The content for this publication was developed by SkillPlan as part of a joint project with Buildforce Canada to further the use of Essential Skills concepts by the construction industry in its training activities. This publication is intended to support instructors and apprentices in improving performance and success rates in technical training, and was part of a project that involved industry partners who deliver technical training.

Originally created in 2001 as the Construction Sector Council, BuildForce Canada is a national industry-led organization committed to working with the construction industry to provide information and resources to assist with its management of workforce requirements. The mandate of BuildForce Canada is to provide accurate and timely labour market information (LMI) to advance the needs of the entire construction industry. BuildForce Canada will lead value-added programs and initiatives that build the capacity and the capability of the construction workforce to meet current and future industry demand to drive economic growth in Canada.

SkillPlan is an organization with over twenty years of experience developing workplace materials for the construction industry. Our programs and resources provide industry-specific training and information that address skills gaps and improve worker success prior to and during technical training and employment in the building trades. We work with employers, training schools, technical trainers, apprentices, and journeypersons to improve the Essential Skills of the workforce.

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Most technical training instructors are hired for their knowledge and expertise in the trade. While this expertise and know-how are acquired on the job, gaining effective teaching strategies is a skill that develops with experience. Many instructors have the opportunity to participate in instructor diploma programs to learn more about the teaching aspect of their role in the classroom. An Essential Skills endorsement is another set of tools to add to their instructor toolbox.

As a technical training instructor, you want the apprentices in your classes to succeed in technical training and to pass Red Seal and provincial examinations. You are familiar with the challenges that apprentices face when they enter technical training and know that each apprentice brings unique skill sets to the classroom. Some apprentices have been out of school for several years; others lack the Essential Skills they need to keep up with the fast pace of technical training. Some may have excelled in high school while some may have struggled with or not completed an academic program.

Even apprentices who have completed high school with modest success often find the application of skills challenging. For those apprentices with limited reading skills, the idea of making sense of code is daunting. Many apprentices have lost math skills that they once knew. For a smaller number, school was not a positive environment and they simply did not acquire the skills needed to begin apprenticeship or other technical training.

The construction industry has become more reliant on technical training. On-the-job mentoring is sometimes put aside as production demands increase. More is expected in terms of curriculum coverage and yet an increase in time is not allotted. With these pressures, instructors have a significant responsibility to lead each apprentice or trainee successfully to completion. An employer or sponsor has invested in the apprentice on the job; now they depend on the training institution to contribute to their initial investment.

Understanding Essential Skills and sharing best practices to address classroom challenges can be done collaboratively. Increasing Essential Skills expertise in construction training ensures success for apprentices and the continuity of highly skilled tradespeople for the industry. Technical training instructors welcome resources that help every apprentice acquire skills and training. The goal of this guide and the trades worksheets is to enhance technical training and increase success rates.

In this set of publications, apprentices are the learner group. All of the instructional examples included were suggested by trades instructors who provide block training to meet the standards of the formal apprenticeship program in 13 different trades. Instructors or educators enrolling pre-apprentices, youth-at-risk, or others in construction-related training will also find these materials valuable.
What are the goals of this guide?

This instructor’s guide is a “how to” manual for technical training instructors. It is designed to demonstrate and teach how to integrate Essential Skills into technical training materials and worksheets. Integrating Essential Skills into technical training materials means:

- anticipating the factors that make tasks more or less complex
- structuring learning activities to bridge skill levels
- ensuring apprentices understand the structure of documents
- providing strategies for finding information in texts
- designing worksheets that have clear examples with steps and are effective at more than one level of complexity
- providing consistent strategies for learning

Practicality at the classroom level is foremost in this resource. You can refer to the various sections of the guide and apply them immediately into the classroom or adapt an idea that could enhance existing materials.

How this guide is organized

This guide has five sections.

- **Section 1 Introduction** explains the goal of the instructor’s guide and gives an overview of this project in relation to previous Essential Skills projects.
- **Section 2 Essential Skills and Technical Training** makes a case for integrating Essential Skills into technical training. It shows how three of the Essential Skills (Reading, Document Use and Numeracy) are a part of technical training.
- **Section 3 Characteristics of Tasks and Apprentices** describes three Essential Skills and their levels, giving examples of what is required for competency at each level. Examples of technical training tasks for each level of these Essential Skills are also provided.
- **Section 4 Addressing Essential Skills Gaps** identifies Essential Skills gaps and provides strategies for instructing apprentices at these levels.
- **Section 5 Integrating Essential Skills into Technical Training** provides a strategy for developing or adapting learning materials to integrate Essential Skills into new or existing technical training worksheets.

How to use the guide and the trades worksheets

This instructor’s guide gives you the information you need to first identify and then address Essential Skills gaps of your apprentices. Section 5 of the guide demonstrates one Essential Skills strategy for addressing those gaps. The worksheets in *Trades Worksheets* Book One, Book Two and Book Three are a collection of real trades worksheets developed using this Essential Skills strategy. The worksheets can be used as is or they can be used as examples and models for developing other worksheets and materials.

More importantly, the worksheets also help in delivery of technical training. By examining what methods are most effective in achieving training goals, you can adapt and develop materials to address the wide range of learning needs in a training classroom.
Building on previous initiatives

The instructor’s guide and accompanying trades worksheets build upon previous Essential Skills initiatives by the BuildForce Canada and its partner SkillPlan. Previous BuildForce Canada Essential Skills projects were designed to meet specific needs in the construction industry. All of these materials can be downloaded or ordered from the BuildForce Canada website.

- **Essential Skills Symposium (2003)**
  BuildForce Canada hosted a gathering of industry representatives to increase awareness of Essential Skills activities and best practices. The report documents the outcomes of the symposium and the industry’s input into a strategy for BuildForce Canada's work in Essential Skills.

- **Essential Skills Strategy (2005)**
  BuildForce Canada uses the *Essential Skills Strategy for the Construction Industry* to guide its work with industry stakeholders to ensure that construction workers have the levels of Essential Skills they need to fully participate in training and employment. The strategy includes five key elements: research, awareness, coordination, training and standards, and a clearinghouse function.

  These were designed to increase awareness of Essential Skills, especially for those individuals who are entering trades. Emphasis is placed on the skills that are needed and to help individuals understand that skilled trades require high levels of Essential Skills.
The publication *Plain Language for Construction* addresses the unnecessary complexity of some documents. By presenting information clearly, employers and others can make information easier to access.

The *Step Up* series provides an opportunity for tradespeople to practice the Essential Skills required when moving from the tools into a supervisory role.

- **Essential Skills Workplace Services** (2009)

Each of these publications or websites was designed to meet a specific need in the construction industry.
• **Essential Skills Business Case** (2010)
  This research project looked for an answer to the question “What effect does Essential Skills training have on completion rates and performance in apprenticeship and other training programs?” The results of the study clearly demonstrated that apprentices who participated in Essential Skills upgrading were significantly more likely to pass their apprenticeship exams or other training exams.

• **Tips on Introducing Essential Skills into Construction Trades Training** (2010)
  Trades instructors who are looking for practical ways to teach Essential Skills to apprentices will find useful information in this publication. It provides tips and strategies for teaching Reading, Document Use and Numeracy.

• **Essential Skills Symposium** (2010)
  The Essential Skills Symposium brought together representatives from all levels and sectors of the construction industry. It showcased past projects and emphasized:
  o a strong correlation between Essential Skills and success on the Red Seal exam
  o a need to integrate and build Essential Skills into technical training from the beginning and to add exam-taking skills at the end
  o a need for Essential Skills training and certification of instructors

**A long-term vision**
This guide and accompanying trades worksheets are in direct response to feedback from the construction industry. Awareness of Essential Skills has grown significantly amongst industry stakeholders. The focus now is on technical trainers and continuing the tradition of excellence in delivering technical knowledge and know-how to meet the needs of apprentices with varying Essential Skills levels.

This resource is part of a larger objective to increase the self-sustaining capacity of the construction industry to apply Essential Skills by:
  • developing the skills of industry and others to enable them to integrate Essential Skills into technical training and other applications
• supporting the industry in its efforts to improve Essential Skills through the creation of a virtual Essential Skills community
• creating a mechanism (online professional collaboration platform) for sharing Essential Skills learning materials and approaches
• making Essential Skills materials readily available to industry, training instructors and educators
• expanding the field of Essential Skills through collaborative efforts by developing, modeling and implementing Essential Skills solutions to sector challenges

BuildForce Canada and SkillPlan believe that by providing the means, collaboration amongst technical trainers will evolve. The vision of this initiative is to build on the training expertise that this industry relies on to produce skilled tradespeople. By opening this resource and furthering your interest in Essential Skills, you have become part of the instructor community dedicated to the highest standard of construction training delivery.