



Building Essential Skills in the Workplace



Human Resources and
Skills Development Canada

Ressources humaines et
Développement des compétences Canada

Canada

HIP-028-03-05E

These case studies and 10-step guide were written by The Conference Board of Canada with financial support from Human Resources and Skills Development Canada. The views expressed in this report are not necessarily those of Human Resources and Skills Development Canada or of the Government of Canada.

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Cat. No.: HS28-16/2005E
ISBN: 0-662-39637-5



Introduction

Canadian organizations are becoming increasingly aware that they need to maximize the skills of their work force, in order to compete and grow, which often means enhancing or refreshing their employees' Essential Skills.

Essential Skills help people perform the tasks required by their occupation, provide people with a foundation for learning other skills, and enhance people's ability to innovate and adapt to workplace change. Essential Skills include:



Reading Text



Writing



Thinking Skills



Document Use



Oral
Communication



Computer Use



Numeracy



Working with
Others



Continuous
Learning

The case studies presented examine outstanding workplace education programs and initiatives. They highlight best practices in developing Essential Skills in the workplace and provide an overview of benefits, outcomes and impacts of Essential Skills training. Learning partners include schools, colleges, universities, workplaces, communities and governments. A more detailed version of the case studies, as well as a more in-depth analysis of the methods used to develop, assess, implement and deliver education in the workplace, can be found on The Conference Board of Canada's Web site (www.conferenceboard.ca).

Also included in this publication is a 10-step guide to implementing Essential Skills learning programs in the workplace. It provides information and advice to employers and their learning partners on ways to address challenges.

Why Do Employers Invest in Essential Skills Development for their Employees?

Employers tend not to identify employees' lack of Essential Skills as an immediate challenge to be addressed. Instead, they address business issues arising from their operating environment. These issues, which include low productivity, poor safety records and high error rates, may mask underlying Essential Skills challenges. However, Essential Skills challenges are often not identified specifically until employers begin to grapple with implementing solutions to address their business issues.

Once Essential Skills gaps have been identified and Essential Skills training has been developed and implemented, businesses often notice soft returns in addition to hard business results. The combination of improved Essential Skills and other softer benefits (including increased participation, improved morale, enhanced employee engagement and improved team performance) not only equips organizations to address future challenges, but also raises employers' awareness of how to identify Essential Skills challenges and when to address Essential Skills head-on.

Essential Skills Challenges and Responses in Five Organizations

1. Teaching the Skills that Enable Employees to Manage Change at Syncrude Canada Ltd.



Syncrude Canada Ltd. is located in Fort McMurray, Alberta. The company is the world's largest producer of crude oil from oil sands and the largest single source producer in Canada. Syncrude employs 14,000 people directly and indirectly across Canada and currently supplies 13 percent of the nation's petroleum requirements.

Essential Skills Challenge

Syncrude made a business decision to transform its management model and adopt a team-based management approach. The company realized that its work force was not ready for this change in operational style and that managers and staff would need to refresh their Essential Skills.

Organizational Response

Management initially rolled out Essential Skills training for supervisors and subsequently included all employees as a result of the success of its Effective Reading in Context (ERIC) program.

Characteristics of Target Audience

Fort McMurray is a remote community that relies chiefly on the tar sands for employment. Syncrude and other petrochemical companies mining the tar sands have had to recruit large numbers of workers to the region, including Aboriginal workers and immigrants. The company also relies on groups of trades workers to build and

maintain infrastructure. Given the nature of mining and refining oil sands, there is little tolerance for error—small mistakes can cause costly production delays and expensive repairs. Ensuring a common foundation in Essential Skills among all workers is a means of achieving safety and productivity targets.

Contribution to Building a Learning Culture

Syncrude's innovation was to recognize that managers are a key factor in successful Essential Skills training. Managers themselves may need to develop Essential Skills, not only to model effective behaviours in the workplace, but also to see the value of supporting Essential Skills training for their direct reports.

Benefits, Outcomes and Impacts: Return on Essential Skills Training Investment

Syncrude not only tracked the number of participants in its ERIC program, but also observed changes in behaviour that resulted from the training, especially behaviours that affect safety, productivity, adaptability and team performance. Syncrude also developed a Syncrude Applied Math (SAM) program for numeracy skills upgrading. Employees and new recruits who participate in ERIC and SAM typically achieve better results on the Test of Workplace Essential Skills (TOWES) and are more successful in trades certification exams than people who do not participate in these programs.

Ability to be Used as a Model

Syncrude has partnered with adult education experts at Keyano College in Fort McMurray to deliver its Essential Skills programs. While Syncrude owns the copyrights to ERIC and SAM, Keyano College manages and adapts these products and brokers sales of customized versions of them to third parties, from whom Keyano derives revenue.

Measuring the Essential Skills Gap

Syncrude invests in one-on-one assessments of individuals' Essential Skills. This personalized assessment ensures that trainers understand the actual skill needs of individual employees and can develop learning activities to meet each individual's specific learning needs. Syncrude's focus is not on measuring skill gaps and skill levels of individuals or of job categories within the work force as a whole. Instead, Syncrude prefers to take a developmental approach with each individual learner to help them master the Essential Skills needed to perform the tasks they have identified as problematic.

Essential Skills Challenges and Responses in Five Organizations

2. Shaping Performance at BHP Billiton Diamonds Inc.



BHP Billiton Diamonds Inc. employs 900 people and operates Canada's first diamond mine. Management is committed to building a sustainable Aboriginal and northern work force. Its Workplace Learning Program benefits all workers who wish to upgrade their skills.

Essential Skills Challenge

Billiton is committed to hiring a large number of Aboriginal workers as part of its mining agreement with the territorial government. The company cannot screen out employee candidates on the basis of Essential Skills, given the limited supply of workers available at its remote Yellowknife site.

Organizational Response

Billiton has invested in a training-on-the-job approach in order to continue mining diamonds while addressing Essential Skills challenges. The company ended up designing a dual-track production schedule to accommodate workers who were needed for front-line production on a given day and others who could be given release time to attend Essential Skills training.

Characteristics of Target Audience

Workers at the Ekati diamond mine site live, work, sleep and eat in close quarters with their co-workers in a remote, camp-style work environment for two to three weeks at a time. Shift work under these conditions can be very demanding and requires strong interpersonal communication and team skills.

Contribution to Building a Learning Culture

Billiton schedules Essential Skills training as part of the daily roster of work assignments at the mine. Production dictates which categories and quantities of workers are required to meet operational and safety objectives on any given day, but Essential Skills training is recognized as a core operation for personnel who need Essential Skills training but are not required on a work team that day.

Benefits, Outcomes and Impacts: Return on Essential Skills Training Investment

Billiton carefully tracks the hours of paid release time that it provides for Essential Skills training for its employees, as well as the employee turnover rate, which is significantly lower for employees participating in Essential Skills training than for those who do not. The company has also been proactive in gauging the softer impacts of Essential Skills training, such as workers' greater comfort in speaking up at safety meetings and improved morale.

Ability to be Used as a Model

The flexibility of Billiton's model is evident from the variety of ways in which its Workplace Learning Program is delivered. Workers participate in independent learning, in one-to-one tutoring and in small classes. Learning at the site ranges from core literacy to General Educational Development (GED) preparation and pre-apprenticeship training.

Measuring the Essential Skills Gap

Billiton uses a customized version of the Test of Workplace Essential Skills (TOWES) to assess the Essential Skills of individual employees. The company addresses skill gaps as an operational issue, with employees' development to a workplace standard as the desired outcome of Essential Skills training.

Essential Skills Challenges and Responses in Five Organizations

3. Essential Skills for Multi-Skilling at National Silicates



The primary objective of National Silicates' workplace training program is to upgrade the skill levels of the plant operators and to enable them to be multi-skilled and competent in all areas of the plant's operations. National Silicates is a small chemical company that is a wholly owned Canadian subsidiary of the PQ Corporation. The PQ Corporation, in conjunction with its affiliates, is the world's largest producer of sodium and potassium silicates, and operates in 18 countries on five continents.

Essential Skills Challenge

National Silicates operates in a highly specialized environment requiring strong technical skills. To be competitive in the industry, it must update refining processes and employee skill sets on a regular basis.

Organizational Response

National Silicates develops Essential Skills in order to recruit, build and retain a category of workers known as chemical process operators who are in short supply in the labour market, but whose skills are crucial to ensuring safety, productivity, competitiveness and growth of the industry.

Contribution to Building a Learning Culture

National Silicates has shown a strong commitment to developing Essential Skills as part of its effort to meet quality standards and be competitive. The company's belief in the value of developing these skills and its pragmatic understanding of the business imperative of

“staying the course” on Essential Skills upgrading underscore the need to treat Essential Skills as “need to have” competencies in a competitive industry.

Benefits, Outcomes and Impacts: Return on Essential Skills Training Investment

National Silicates’ Chemical Process Operators Program shows that employees who are properly trained are not only more comfortable in their roles but are also more engaged in contributing to safety and productivity in the workplace. The company found that employees who have the Essential Skills necessary to be effective in the workplace are an organization’s best asset and can draw on their skills and abilities to achieve aggressive performance targets. Significant outcomes and impacts of the company’s Essential Skills training program include a zero voluntary turnover rate, reduced overtime hours, reduced outside contractor hours, reduced plant down time, more versatile employees, improved efficiency, improved productivity, improved safety and an improved work environment.

Ability to be Used as a Model

National Silicates’ Essential Skills training program might easily be adapted for use by companies in other industry sectors facing shortages of skilled workers and skill gaps among members of the existing work force.

Measuring the Essential Skills Gap

National Silicates identifies Essential Skills gaps and addresses them through training for current employees while they are pursuing apprenticeships as chemical process operators. The company also assesses potential new employees’ Essential Skills and encourages them to pursue Essential Skills upgrading while taking first-level training as chemical workers. For both groups, Essential Skills upgrading is instrumental to individuals’ progress in job-specific training.

Essential Skills Challenges and Responses in Five Organizations

4. Producing “Productivity Through People” at Minas Basin Pulp & Power Company Limited



Minas Basin Pulp & Power Company Limited is a family-owned and -operated company with 162 full-time employees. The company produces linerboard and coreboard from recycled material and is affiliated with other Nova Scotia companies that convert linerboard into cardboard boxes and coreboard into paper tubes.

Essential Skills Challenge

Minas Basin Pulp & Power introduced a major technology change in the workplace and greatly expanded its operations, hiring many new workers. Experienced employees needed to refresh their Essential Skills to learn how to operate new equipment and a large number of new recruits needed to learn the business from the ground up.

Organizational Response

Minas Basin Pulp & Power is an example of a company that invested heavily in its physical plant *and* in people to remain competitive. The company needed to improve the Essential Skills of its employees so that they could easily learn how to use state-of-the-art technology.

Characteristics of Target Audience

Minas Basin Pulp & Power draws its workers from the local community. Like other companies in this situation, it found that the level of education it required for its employees lagged behind the skill levels needed for high performance in the workplace. Minas

Basin Pulp & Power had to upgrade the skills of existing workers and then raise the educational requirement for new recruits to ensure they came equipped with the required Essential Skills.

Contribution to Building a Learning Culture

The Minas Basin Pulp & Power story shows how upgrading Essential Skills has a multiplier effect by enabling workers to pick up new skills more quickly, to teach others more effectively and to contribute more deliberately to the business success of the organization.

Benefits, Outcomes and Impacts: Return on Essential Skills Training Investment

Minas Basin Pulp & Power has carefully tracked the outcomes and impacts of its Workplace Education program. The company has reported unprecedented operating efficiencies, an all-time low absenteeism rate, and a 13-fold reduction in lost time due to accidents, which justify the company's investments in Essential Skills development for its work force.

Measuring the Essential Skills Gap

Minas Basin Pulp & Power identifies ongoing Essential Skills gaps through semi-annual performance reviews of its employees and by involving a training and development team that includes representatives from unions, management and employees. The team meets every two or three months to review progress on Essential Skills and set targets for the future.

Essential Skills Challenges and Responses in Five Organizations

5. Empowering Employee-Learners with Essential Skills at Durabelt Inc.



Durabelt Inc. is a small Prince Edward Island manufacturing company that produces belted chain conveyor belting and associated components for harvesting root vegetable crops. The company employs between 5 and 35 workers on a seasonal basis.

Essential Skills Challenge

Durabelt produces customized industrial products for its consumer base of farmers. Depending on crop fortunes, farmers might choose to have old products overhauled or to place orders for new products to meet their specific requirements. Either way, Durabelt employees need to be able to constantly retool their manufacturing equipment to accommodate piecework orders. Essential Skills are crucial for reading work orders and recalibrating machines. In practice, employees need to be adept not only at using their technical job-specific skills, but also at applying those skills while managing their time, sequencing operations, working in and supporting teams, working safely and dealing with external customers.

Organizational Response

Durabelt used Essential Skills training to help front-line workers manage their work and increase their productivity. The company could not afford to have production stalled while employees waited for a senior employee to read and interpret work orders, recalibrate machines and start production. Essential Skills training would enable the person acting as the company's millwright to optimize their time and ensure that employees were working all the time, not just when they were able to get the attention of the millwright.

Characteristics of Target Audience

Durabelt is a seasonal business and employees typically joined the firm without specifically preparing themselves academically for employment with the company. Durabelt now expects new recruits to have completed Grade 12. When the company started Essential Skills training, most employees were experienced but did not have that academic background and lacked certain Essential Skills.

Contribution to Building a Learning Culture

Since Durabelt is a small organization, a concerted effort to refresh Essential Skills involved everyone, and the learning culture was apparent to all employees.

Benefits, Outcomes and Impacts: Return on Essential Skills Training Investment

Durabelt tracked many impacts and benefits of Essential Skills training. Many related to positive changes in attitudes and behaviours that support performance in the workplace, success in the classroom and positive relationships at home. For Durabelt, enhanced employee self-confidence helps to ensure better working relationships and stronger productivity.

Ability to be Used as a Model

A challenge of making this model work in a larger organization might be engaging the entire work force—for example, getting input from everyone when rewriting work descriptions.

Measuring the Essential Skills Gap

At Durabelt, organizational skill needs and gaps were identified by an independent third party, and skill development plans and activities were established for individual employees to ensure that the organization addressed its collective skill gaps at the individual level.

Key Findings from Case Studies

Employers invest in training when there is a hard business reason to do so—for example, because they want to reduce unacceptable loss of time due to accidents, excessive waste of materials or time lost because employees require too much supervision.

Essential Skills training tends to be most effective when it is used to help employees improve their own ability to perform in the workplace. In other words, all training activities need to be evaluated according to how much they contribute to improving workplace performance (not just according to how employees feel about the training, but also in terms of what they learn, how their behaviour changes and how they improve in their jobs).

It is important to track benefits, outcomes and impacts. *Benefits* accrue to all stakeholders, including employers, employees, managers and customers. These benefits need to be recognized and communicated widely to maintain the momentum of Essential Skills interventions.

The kinds of *outcomes* that employers who invest in Essential Skills training tend to measure and manage include the following:

- ✓ skill gains (Essential Skills, or firm-specific, job-specific or technical skills);
- ✓ attitude change—for example, increased commitment to achieving individual, team and organizational goals;
- ✓ increased engagement in the workplace; and
- ✓ knowledge acquisition and application—for example, enhanced employee understanding of the workplace.

Some *impacts* that employers may want to measure include improved safety, increased productivity, increased retention, reduced absenteeism and reduced error rates. Evaluating the entire package of benefits, outcomes and impacts resulting from Essential Skills training is crucial to understanding the business case for investing in Essential Skills. A business case will typically include a combination of hard and soft returns that improve both individual and organizational performance.

Table 1: Hard returns on Essential Skills investments

Organization	Hard Returns
Syncrude Canada Ltd.	<ul style="list-style-type: none"> ✓ By delivering Effective Reading in Context (ERIC) and Syncrude Applied Math (SAM) in pre-employment programs at Keyano College, Syncrude has enhanced students' ability to pass the Test of Workplace Essential Skills (TOWES), which it uses as a pre-employment screening tool. ✓ Syncrude employees who failed apprenticeship exams passed their tests after taking ERIC and SAM. ✓ ERIC participants have moved up to team leader and supervisor positions within Syncrude.
BHP Billiton Diamonds Inc.	<ul style="list-style-type: none"> ✓ The workplace is safer and more productive. ✓ Turnover rates are lower.
National Silicates	<ul style="list-style-type: none"> ✓ There is a zero voluntary turnover rate; employees do not leave when they get training. ✓ The company has reduced overtime hours, outside contractor hours and plant down time.
Minas Basin Pulp & Power Company Limited	<ul style="list-style-type: none"> ✓ Efficiencies on the paper machine exceeded 80 percent every month during 2004, something the company had never achieved before (average past efficiency rates only reached the high 70s). ✓ Absenteeism reached an all-time low at 6.9 days absent per employee in 2003 (the previous average was 10.91 days). ✓ A decline in lost time accidents lowered the company's safety performance index from 19.88 in August 2003 to 1.5 in August 2004 (383.5 days were lost in 2003 due to accidents, compared to 62.5 days lost in 2004). ✓ Employee retention is up.
Durabelt Inc.	<ul style="list-style-type: none"> ✓ Duraschool students developed a dictionary of workplace terminology for new workers. ✓ Employees rewrote the employee handbook to make it easier for them to use. ✓ Employees put annual performance appraisal forms into plain language.

Investing in Essential Skills training produces a whole range of soft returns in the workplace. Typically, investing in Essential Skills produces a ripple effect in this area. Soft returns accrue to individual employees and their managers, to teams, to organizations as a whole, and to the wider community in which individuals and organizations operate (including families). Employees become more engaged, more adaptable, and better able to learn and to succeed in other training.

Table 2: Soft returns on Essential Skills investments

Who Benefits	Soft Returns
Individuals	<ul style="list-style-type: none"> ✓ Believe they are more capable ✓ Take more pride in their work ✓ Accept and act on suggestions for personal improvement more readily ✓ Have improved self-confidence ✓ Develop a lifelong learning attitude
Teams	<ul style="list-style-type: none"> ✓ Improve communication and cooperation ✓ Respect diversity ✓ Better identify and leverage contributions of individual team members
Organizations	<p>Employees...</p> <ul style="list-style-type: none"> ✓ show more initiative and become more innovative ✓ work and make decisions more independently ✓ become better at recognizing and solving problems ✓ take on new roles as mentors and peer learning coaches
Family and community	<p>Employees...</p> <ul style="list-style-type: none"> ✓ are better able to help children with homework ✓ participate more in voluntary activities ✓ enjoy improved health

Step-by-Step Process for Developing Essential Skills

The following step-by-step process for developing Essential Skills is based on the research summarized in the case studies.

1. Assess organizational skill needs

- Employers typically become aware of skill gaps when they observe employees having difficulty performing work tasks or when productivity needs to be increased.
- Employers' assessments of skill gaps are often contextualized to the work environment.
- A key part of assessment is identifying which Essential Skills within job-specific skill sets need to be improved to enhance employee performance.

2. Determine the skill gaps of individual employees

- Employers and trainers need to engage employees to assess individual skill needs.
- Employers should carefully consider confidentiality of assessment data and the way they will use the results.
- Employers need to be sensitive to employees' anxieties related to assessment and learning.
- Employers should link Essential Skills gap identification to performance reviews to identify training needs and skill performance on the job.

3. Set Essential Skills targets for individual employees

- Employees need a specific action plan to address their own Essential Skills gaps.
- Employees need to be able to visualize easier and more efficient job task performance as a result of upgrading their Essential Skills.

- Employees who “personalize” their need for Essential Skills training are better able to track and celebrate their progress.

4. Design appropriate training to meet individual and organizational Essential Skills targets

- Training materials are most effective when they are based on workplace tasks.
- Employees need to enhance their Essential Skills in the context of the way they are expected to use them in their jobs.
- Once key organizational targets are met, individual Essential Skills gaps can be addressed using materials or examples specific to the individual. For example, practice in reading a safety manual could be complemented by practice in reading a child’s school report.

5. Schedule training

- Organizations need to build time into work schedules to accommodate necessary Essential Skills training.
- A key decision is the time commitment required from the organization (paid release time) and from the employee (personal time).
- When Essential Skills training time is properly integrated into the work schedule, production can continue while individuals are enhancing their Essential Skills.

6. Track individual performance

- Individuals improve their Essential Skills gradually, but often need to know how far they have progressed and how far they have to go to achieve their target.
- Recognition for skill gains is a crucial part of a successful training plan.
- Individuals need to be able to deliberately target their learning efforts to ensure effective use of training resources.

7. Track organizational performance

- Employers need to track training benefits, outcomes and impacts, including improved safety records, enhanced productivity, reduced absenteeism and reduced error rates.
- Employers should also monitor softer impacts, such as improved self-confidence, better team performance and improved workplace morale.
- Organizations should also pay attention to newly emerging skill needs and gaps.

8. Leverage Essential Skills gains

- When employees individually and collectively make Essential Skills gains, new operating procedures and performance targets may be within reach.
- It is important to continuously find ways to leverage Essential Skills. They can be used to drive workplace innovation, to improve the quality of goods and services, and to generate new solutions for customers.
- Continuously leveraging skill gains is part of the ongoing business case for enhancing, refreshing and redeploying Essential Skills for high performance.

9. Market the benefits

- Essential Skills programs and their benefits need to be constantly marketed to staff, managers and senior management.
- Essential Skills training improves a corporation's attractiveness to external customers and to the communities in which it does business.
- Raising the Essential Skills bar can help an organization to recruit better job candidates. An organization with a reputation for managing and developing Essential Skills becomes an "employer of choice" for job seekers.

10. Build on success

- Organizations that have achieved success with Essential Skills training need to celebrate their achievements with their employees.
- Applying for awards programs and continuing to network with other business leaders can help organizations make additional improvements in their work force. An organization with an established best practice in Essential Skills is well positioned to borrow ideas from others and adapt them for success in its workplace.
- Because the market is ever changing and competitive, tapping into employees' potential through Essential Skills is a never-ending proposition.

Conclusion

Employers profiled in the case studies summarized above have all followed different paths in their journey toward investing in Essential Skills. That being said, each employer studied has made a very pragmatic decision to invest in the Essential Skills of its workers and to ensure that the organization and its work force derive maximum benefit from these investments. There was no evidence of employers taking a “leap of faith” when committing their scarce resources to Essential Skills training. Instead, employers, managers, trainers and employees demonstrated a strong-willed determination to make Essential Skills training work for them.

When individual employees, teams and organizations stay the course on their Essential Skills investments, they experience, both individually and collectively, a range of hard and soft returns. High performance on the part of both individuals and organizations depends on recognizing and fully leveraging this combination of hard and soft returns. While hard returns, such as increased productivity and improved workplace safety, are among the most preferred business outcomes, softer returns—such as improved morale, improved self-confidence levels and improved communication—are not to be underestimated.

It is becoming more apparent that doing nothing to enhance Essential Skills and employability attitudes is not an option in most workplaces. Pressure on wages from a shrinking labour force, challenges from competitors to improve quality and cut costs, and rising skill requirements for all workers make investment in Essential Skills not only imperative but also, increasingly, irresistible.

Organizations interested in having their best practices for developing Essential Skills featured in a Conference Board of Canada case study should contact: kitagawa@conferenceboard.ca.

