐ Years Registered as an Apprentice:

- The data indicated that those who were registered between 6 and 15 years had a higher success rate.

## ☐ Education

- The results indicated that a higher percentage of clients with more than high school education passed the Red Seal Exam compared to those with high school or less.



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# Impact on Essential Skills Gaps

- ❑ Are these goals different than those of achieving certification?
  - Uncertain
  - Positive improvement results

| <b>Intervention<br/>Number 1<br/>(106 registered<br/>and 98<br/>completed )</b> | <b>#<br/>Recommended<br/>for<br/>Training</b> | <b>#<br/>Improved<br/>Post-<br/>Assessment</b> |
|---|---|--|
| <b>Numeracy</b>   | 105   | 85   |
| <b>Technical<br/>Reading</b>  | 55  | 34   |
| <b>Document Use</b>   | 72  | 49   |

# Considerations in Learning Environments

- ☐ Tendency to gravitate towards Red Seal as goal of activity
- ☐ Impact of Test Anxiety
- ☐ Group Pressure to write
  - “try it out”
- ☐ Focusing on individual needs and group needs

# IMPACTS

# Trout River

- ❑ Trout River Industries manufactured its first live bottom trailer in 1999.
- ❑ The Trout River plant and head offices are located in Coleman, Prince Edward Island Canada.
- ❑ TE worked with Welders...
  - Illustrates impact

# Apprenticeship Division

- ☐ Exploring the opportunity to offer pre-block release in the 9 essential skills to tradespeople who are finding they might be rusty and some refresher in these areas would allow for a stronger block release experience.
- ☐ Working with PEI Population Secretariat to explore web portal -Technical Skills Inventory Self Assessment.
- ☐ Discussion with PEI Newcomers Association about incorporating assessment processes specific to trades into their procedures.
- ☐ The project has provided new tools, introduced a way of dealing with challengers who had been previously unsuccessful.
- ☐ A database structure used to enter registrants and produce reports on outcomes.



# Provincial/Regional

- ☐ **Newcomers Association: provision of a tool for determining skills sets of newcomers.**
- ☐ **Mentoring pilot under development and slated for delivery in January.**
- ☐ **Provincial K-12 Education : Exploring adopting/adapting of ES inventories for use in determining aboriginal education outcomes.**
- ☐ **Trucking Sector Council interested in developing tools for sector/ongoing research in partnership with the Province.**
- ☐ **Incorporation into the Atlantic Apprenticeship Council (AAC) 3-year strategic plan.**

# Provincial/Regional continued...

- ☐ **Trout River Industries:** Trade Essentials intervention leads to ... GED, Block Release, Computer Training.
- ☐ **Provincial Correctional Centre:** Trained assessor for corrections site and tools were used with some inmates.
- ☐ **Private Colleges:** adopted tools for use in ongoing programs, including pre-apprenticeship.
- ☐ **Holland College:** Explored flexible delivery. Currently looking at ways of incorporating into front end of trades students' learning path and in block training.
- ☐ **Developed a protocol for training developed a a delivery roster.**
- ☐ **Number of immigrants using centres to prepare for block exams, etc.**





*Trout River*

"We will serve our community by respecting people and providing innovative solutions."

More Skills. More Opportunities.

# National

- ❑ **Manitoba: Development of drop-in centres influenced by Trade Essentials model**
- ❑ **Article published in CAPLA's national newsletter "The Hub" was picked up by the National Adult Learning Database (NALD) as a news item National Essential Skills Groups - Tool sharing across network**
- ❑ **Canadian Association for Prior Learning Assessment (CAPLA). Because of our tools in the Prior Learning Assessment field our tools will be highlighted on their Recognition For Learning site.**

# National continued...

- ☐ **Saskatchewan Canadian Homebuilders Association (SK) interested in looking at and adapting some information.**
- ☐ **Numerous provincial jurisdictions expressing interest in receiving tools/presentations.**
- ☐ **Invited to present at special meeting of CCDA (Canadian Council of Directors of Apprenticeship) in Ottawa this February**

# Evidence

- ☐ Letters
- ☐ Video
- ☐ Unsolicited Requests
- ☐ Meetings
- ☐ Invitations to Present (unsolicited)

# General Observations

- ☐ Essential Skills are seen as barrier to success
- ☐ Many trades people, although successful in their career, lack confidence in their ability to learn; Test anxiety is a big issue
- ☐ Adults learn from each other and benefit from the support of their peers
- ☐ Contextualized course materials make learning easier
- ☐ Participants were happy with the Center, the flexible hours and the access to learning material
- ☐ Job mobility was not a key motivator for participation

# PROJECT COMPLETION

- ☐ Publish Reports
- ☐ Products
- ☐ Training Materials
- ☐ Dissemination
- ☐ Sustainability
- ☐ Continuing Service
- ☐ Drop-in Centres

# Challenges and Lessons

- ☐ **Balancing demands of research project with delivering a service to the community**
- ☐ **Division in high state of transition**
- ☐ **Assigned consultants changing**
- ☐ **Preparation of instructors on best practices using TE approach**

# Challenges and Lessons

- ❑ Offering computer training separately is a better approach
- ❑ The right instructor is the key to a successful program; finding the right instructor is one of the biggest challenges
- ❑ Core focus of participants on Red Seal



# Applications Beyond Immediate Scope

- ☐ Learning Approach and tools can be adapted to
  - industry or college setting
  - pre-apprenticeship programs
- ☐ Build in Cultural Sensitivity
- ☐ Examine learning outcomes in a non-threatening manner
- ☐ Newcomers
- ☐ Establishing learning paths
- ☐ Career Development
- ☐ Mentoring

# Sustainability

- ❑ Apprenticeship, Workplace Learning Inc. and Holland College
- ❑ Discussions under way to continue providing these services with a broader scope:
  - Preliminary budget in preparation
  - Initial estimates 100 clients per year
    - ❑ Those in block training
    - ❑ Previous Red Seal Challengers
    - ❑ General skilled/employed trades workers

# The Last Word(s)...