

The Value of Education.

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

Builder's & Renovator's
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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

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 SCALE

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!**

1. CANADA'S SKILL DEFICIT

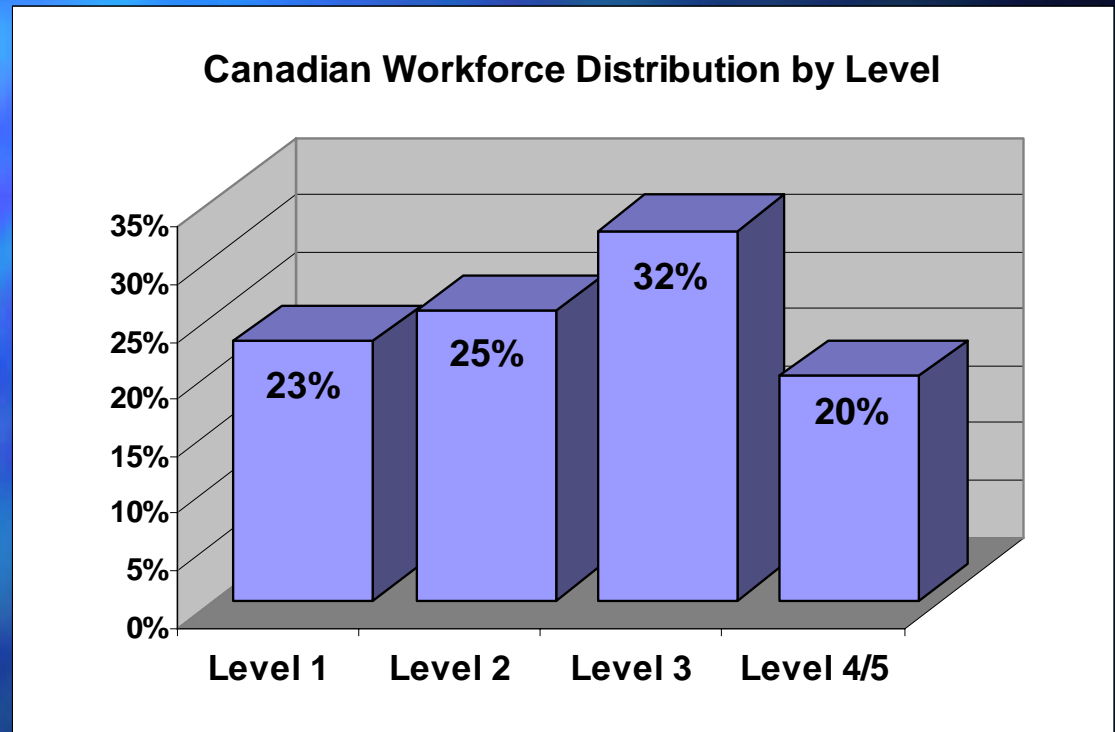
22 country survey (ALLS) determined the literacy levels of adults and the impact of literacy on economic success and global competitiveness. Used the IALS 5 level scale to measure proficiency.

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.

PERFORMANCE OF CANADIANS

A significant portion of Canadians are at the two lowest levels in three important essential skill areas.



Source: *Matching Canadians' Literacy Attainment to Actual Occupational Requirements*, May 2001.

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.

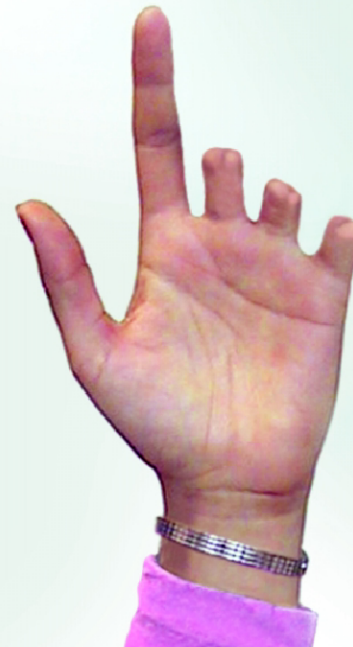


Relationship between GDP per capita and per cent at Reading Text - Levels 1 and 2, population aged 16-65, 1994-1998

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. *Not* 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*.

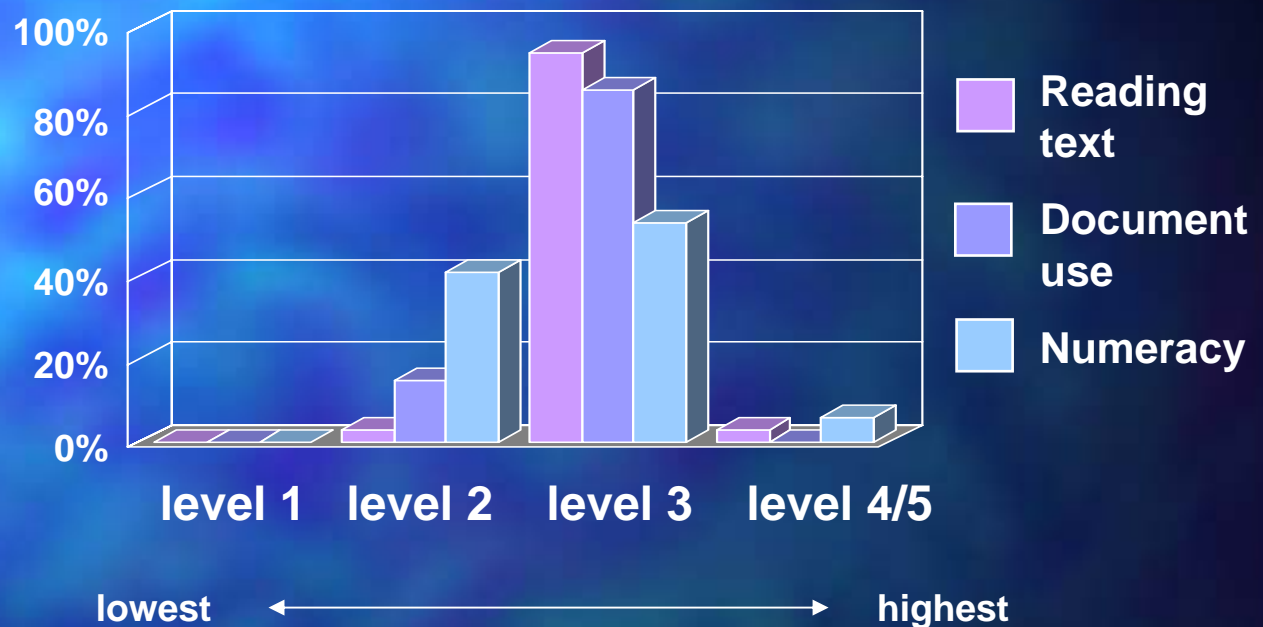
TOWES is a major national initiative that is supported by the government of Canada and over 30 of the leading community colleges across Canada. It is a sophisticated new approach to helping employers manage their workforce.

To find out more and who you can call at your nearest college to help you benefit from TOWES please go to www.collegeconnect.on.ca or www.towes.com.

TOWES
CANADA'S ESSENTIAL CREDENTIAL

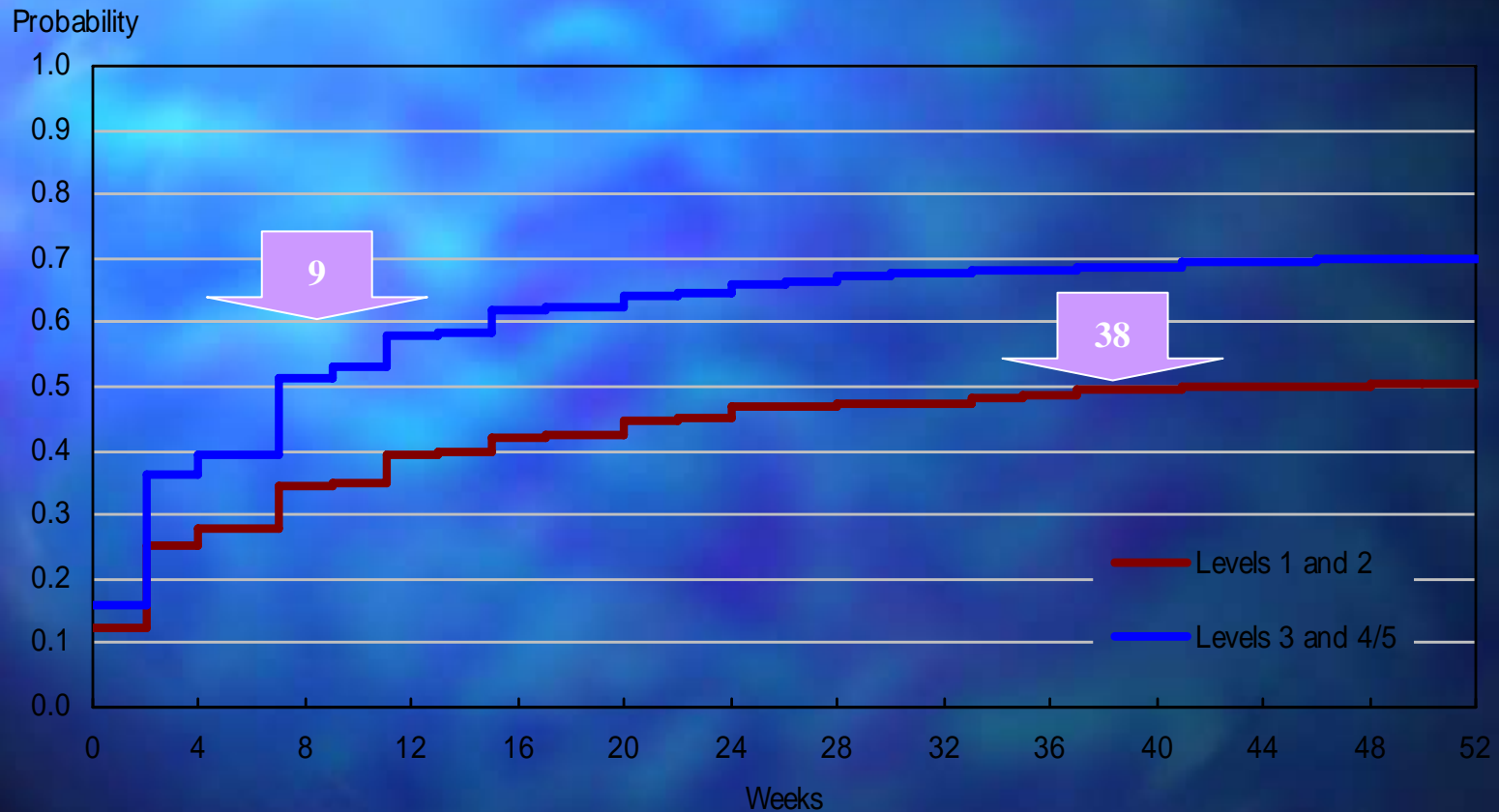
4. WORKPLACE DEMANDS FOR ESSENTIAL SKILLS

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



Source: *Matching Canadians' Literacy Attainment to Actual Occupational Requirements*, May 2001.

4. IMPACT ON EMPLOYMENT



Source: Adult Literacy and Life Skills Survey, 2003.

5. IMPACT ON EARNINGS

- ✓ Essential Skills are a passport to a higher paying more satisfying job.
- ✓ Increased Job Security.
- ✓ Decreased employee turnover.

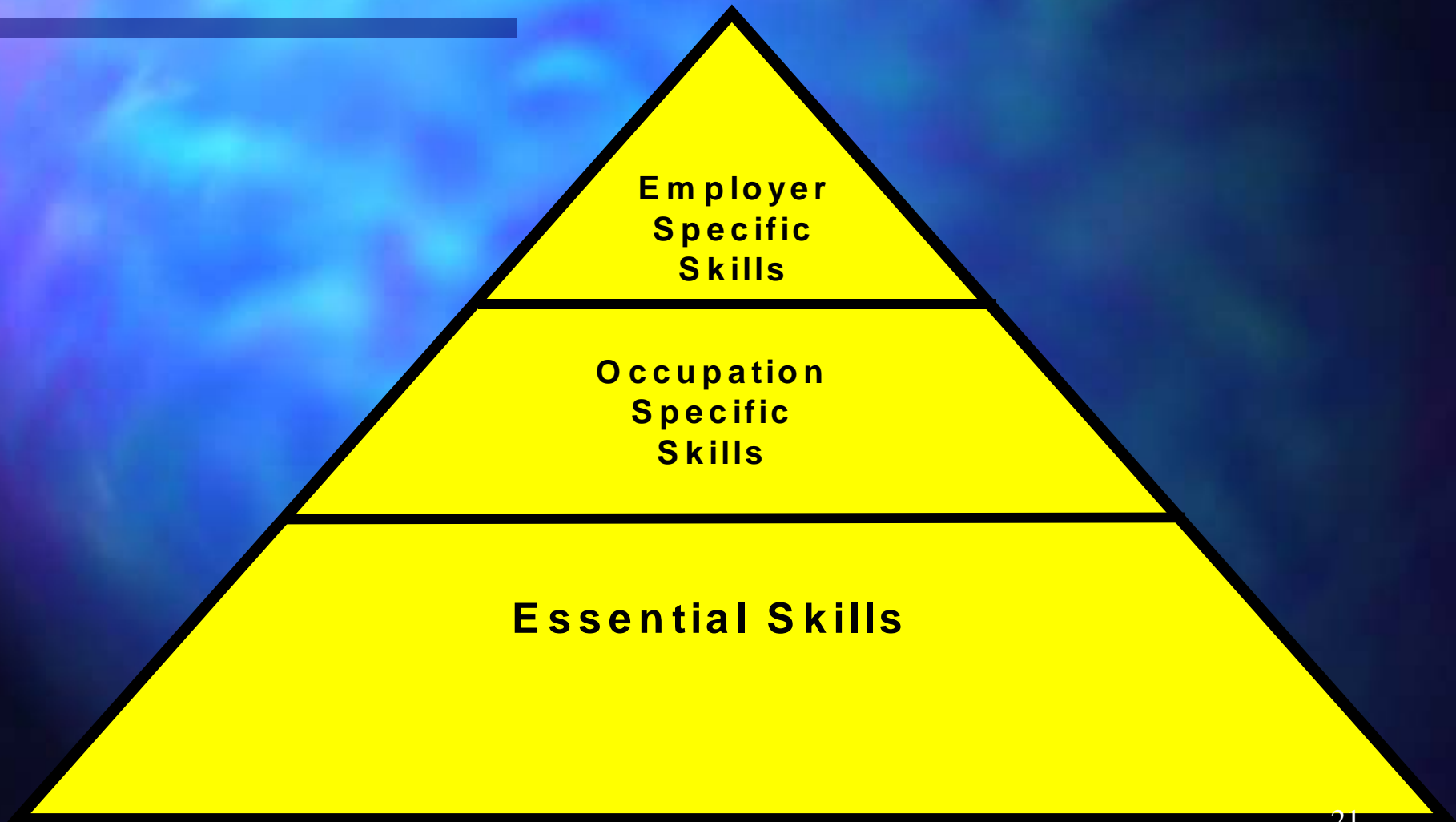
6. NEED FOR A VALID MEASURE OF WORKPLACE SKILLS

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



TOOLS



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?



Français

English



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



CANADIAN TRUCKING HUMAN RESOURCE COUNCIL

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 for more information.



APPLICATIONS – 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



APPLICATIONS – USING ES WITH ABORIGINAL POPULATIONS

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 than 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

CANADIAN AUTOWORKERS

"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

APPLICATIONS – USING ES WITHIN APPRENTICESHIP TRAINING

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

Group	Class Size	Average Completions	Average Provincial Exam Result
1	29	76%	75%
2	42	71%	73%
3	27	96%	81%
4	29	100%	81%
5	27	61%	71%
Total	154	78%	76%

The Alliance of Sector Councils



www.councils.org

Building Essential Skills in the Construction Industry



www.buildingessentialskills.co.uk

SOLUTIONS ... SAFETY PERFORMANCE

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.

SOLUTIONS ... QUALITY ASSURANCE

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.

SOLUTIONS ... COMPLIANCE WITH REGULATIONS

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.

SOLUTIONS ... STAFF RECRUITMENT

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

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