The Value of Education.

“Fundamentals for Improving Workplace Productivity, Quality and Safety Through Essential Skills”

Builder’s & Renovator’s Industry Trade Forum

Saskatoon

April 7, 2009

Presented by: Lou Charlebois, CHRP Essential Skills Consultant

SI AST
The Value of Education

- People are the common denominator of progress.
- No improvement is possible with unimproved people whereas advance is inevitable with liberty and learning.
- From manufacturing to high tech, productivity comes from communication efficiency.
The Value of Education

- The knowledge intensity of Canadians’ jobs is growing
- That growth is at an ever increasing rate
- Changes in production technologies and in the nature and organization of work in general have fuelled the demand for workers equipped with solid essential skills
Think

CHANGE

Adapt and thrive or fall behind

John Murphy
The Policy Challenge:

- What proportion of Canada’s workers have the essential skill levels to compete in global markets?

- Where jobs are lost to international competitors, do the laid off workers have the essential skills required to get highly paid, stable employment?
The Value of Education

If you had only heard the term “Essential Skills” and knew nothing about it, outside the definition of these words, what would be the skills you would come up with?
**WHAT ARE ESSENTIAL SKILLS?**

- **“enabling”** skills that help people perform tasks required by their jobs.
- **skills that provide workers with a foundation for learning other skills.**
- **skills that enhance the ability to adapt to change.**

Workplace essential skills are the Velcro to which other training sticks.
The 9 Essential Skills

- Reading text
- Document Use
- Numeracy
- Computer Use
- Working with others
- Writing

- Oral Communication
- Continuous Learning
- Thinking Skills
  - problem solving
  - decision making
  - job task planning
  - critical thinking
  - use of memory
  - finding information
International Adult Literacy Survey (IALS) & Adult Literacy and Life Skills (ALLS) Survey

- Surveyed adults in 22 countries to determine literacy levels
- Described literacy in three domains... prose literacy, document literacy, and quantitative literacy
- Used a 500 point scale to measure literacy skills in each of the three domains
- Calibrated 500 point scale into five levels
Measuring Complexity Using IALS 500 Point Scale & HRSDC Five-Level Scale
EVOLVING SCALES

- Levels of complexity are a rating tool by which all skills are measured.

- Complexity levels from 1 (basic tasks) to 4 or 5 (advanced tasks) are assigned to example tasks performed by a worker in a specific job.
BACKGROUND

Heavy investments are made in the area of Essential Skills because of:

1. Canada’s skill deficit
2. Their impact on Canada’s GDP
3. Their impact on safety
4. Their impact on employment
5. Their impact on earnings
6. The need for valid measure of workplace competency

Essential Skills are ESSENTIAL!
22 country survey (ALLS) determined the literacy levels of adults and the impact of literacy on economic success and global competitiveness. Used the IALS 5 level scale to measure proficiency.

Key Findings:

- Literacy is firmly linked to economic success and productivity.
- Changing workplace requires higher levels of literacy.
- Respondents scoring <3 out of 5 lack the skills needed to transfer existing knowledge to new environments.
- Many Canadian adults have limited literacy skills.
A significant portion of Canadians are at the two lowest levels in three important essential skill areas.

2. IMPACT ON CANADA’S GDP

Research indicates that an 1% (5 point) gain in Essential Skills scores, on a per worker basis, would increase Canada’s GDP by 1.5%. This gain would be realized year-after-year.
3. IMPACT ON SAFETY

Research conducted by groups such as the Canadian Trucking Human Resources Council shows that workers with adequate levels of essential skills are 58% less likely to be involved in a workplace accident.

One reason to test for three essential workplace skills

- You can read. You can do basic math. You can understand workplace documents. But how can you be sure your new employees have these essential workplace skills?
- A high school diploma is not an adequate screening tool. Some have the skills needed, others do not.
- When is the best time to find out they are missing essential workplace skills? The time to do it is not when you are struggling to implement new technologies, but when you are battling with the paperwork needed for quality certification. And it is too late after you have had a workplace accident.
- The time to test for essential workplace skills is now.

How: Require your job applicants to be assessed using TOWES, Canada's Essential Credential.

TOWES is a major national initiative that is supported by the government of Canada and over 300 of the leading community colleges across Canada. It is a sophisticated approach to helping employers manage their workforce.

To find out more and see how you can call on your member colleges to help you benefit from TOWES please go to www.collegescanada.ca or www.towes.ca.

Canada CONNECT Department of Employment and Immigration

16
4. WORKPLACE DEMANDS FOR ESSENTIAL SKILLS

Jobs for which no post secondary education is necessary increasingly require a minimum of Level 3 (e.g. cashier, security guard or labourer).

4. IMPACT ON EMPLOYMENT

5. IMPACT ON EARNINGS

- Essential Skills are a passport to a higher paying more satisfying job.
- Increased Job Security.
- Decreased employee turnover.
6. NEED FOR A VALID MEASURE OF WORKPLACE SKILLS

Many employers use academic credentials, such as the Grade 12 Diploma, to screen job applicants. This practice is risky because:

1. There is no “national” standard for a Grade 12; quality of education varies from region to region
2. Secondary education has become “political”
3. The academic nature of the content is different from what is found in the workplace.
WHERE ESSENTIAL SKILLS FIT WITH TECHNICAL SKILLS

- Essential Skills
- Occupation Specific Skills
- Employer Specific Skills
TOOLS

- Human Resources and Social Development Canada (HRSDC)
- Assessments
- Learning Resources
HRSDC Essential Skills Research Project (ESRP)

- Federal Government devised process to determine the Essential Skills required of jobs using the 5 level scale

- Essential Skills requirements for over 300 NOC job classifications have been determined; over 4500 interviews across Canada were conducted.
Where do you find this information?

Web Address: www15.hrdc-drhc.gc.ca
(www.red-seal.ca)
USES OF ESSENTIAL SKILLS PROFILES

Essential Skills Profiles can be used to:

1. Develop and refine job descriptions
2. Recruit and place employees
3. Identify training needs
4. Succession plan
5. Other
TOWES ASSESSMENT

 ✓ Assesses the reading, document use and numeracy skills of test takers
 ✓ Test results are comparable to national occupational standards established by the government.
 ✓ Uses authentic workplace documents and actual re-created tasks to test skills.

www.towes.com
Assessments

- **TOWES** includes assessments for testing essential skills at various levels.
- Tests contain problem sets relevant to a broad range of occupations.
APPLICATIONS
The CTHRC has developed a series of Essential Skills learning modules aimed at improving the abilities of truck drivers to carry out their jobs safely.

Visit [www.cthrc.com](http://www.cthrc.com) for more information.
APPLICATI ONS - USING ES WITHIN THE TRUCKING INDUSTRY

Challenge

1. Professional drivers have low levels of Essential Skills
2. Industry has high turnover rates
3. Driver insurance rates are escalating
4. Safety and environmental standards are increasing
APPLICATIONS - USING ES WITHIN THE TRUCKING INDUSTRY

Essential Skills Solution

The Canadian Trucking Human Resource Council (CTHRC) has:

1. Set minimum Essential Skills entrance standards for CTHRC approved training
2. Developed custom trucking versions of TOWES
3. Developed industry-specific Essential Skills learning modules

Graduates from CTHRC approved training schools receive a 15% reduction in insurance premiums.
APPLICATIONS - USING ES WITH ABORIGINAL POPULATIONS

Challenge

1. Low Aboriginal workplace participation rates affecting employers’ ability to meet production and equity targets

2. Aboriginal populations are generally less well educated
Essential Skills Solution

Diavik Diamond Mines (NWT) uses ES approaches that include:

1. Testing all production workers after being hired, using TOWES
2. Using test results to place workers at jobs suited to their essential skills abilities
3. Providing all workers with on-site Essential Skills training during non-work hours
4. Promoting workers to higher pay, higher skill jobs as their Essential Skills improve
APPLICATIONS - USING ES WITH IMMIGRANT POPULATIONS

Challenge

1. Language issues can slow the speed at which immigrants transition into the Canadian labour market.
2. Foreign trained immigrants may not have their credentials recognized in Canada.
3. Immigrants are ethnically diverse and their prior training and education may not directly match the requirements of Canadian employers.
RESULTS OF ES APPROACHES AT MINAS BASIN PULP & POWER

Outcomes

- Paper machine efficiencies exceed 80%
- Absenteeism dropped over 40%
- More that 25% of employees have benefited from Workplace Training
- 75% obtained GED or completed all 5 components
- 13 employees passed a math refresher course
- Accident rates dropped from 19.88 in 2003 to 1.5 in 2004
"Our Local union fully supports the TOWES testing process. CAW Local 103 and Ontario Northland have included TOWES as part of our process for the hiring of all of our Skilled Trades Apprentices since spring 2005. TOWES is a fair, non discriminatory and accurate assessment of an individual's ability in reading, document usage and numeracy. We believe it is a valuable tool in our assessment process."

Brian Kelly
President
CAW Local 103
APPLI CATIONS – USI NG ES WI THI N APPRENTI CESHIP TRAI NI NG

Challenge

1. Only a small fraction of workers complete their apprenticeship programs
2. Low completion rates are affecting employers’ ability to meet production targets, succession plan effectively and control costs
3. Most sectors are experiencing severe skilled labour shortages
4. Costs to train apprentices are rising rapidly
APPLICATIONS - USING ES WITHIN APPRENTICESHIP TRAINING

Essential Skills Solution

NAIT, Canada’s largest apprenticeship trainer, uses ES approaches that include:

1. Using TOWES to determine which 1st year carpentry apprentices lack the required level of ES
2. Offering help to those lacking the required Essential Skills

The following two slides show how NAIT’s use of Essential Skills has lowered drop-out rates and training costs.
## Carpentry Completion Rates
### 2002-2003 Field Study

<table>
<thead>
<tr>
<th>Group</th>
<th>Class Size</th>
<th>Average Completions</th>
<th>Average Provincial Exam Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>29</td>
<td>76%</td>
<td>75%</td>
</tr>
<tr>
<td>2</td>
<td>42</td>
<td>71%</td>
<td>73%</td>
</tr>
<tr>
<td>3</td>
<td>27</td>
<td>96%</td>
<td>81%</td>
</tr>
<tr>
<td>4</td>
<td>29</td>
<td>100%</td>
<td>81%</td>
</tr>
<tr>
<td>5</td>
<td>27</td>
<td>61%</td>
<td>71%</td>
</tr>
<tr>
<td>Total</td>
<td>154</td>
<td>78%</td>
<td>76%</td>
</tr>
</tbody>
</table>
The Alliance of Sector Councils

www.councils.org
Building Essential Skills in the Construction Industry

www.buildingessentialsskills.co.uk
Safety Performance:

Research shows that people with higher levels of Essential Skills have stronger safety performance.

Companies would improve their safety records and reduce costs for workers’ compensation by using ES tests to determine which job candidates or employees are at risk.
SOLUTIONS ... PRODUCTIVITY

Key Message:

Research by the Government of Canada indicates that our workforces’ level of Essential Skills has a huge impact on Canada’s GDP.

Companies would improve the performance of their workforce by using ES tests to determine which job candidates/employees have weak skills and by providing interventions.
Key Message:

Quality is a key driver in most companies, and everyone needs to be able to read, understand, and follow directions. Workers with skills at Level 3 or higher have the skills needed to understand processes reduce rework and meet quality standards.

Use ES tests to determine which job candidates or employees have the required skills.
Key Message:

A worker’s reading ability must be strong enough for them to understand notices, memos, quality procedures and health and safety regulations.

Use ES tests to ensure that job candidates and existing employees have the reading skills needed to understand and apply complex information.
**Key Message:**

A grade 12 education no longer guarantees that a person has the skills needed to work productively and safely on the job. And, it is dangerous to assume that a job candidate has skills based on their previous work experience.

Use ES tests and HRSDC job profiles to ensure that job candidates have the required Essential Skills for the job.
OUTLINING VALUE & BENEFITS

Essential Skills’ Return on Investment includes:

✓ Stronger safety performance
✓ Increased productivity
✓ Fewer rejects and lower material costs
✓ Stronger compliance with regulations
✓ Lowered hiring costs and better employee retention
Additional Information

- Questions??
TOWES & Essential Skills

For more information please contact:

J. Lou Charlebois
(306) 659-3770
charlebois@siast.sk.ca