

# Essential Skills for Trades Learners

**Facilitator's Guide**

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## Facilitator's Guide

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Community Learning Network  
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Developers: Genevieve Gliddon and Sarah McPhee  
Project Manager and Editor: Shannon Yates

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Aurora College, NWT  
Trade and Apprenticeship ExamBank  
Apprenticeship and Industry Training

Dedicated to: All the trades learners who know exactly what to do  
on the job and who don't know exactly what to do on the test.

### **Edson and District Community Learning Society**

201, Edson Provincial Building  
111 – 54 Street  
Edson, Alberta T7E 1T2  
780-723-6247  
[www.edsonlearning.ca](http://www.edsonlearning.ca)

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# Introduction

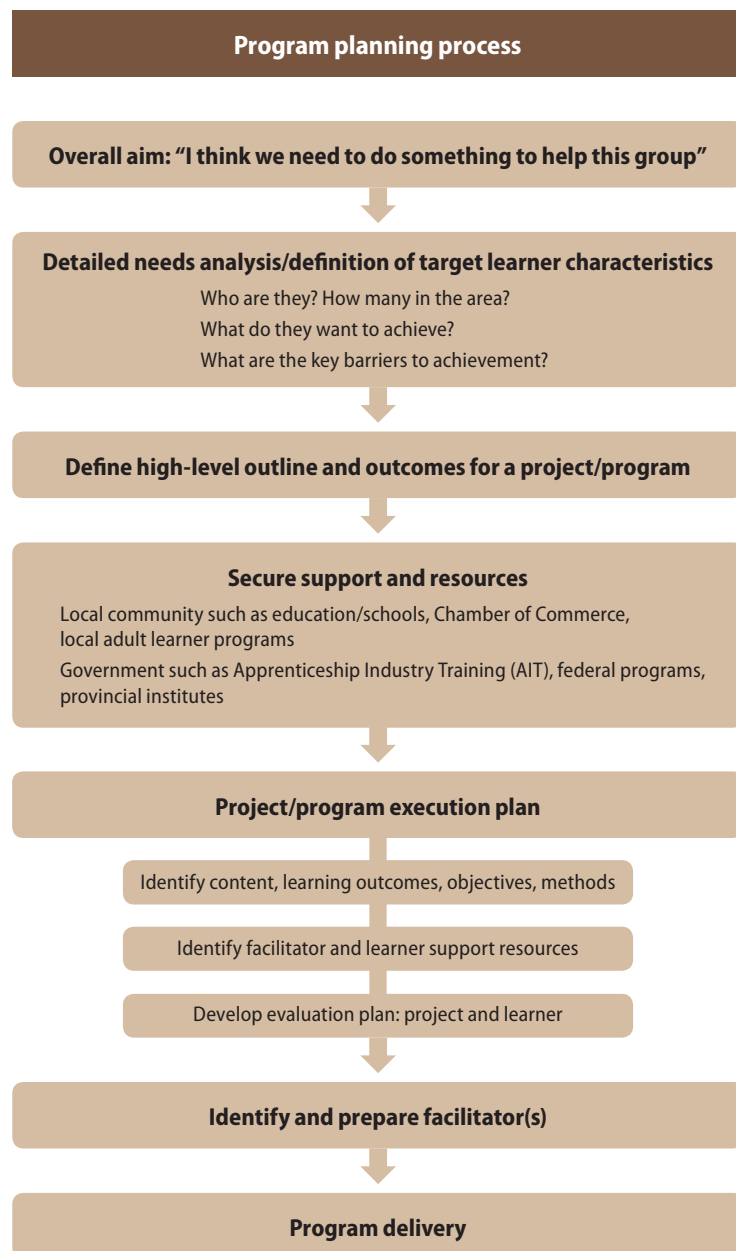
Welcome to the Essential Skills for Trades Learners Facilitator's Guide. This guide provides information to you, the facilitator, for key program items:

- Overall aim of the program
- Target learner characteristics
- Desired learning outcomes
- Program content
- Delivery method
- Resources required
- Evaluation and measurement

This guide also provides process maps that sequence the steps required for successful program conception and execution. Although this guide has been constructed with the overall purpose of assisting facilitators as they help trades workers in completing apprenticeship programs, the concepts within are directly transferable to most adult education scenarios, particularly where community based resources are envisioned.

## The process

This process map provides a high-level view of the steps undertaken in getting from concept to reality in program planning. The flow may give a false sense of tidiness to what can often be an iterative set of refinements, particularly in planning phases. Nevertheless, successful programs cannot be executed without attention to each of these steps. The process map also itemizes the steps involved in developing the trades learner program detailed in this guide.



## How to use this guide

Essentially, following the process maps and the information provided within, a facilitator can conduct needs analysis, design and implement a small trades-based learning project. Individual steps could stand alone, so that one piece at a time can be expanded on in any given Community Adult Learning Council (CALC) community.

In addition, some CALCs might just review the resources, with an eye to designing an introductory class in trades math, document reading, or multiple-choice test strategies. In this scenario, the interview and assessment sections can be shortened to ensure the required entry level range for a class. This is also a good way to gauge community or workplace interest.

Although many of the trades learners we see are apprentices already, most sections of the guide are bisected so as to address potential, as well as current apprentices. In general, however, the same process will apply for both learner types and goals. The differences will be in the content and the outcomes. This choice was based on the possibility that in any particular locale, a project might be best developed around potential trades workers alone.

Although you likely have intake, assessment and evaluation documents that work well, we have provided samples, for you to consider as you will. It might be best to simply revise your documents where you see fit.

Thankfully there is a good range of learning materials to choose from. We have found some gems, cited in Appendix 3: *Resource List* or the resources section. Some of the most learner- and tutor-friendly of them cost little to nothing. You may well have them in your collections already.

## The trades learner program

Let us assume that the program setup phase outlined in the process above is complete. We have determined the following:

### Overall aim of the program

The purpose of the program is to make it easier to help potential entry level trades workers or current apprentices prepare to write or rewrite trades exams.

### Target learner characteristics

The population worked with includes potential trades workers or current apprentices in the towns of Edson, Hinton, Whitecourt, and Drayton Valley. They form parts of a region in which economic viability depends on the oil/gas, mining, and forestry sectors and the service industries associated with them. This region is also influenced by shifting world commodities prices which contribute to the “boom and bust” features of our employment market. Some of the first learners to come into our learning centre in 2009 were, in fact, working apprentices who were unable to pass Apprenticeship and Industry Training (AIT) exams, even though they had passed the technical training. Non-completion rates in Alberta’s apprenticeship system are diminishing, but still comprise up to 20 percent (Alberta Apprenticeship and Industry Training Board, 2013). The most significant “dropout” rates occur in the first year of an apprenticeship program. While there are many reasons for leaving apprenticeship training in the first year, we believe that first year is where the lack of Essential Skills would be the most painfully felt. We also suspect rural trades

workers may be at higher risk, for two reasons. First, they may be doing their technical training in an unfamiliar town or city. This can be a difficult adjustment for even the most confident and capable. Second, there are fewer resources and supports available to them once they leave the college or technical school and return home.

At the same time, there are un- or underemployed adults who despair of ever winning well-paid and fulfilling trades jobs because they had done so poorly in junior high and high school.

Finally, our experience in rural central Alberta suggests that weak literacy in some of the nine Essential Skills (Canada E. a., 2014) discourages capable adults from entering, or even considering the apprenticeship system. These factors also restrict some working apprentices' ability to progress through the stages towards their journeyman/red seal designation. This increases their vulnerability to stress, job loss, unemployment or underemployment. Productivity and retention are the foundations of success for local employers, so Essential Skills deficits represent a significant challenge. First, workplace productivity is compromised, and second, otherwise competent workers are either pooled at the bottom of their organizations, or are terminated.

### **Desired learning outcomes**

At a high level, our intervention is aimed at having learners improve:

- Strength and confidence in the Essential Skills of Reading and Document Use with embedded Numeracy, Thinking skills with problem-solving and test writing strategies at International Adult Learning Survey (IALS) levels one to three
- Digital skills, specifically calculator

These are all learnable skills critical to success in trades-type exams. The skills also transfer well to other content, such as General Equivalency Diploma (GED) preparation and especially Workplace Essential Skills training programs. It is noted that most adult learners welcome Essential Skills learning that is anchored in practical, employment-oriented contexts such as the trades. Happily, the Essential Skills framework of teaching and learning allows us to have a far richer impact on our learners. At the same time, an Essential Skills approach broadens the number of learners who we can serve by breaking down the number of content pieces and showing us the relationships among them. Without this, scaffolding learning for adults is difficult.

We have found, too, that weak Essential Skills continue to plague apprentices in the third and fourth years of their training, making their technical training more difficult. Maybe more important, these gaps savage confidence and self-worth at the same time.

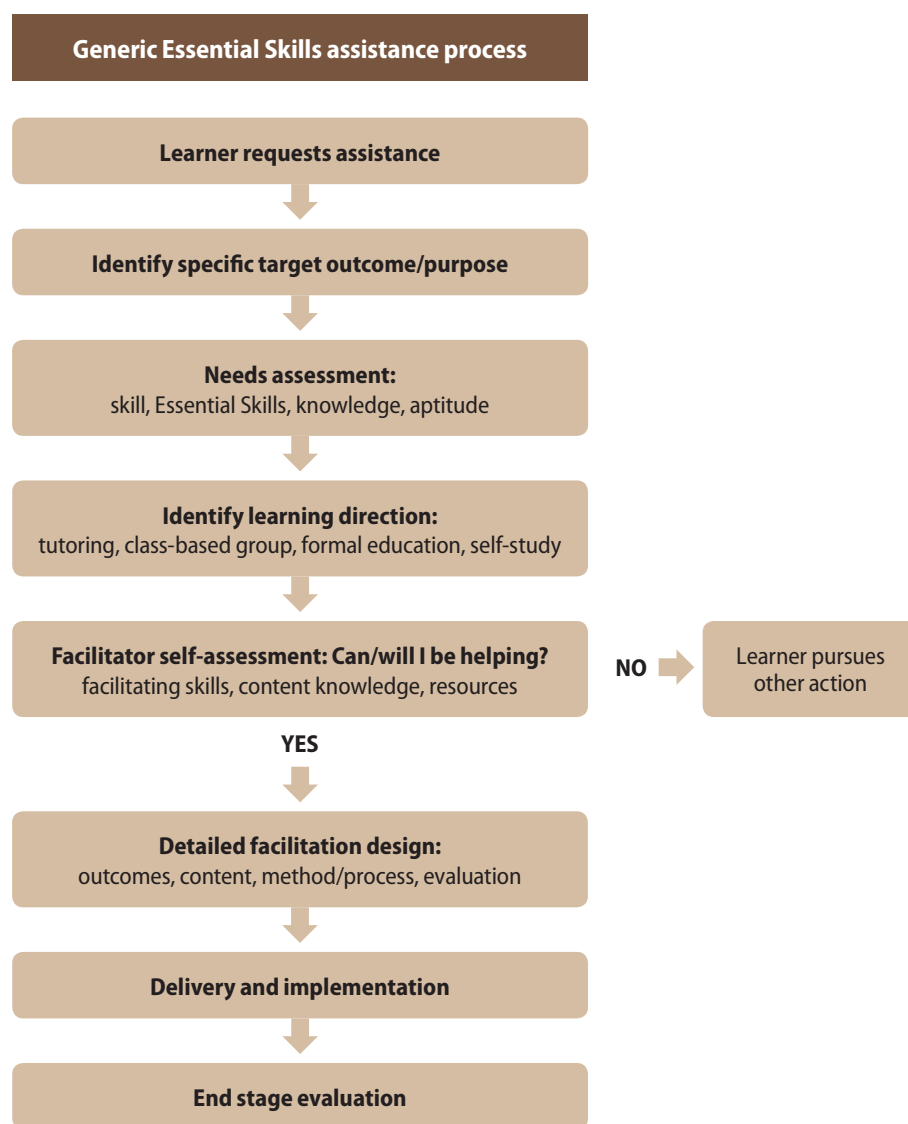
### **Program content**

Although targeted to support the eventual completion by learners of specific trade certification, individual needs vary. Trades workers who lack Essential Skills are more vulnerable to layoff and unemployment, and Essential Skills and subsets thereof are likely to form a significant part of program content. The apprenticeship system involves technical skills and knowledge at the post-secondary level analogous to complexity literacy Levels 3 to 5 (Canada E. a., 2014). The success of adults within that system depends on literacy Level 1 and 2 skills in text and document reading, numeracy, critical thinking and oral communication. These skills form key program anchors.

Some colleges do offer upgrading courses or programs and they do help some to bridge the gap. It is also the case that some will not be helped because of the necessary focus on content, rather than a focus on Essential Skills.

## Delivery method

This trades guide is based on individual tutoring, rather than group instruction. This is central to a learning centre model that recognizes that small communities have insufficient numbers to offer face-to-face courses. Workers in these communities have many competing demands on time and energy. Because we are assuming an individual tutoring model, as facilitators we need to work our way through the map below:



With the context established, we move to modular activities. Because modules often overlap some of the individual elements in the process maps, guidance is provided on where the modules fit into the overall flow. Time to complete each activity has not been included in the guide. Many factors will influence the amount of time needed for each activity; however, an effort has been made to keep them short. The longest of them will be practice assessments in Module 5: Learner Assessment, followed by the practice quiz in gathering information from the Tradesecrets website in Module 1: Preliminary Research.

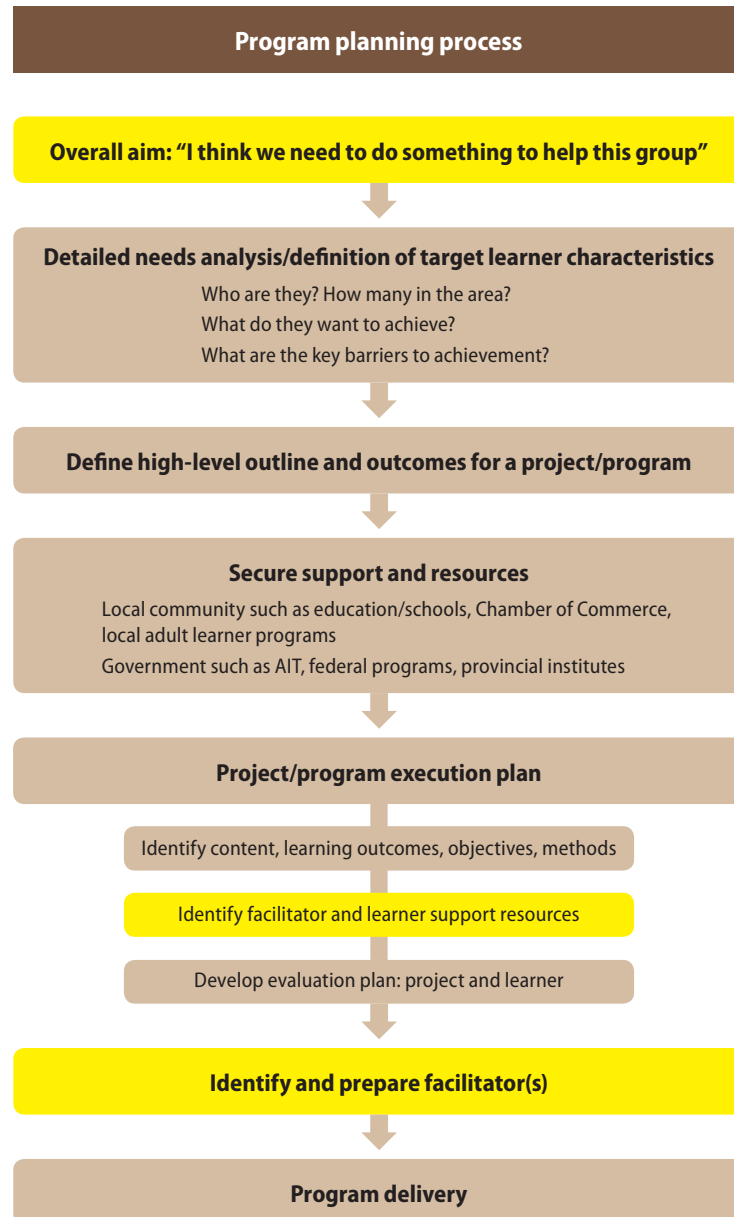


Before launching into the activities, take a few minutes to read the following paragraphs and review Appendix 1: *Principles of Adult Learning and Helping Skills* as well as Appendix 2: *Introduction to Essential Skills*.

Facilitating adult learning programs or working one-on-one with an adult learner starts with a basic understanding of adult learning principles. Take a minute and reflect on your experiences as an adult learner, you may find that what made your experience either positive or negative was directly related to the instructor's knowledge about adult learning principles. Specifically, being recognized for the wealth of experience you've accumulated, your desire to learn, and your independence as a learner.

Moreover, equally important to understanding adult learning is having a good grasp of communication process fundamentals that aid in moving your learner towards meeting goals. In addition, since the focus of the activities described in this guide is to increase the learner's success in writing trades exams, refreshing your memory about the nine Essential Skills and the literacy levels will make for more effective facilitation.

# Module 1: Preliminary research



## Overview

This module supports the processes highlighted above. Broadly speaking, the module equips the facilitator with a preliminary understanding of the potential project conceptual environment.

## Objectives

The activities in this module help prepare you, the facilitator, to:

- Recognize some of the relationships between trades and Essential Skills
- Become familiar with the online resources available for use in a trades project

## Activity 1

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### Familiarity with online AIT resources

#### STEP-BY-STEP INSTRUCTIONS

1. Browse the Alberta Industry and Training website [www.tradesecrets.alberta.ca](http://www.tradesecrets.alberta.ca).
2. Take the *Tradesecrets Quiz* (Appendix 4).

## Activity 2

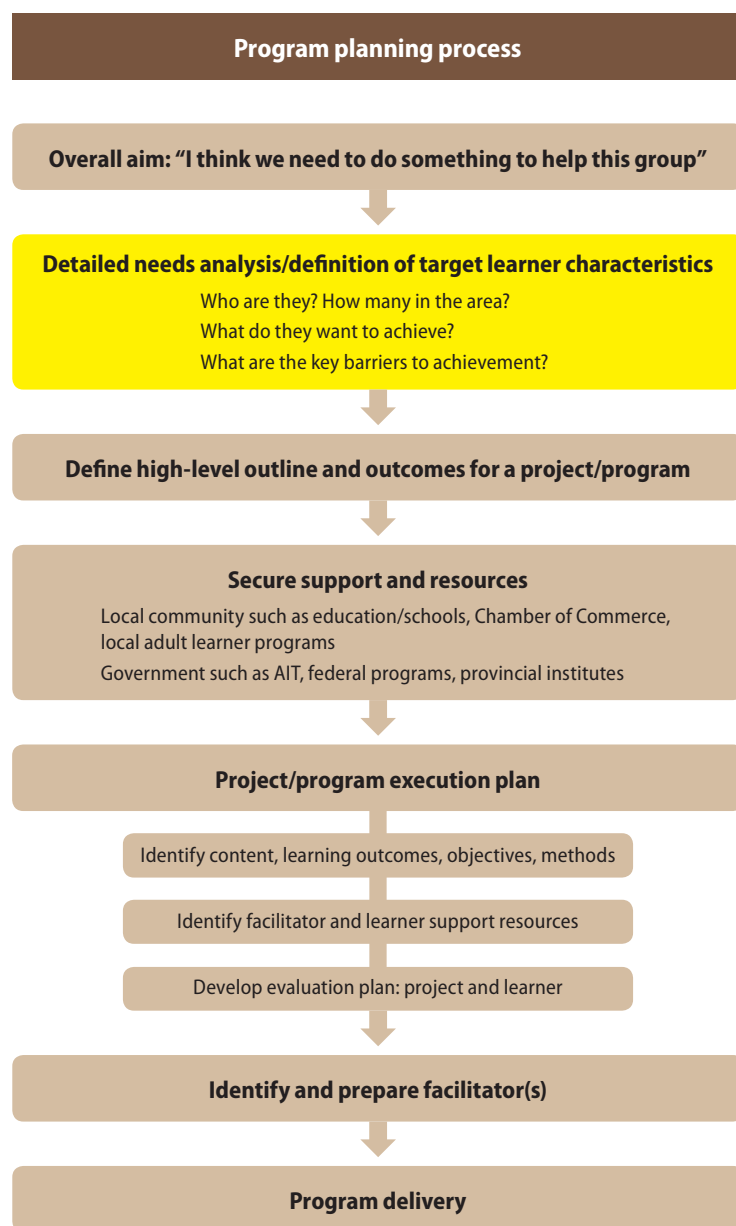
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### Familiarity with online federal resources related to trades and workplace Essential Skills

#### STEP-BY-STEP INSTRUCTIONS

1. Browse the National Occupation Classification (NOC):  
<http://www5.hrsdc.gc.ca/NOC/English/NOC/2011/SearchIndex.aspx>
2. Take the three NOC tutorials:
  - <http://www5.hrsdc.gc.ca/NOC/English/NOC/2011/Tutorial.aspx#10>
  - <http://www5.hrsdc.gc.ca/NOC/English/NOC/2011/Tutorial.aspx#18>
  - <http://www5.hrsdc.gc.ca/NOC/English/NOC/2011/Tutorial.aspx#21>
3. Browse the Literacy and Essential Skills section of the Employment and Social Development Canada website: <http://www.esdc.gc.ca/eng/jobs/les/index.shtml>
4. Take the Literacy and Essential Skills Self-assessment:  
<http://en.careers.essentialskillsgroup.com/?p=assess>
5. Browse the Essential Skills Profiles for three common trades:  
[http://www.jobbank.gc.ca/es\\_all-eng.do](http://www.jobbank.gc.ca/es_all-eng.do)
6. Determine the skill type and skill level for Heavy Duty Equipment Mechanics:  
[http://www.jobbank.gc.ca/es\\_view\\_profile-eng.do?prof\\_id=28&lang=eng](http://www.jobbank.gc.ca/es_view_profile-eng.do?prof_id=28&lang=eng)
7. Review the task complexity levels for each of the nine Essential Skills for the welding trade:  
[http://www.jobbank.gc.ca/es\\_search-eng.do?titleKeyword=welder&source=2&modify=Go%21&noc=7265](http://www.jobbank.gc.ca/es_search-eng.do?titleKeyword=welder&source=2&modify=Go%21&noc=7265)
8. Consider taking a free membership in the Canadian Apprenticeship Forum: <http://caf-fca.org/>

# Module 2: Community snapshot



## Overview

This module supports the processes highlighted above. Broadly speaking, the module helps you, the facilitator, to use demographic characteristics to identify potential learners.

## Objective

The activity in this module helps prepare you, the facilitator, to explore local demographic evidence.

### Activity 1

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## Identifying target population

### STEP-BY-STEP INSTRUCTIONS

1. Review the following example population and its barriers.

The population served by this project includes:

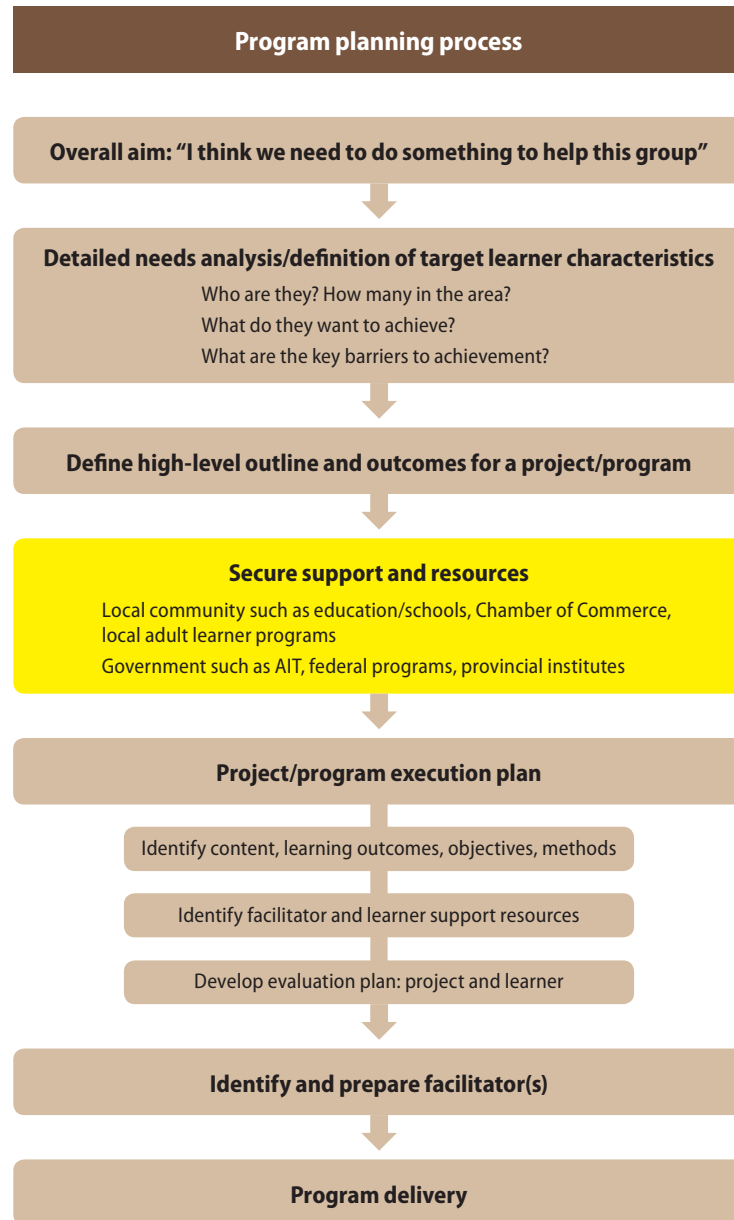
- Adults, aged 18 to 50
- Entry-level unskilled or semi-skilled workers
- Un/under-employed workers
- Workers who have failed an Apprenticeship and Industry Training (AIT) exam
- Workers with a foreign language and English as Additional Language background who have achieved permanent resident or citizenship status, and wish to begin or resume apprenticeship training
- Apprentices referred by their AIT consultants or their employers

Some of the barriers faced by these adults include:

- Difficulty navigating complex systems
- Left formal education early; highest level completed Grades 6 to 10
- Lack of confidence in problem solving
- Poor test-taking strategies (see *Edmonton Journal*, Saturday, April 4, p. A15)
- Limited or reluctant reading, numeracy, and digital skills
- Cognitive/learning disabilities, whether or not identified or diagnosed
- Long, physically-demanding work hours
- Family and financial responsibilities
- Layoffs due to lack of AIT certification
- Layoffs due to industry or economic factors

2. Create a contact list of individuals, organizations, and businesses in your community that may connect with the population described above. Your population characteristics may differ from the example above.

# Module 3: Using research to engage supporters



## Overview

This module supports the processes highlighted above. Broadly speaking, it allows the facilitator to gauge and to elicit community interest and potential supports.

## Objectives

The activities in this module help prepare you, the facilitator, to:

- Judge the level of support within the community
- Recognize the challenges and opportunities to be faced

## Background information

Your research and conversations should help you identify potential strengths and barriers to consider in your community. Second, you will gain insight into how best to build such a project, specifically the size and scope.

For example, some communities may be best served by offering a short course on trades math, or test-writing strategies. In our community, one client came to the learning centre and simply asked for help to study for a first year trades exam. We jumped on board and found that almost all first year crane and hoist apprentices have some difficulty with load charts, but typically do well on other sections of the exam. A “load chart” is a document which can be read, using certain strategies. Level 1/2 Numeracy skills are embedded in the document, so the general study of math operations would not be useful or wanted. Instead, working together to “figure out the document” turned out to be very useful and engaging for the worker, and for us.

After that, learners kept appearing one by one. We learned a little more each time, without making an unwieldy investment or taking too many resources from other projects. Thus, a trades project can be grown more or less organically, one learner at a time. This calls for a comment on the enormous value of continuous intake. An important consideration for trades clients is that they are either working or between jobs. This kind of barrier can derail the best intentions. So it helps if you can have some flexibility in your bookings.

This part of the project, like the evaluation section, while not directly related to tutoring trades clients, is extremely important. Without a clear understanding of what it is you want to do, community organizations and members will be unable to offer the broad support you need to be successful. Maintain open and cordial communication with employers, AIT, Comprehensive Community Institution (CCI) and funders. Misunderstandings can arise that will make the project a tough slog indeed.

## Activity 1

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### Elevator pitch

#### STEP-BY-STEP INSTRUCTIONS

1. Read the instruction for designing an elevator pitch on page 7 of the *AWES Workup Practitioner Guide*. See link: [http://www.awes.ca/site/assets/files/1303/workup\\_practitioner\\_guide.pdf](http://www.awes.ca/site/assets/files/1303/workup_practitioner_guide.pdf)
2. Create an elevator pitch for your community conversations.

## Activity 2

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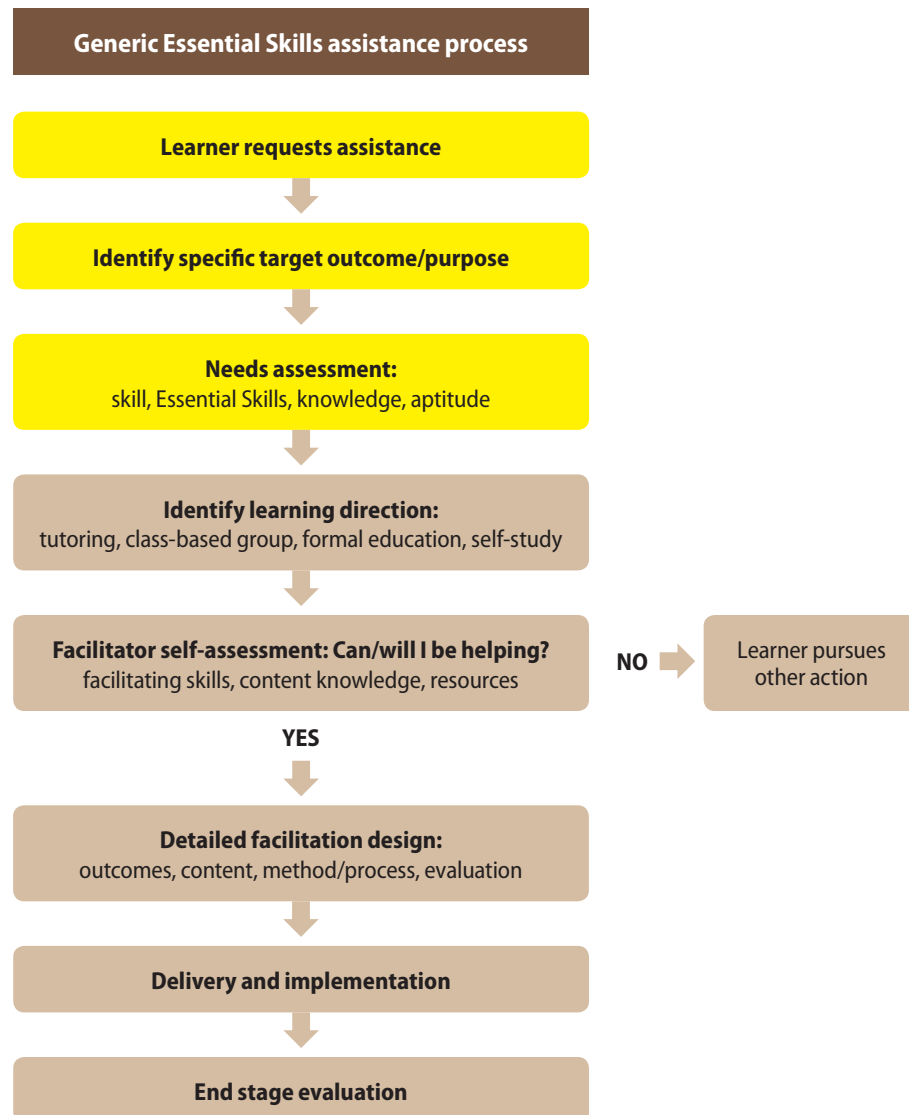
### Community conversations

#### STEP-BY-STEP INSTRUCTIONS

1. Review the contact list you created in Module 2.
2. Discuss the idea with your board and colleagues.
3. Attend a business support network or Chamber of Commerce meeting to learn about business and industry perspectives.
4. Chat with AIT consultants in your area (<http://tradesecrets.alberta.ca/contact-us/?QUERY=1>).
5. Interview AIT consultants in your area about the potential for individual tutoring/classes or offer to read for trades exams.
6. Contact your Human Services (Alberta Works) office. Would they see value in such a project? Do they have clients who could benefit from a nudge in the direction of a trade or occupation?
7. Discuss cooperative arrangements with your Comprehensive Community Institution (CCI).
8. Talk to colleagues in your region about the potential for sharing a project.
9. Speak with trades workers/union representatives about the challenges they face.
10. Check among un/under-employed clients in your programs about whether they might consider apprenticeship, and what barriers they see in achieving such a goal.
11. Check with employment services agencies who might know of clients who would fit a trades profile, with added coaching in Essential Skills.
12. Visit local career/job fairs and trade shows.



# Module 4: Interview and information request



## Overview

Broadly speaking, this module equips the facilitator with documents designed to help with the intake part of the process.

## Objectives

The activities in this module help prepare you, the facilitator, to:

- Choose appropriate learners for a trades project
- Determine the compatibility of the project and the learner

## Background information

In the early stages of building a relationship with a learner who is seeking help with trades exam preparation, it is not wise to encourage tutoring as a substitute when technical training or retraining is required. Express clearly that you are not qualified to help with technical aspects of the trade. Later in the guide we will talk about volunteer journeyman tutors. Let the learner know that a passing mark is not guaranteed as a result of tutoring.

## Activity 1

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### Examine a sample psychological assessment

#### STEP-BY-STEP INSTRUCTIONS

1. Turn to Appendix 5: *Psychological Assessment Report*.
2. Read the following information on psychological assessments and act accordingly:

If a current or potential apprentice had difficulties in school, the school may have completed a psychological assessment. If so, usually a document called a *Psychological Assessment Report* would be available through the school or the learner may have a copy. These are extremely valuable for learners, because they contain recommendations for them, their instructors and institutions. The report may, for example, recommend that the learner receive accommodations such as double time, or a reader for exams. Institutions are bound by legislation to honour these recommendations. For example, Northern Alberta Institute of Technology (NAIT) and other training institutions as well as AIT will accommodate trades learners with cognitive or learning disability issues.

Perhaps a learner has no such documentation and you suspect, based on your interview, that a psychological assessment may be appropriate. If the learner is an apprentice, AIT will pay for the assessment which can be arranged through your Alberta Works office. Also, if the learner is unemployed and employability may be affected, Alberta Works will arrange and pay for the assessment. Check with Alberta Works about the criteria. Otherwise, the Educational Psychology Department at the University of Alberta will provide the assessment at a discount, approximately \$500. Privately, they can cost up to \$2000.

If your learner suspects that assessments were done in the past, he or she should try to retrieve them. Often results are held in students' files in the schools they last attended. Sometimes parents still have the documents. We have had learners who have been assessed, qualify for accommodations, but, because of embarrassment/stigma, did not use them. We have also had learners who obviously would qualify, but, because their parents were embarrassed/worried about stigma, have never been assessed.

If your learner has a psychological assessment report, ask permission to view the recommendations section. This will give you excellent suggestions for tailoring your learning activities. It is not useful or appropriate to request or to keep the entire document. A better choice would be to review the recommendations, jot down some notes for yourself, and return the document to the learner. AIT will need a copy of the report, to ensure accommodations are provided.

## Activity 2

### Examine an apprenticeship results breakdown

#### STEP-BY-STEP INSTRUCTIONS

1. Turn to Appendix 6: *AIT Results Breakdown*.
2. Read the following information; it acts as a guide to understanding the results:

The top half of the document shows the scores received on the provincial AIT exam, while the bottom half refers to those marks assigned in the same subjects in technical training at NAIT, Southern Alberta Institute of Technology (SAIT), or another college in Alberta.

Take note of the different pass marks. In this case, the apprentice passed her technical training at school, but the weak scores in her hydraulics and electrical subjects precluded a pass on the provincial exam, with its 70 per cent pass mark.

Also note the high score on the practical, hands-on test. This suggests that the apprentice is more comfortable in the shop and that her knowledge and skills in the trade are best expressed in a practical setting. This discrepancy is common among many apprentices. It can often be a signal that lack of study or exam reading skills, or perhaps test anxiety, are factors influencing the score. This is not definitive, though. You will want to ask questions about:

- How the test went overall
- Has this happened before in other situations
- What seemed especially hard/easy on the test
- Did she have enough, too much or too little time
- Were there any distractions or physical discomforts

The answers will help you understand this person as a learner; for example, preferred learning mode (reflective/active/experiential) and learning style (visual/auditory/kinesthetic).

Another look shows that the AIT mark is only seven points short of a pass. This could mean that a review of hydraulics, electrical, and air brakes, using her modules and/or practice test questions may be of benefit. With what you understand of her preferred learning style and mode, you can choose learning environments, tasks and approaches that compliment her preferences and, more important, that show her how to extend her non-preferred style.

It is important to suggest that an apprentice in this situation return to school and repeat that part of the training, especially if the passing grade is 15 marks or more away. We find, however, that trades workers choose not to repeat technical training because doing so is personally, financially and geographically difficult to do.

## Activity 3

### Develop your trades interview questions

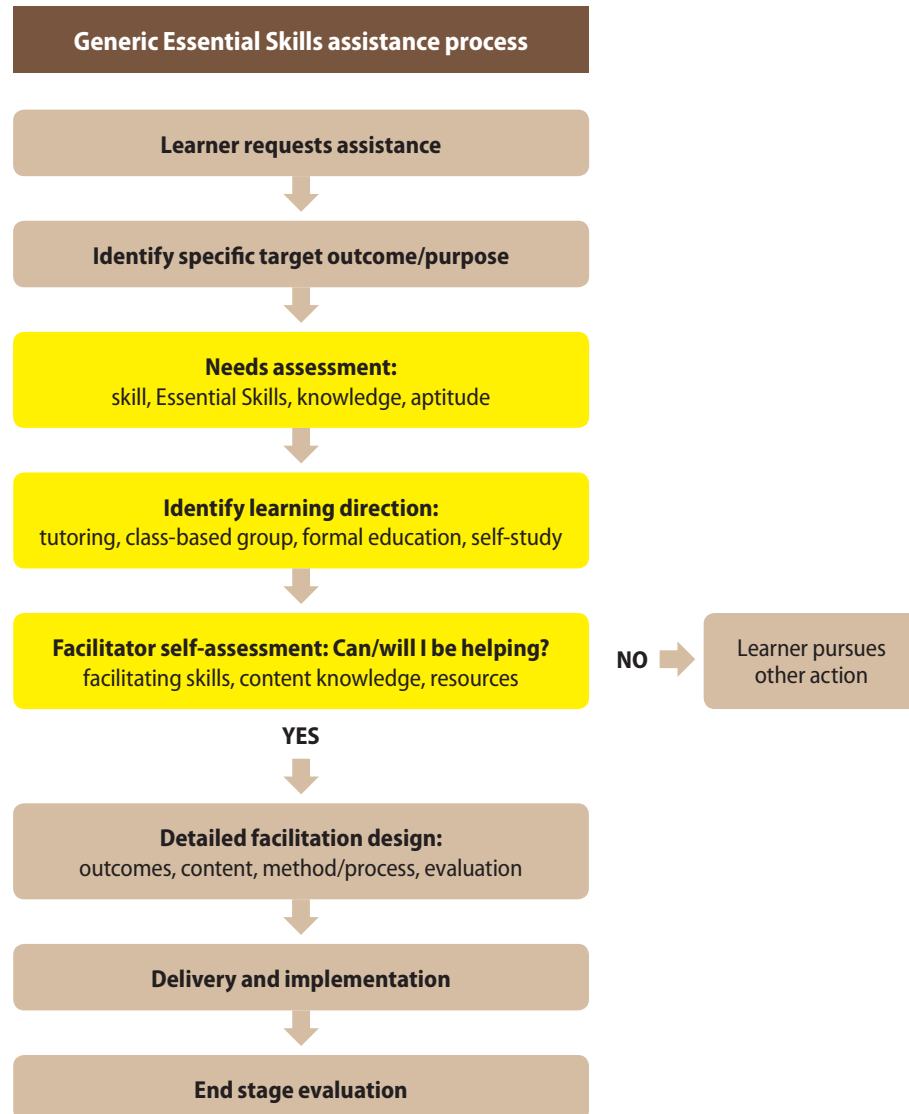
#### STEP-BY-STEP INSTRUCTIONS

1. To tailor a suitable interview protocol for potential or current trades learners use Appendix 7: *Trades Interview for Potential Apprentices* and Appendix 8: *Trades Interview for Current Apprentices*.
2. The following notes provide guidance on how and what to ask in an interview. The interview should be confidential, and as relaxed, informal and friendly as possible. Give yourselves lots of time to chat. Ask open-ended questions first. Save the forms and paperwork for later.

The italicized phrases indicate the purpose served by the question.

- How can we help you? (*specific and general goals*)
  - What sort of work do you do? (*employed or between jobs, current trades worker*)
  - Are you working right now? Where? (*hours, shifts, distance constraints*)
  - How did you become interested in the trades (*depth of interest, commitment*)
  - What do you like about your work and trade? (*comfort, learning, working style, depth of commitment*)
  - What do you already know about this trade? (*realistic understanding, research conducted*)  
You may want to introduce them to the ALIS website <https://alis.alberta.ca/index.html> or possibly to [www.tradesecrets.alberta.ca](http://www.tradesecrets.alberta.ca).
  - What was school like for you? (*difficulties, strengths, learning disability or cognitive limitations, prior psychological assessment*)
  - How much time do you have today? (*information gathering for registration and assessment*)
  - May I see your marks breakdown from the AIT test you wrote? (*for current trades only*)
  - Do you have a statement of marks from high school?
3. At this point, you will have a sense of how to proceed. For instance, with a current apprentice hoping to rewrite a trades AIT exam, you will gather details about the trade involved whether it is compulsory or not, the rewrite date, the marks on his/her first attempt, and possible psychological assessment recommendations.

# Module 5: Learner assessment



## Overview

Broadly speaking, this module equips the facilitator to administer appropriate intake assessments for three types of trades learners:

- Current apprentices
- Potential apprentices with strong high school backgrounds
- Potential apprentices with weaker high school backgrounds

This latter group will require more time and support to prepare for trades employment. It is important to offer realistic advice, without making or implying any judgement about the learner's prospects.

## Objectives

The activities in this module help prepare you, the facilitator, to:

- Have a strong understanding of the assessment processes for these three types of learners by completing the assessments for yourself
- Be familiar enough with these assessments to confidently administer them to appropriate learners
- Be familiar with the languages of trades and Essential Skills and how they are related

## Background information

The following are important resources for understanding how Essential Skills relate to the trades and assessments to use:

- What are Essential Skills for the Trades?  
[http://www.esdc.gc.ca/eng/jobs/les/tools/awareness/what\\_are\\_es\\_trades.shtml](http://www.esdc.gc.ca/eng/jobs/les/tools/awareness/what_are_es_trades.shtml)  
(Canada H. R., Employment and Social Development Canada, 2014)
- Alberta Apprenticeship Industry and Training: Updated Entrance Requirements  
[http://tradesecrets.alberta.ca/SOURCES/PDFS/Entrance\\_Requirements.pdf](http://tradesecrets.alberta.ca/SOURCES/PDFS/Entrance_Requirements.pdf)
- Essential Skills Self-Assessment for the Trades:  
[http://www.esdc.gc.ca/eng/jobs/les/docs/tools/es\\_self\\_assessment\\_trades.pdf](http://www.esdc.gc.ca/eng/jobs/les/docs/tools/es_self_assessment_trades.pdf)  
(Canada H. R., Employment and Social Development Canada, 2010)
- Essential Skills Workbook for the Trades with Answer Guide:  
<http://www.esdc.gc.ca/eng/jobs/les/docs/tools/WP-167-EN.pdf> (Canada H. R., Employment and Social Development Canada, 2011)

The interview process and assessment process can be separated. On-site assessment is best for observation and discussion of test-taking strategies and anxieties. Generally, it is better to conduct the interview in one appointment with the learner and the assessments to be completed in a subsequent appointment. Assessments typically take an hour and a half to two hours, but are not timed.

## Activity 1

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### Understanding intake assessment for current apprentices

**Note:** This activity is for you, the facilitator, to understand how the assessment process works for current apprentices. Allow about 1.5 hours.

#### STEP-BY-STEP INSTRUCTIONS

1. Complete Appendix 9: *NWT Apprenticeship Reading Assessment* for yourself so you have an understanding of the content prior to using with apprentices.
2. Score your assessment and analyze any errors.

## Activity 2

---

### Understanding intake assessment for those with a strong high school background

**Note:** This activity is for you, the facilitator, to understand how the assessment process works for those with a strong high school background. Allow about 2.5 hours.

#### STEP-BY-STEP INSTRUCTIONS

1. Complete the Trade Entrance Exam Study Guide: [http://tradesecrets.alberta.ca/sources/pdfs/exams/entrance/077\\_entrance\\_study\\_guide.pdf](http://tradesecrets.alberta.ca/sources/pdfs/exams/entrance/077_entrance_study_guide.pdf) (Alberta, 2003).
2. Score your assessment and review any errors.
3. Review questions 31 to 37 for points on exam-taking strategies that can be discussed with learners who experience exam writing problems.

## Activity 3

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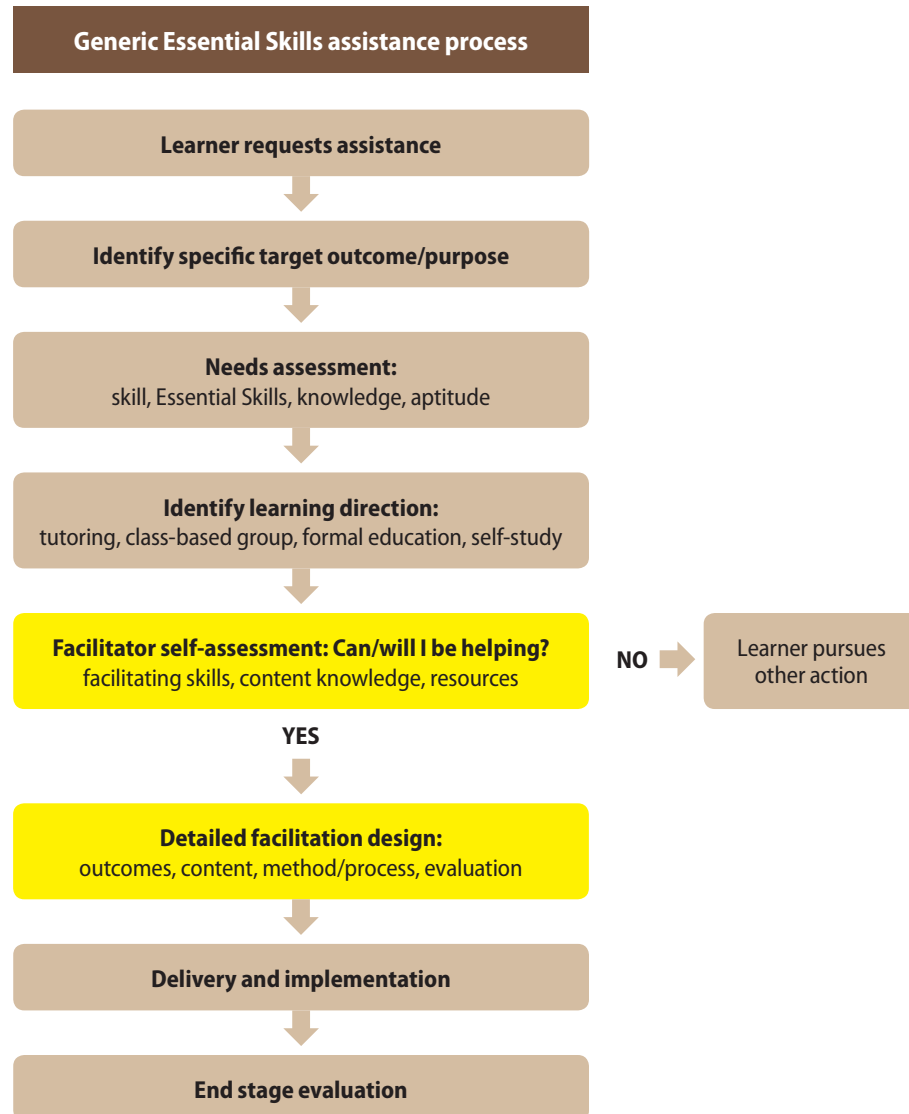
### Understanding intake assessment for those with a weak high school background

**Note:** This activity is for you, the facilitator, to understand how the assessment process works for those with a weak high school background. Allow about 1.5 hours.

#### STEP-BY-STEP INSTRUCTIONS

1. Go to the website for the Breakthrough to Math Levels 1, 2, 3, 4 Teacher's Directory, (2012) [http://www.newreaderspress.com/Downloads/3652\\_3775746\\_BTMTeachersDirectory.pdf](http://www.newreaderspress.com/Downloads/3652_3775746_BTMTeachersDirectory.pdf)
2. Complete the placement tests Level 1 to 3 (pp. 16 to 28, Questions 1 to 119).
3. Next, score your placement tests to ensure understanding of how these tests work.
4. Complete the Read Forward Locator Test: <http://www.readforward.ca/locators/> (College, 2014).
5. Score your Locator Test to determine which Read Forward assessment is appropriate: <http://www.readforward.ca/tests/>
6. Review the results of the assessment.

# Module 6: A draft learning plan



## Overview

Broadly speaking, this module equips the facilitator to convert interview information, learner documents, and assessment information into a draft learning plan.

## Objectives

The activities in this module help prepare you, the facilitator, to:

- Use the information collected through the assessments to design a draft learning plan
- Become familiar with teaching and learning materials



## Activity 1

### Developing a learning plan

#### STEP-BY-STEP INSTRUCTIONS

1. Review interview notes, learner's documentation, and assessment results.
2. Based on learner's goals, timeframes, and availability, sketch a tentative learning plan. Include specific, measurable, achievable, result-focused, and time-bound goals.
3. See Appendix 10: *Learning Plan Template 1* and Appendix 11: *Learning Plan Template 2*, for examples of learning plans. Or, you may want to build your own learning plan.
4. See sample learning plan notes below.
5. Include assessment results and psychological assessment recommendations.
6. Make note of what resources are needed and/or available. Refer to Appendix 3: *Resource List* to help make a list of resources for review.

#### Draft learning plan notes 1: Current apprentice

HET period (year)

Appendix 6: *AIT Results Breakdown*

Goal: 75% on rewrite

Appendix 5: *Psychological Assessment Report*

Expected write date: February 23

Reader and extra time arranged with AIT

Available for study: Mon/Wed, 9:00 – 12:00, Jan. 5 – Feb. 18

Will combine home study, (10 hours); Learning Centre (35 hours test prep)

Journeyman X at work has agreed to help with technical questions as they arise (2 hours)

Materials and resources: Individual Learning Modules and Trades Exam Bank Practice Tests

#### Draft learning plan notes 2: Potential apprentice

Unskilled labour 2 yrs: Grade 9 Math, Grade 10 Language Arts

Goal: Welding trade

May have psych assessment (will check)

Read Forward Assessment / Breakthrough to Math Placement

Study Plan: Tutorial on ALIS and Tradesecrets

Explore websites: Occupational Profile for Welder

Check apprenticeship registration process

Will complete welding research April 16

Will work on Breakthrough to Math Level 2 till next shift off. Will call to book appointment.

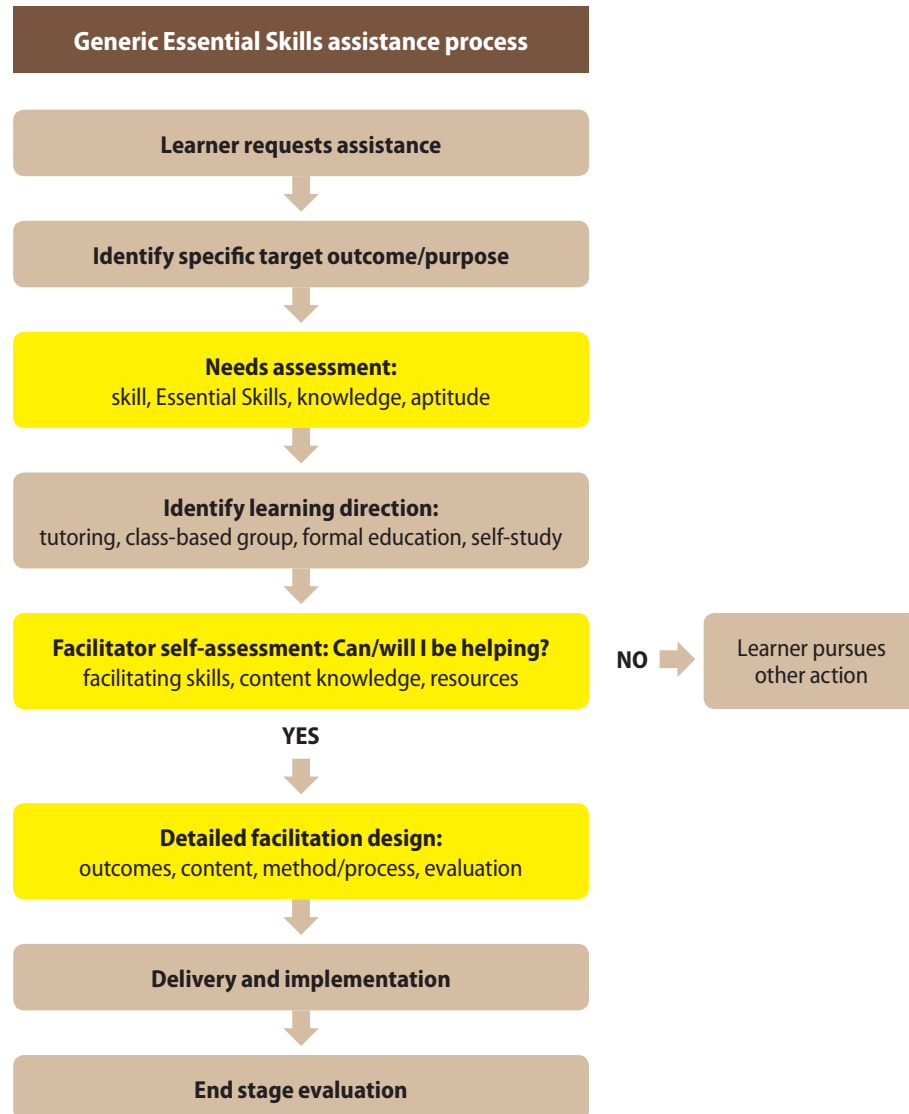
Study materials: Calculator Lessons (Missouri)

Breakthrough to Math Level 2, Document Reading

Refer to Missouri Valley Adult Education Association Calculator Lessons:

<http://www.mvaea.com/casio.html>

# Module 7: Interview 2 and learning plan



## Overview

Broadly speaking, this module equips the facilitator to work with the learner to develop a learning plan.

## Objectives

The activities in this module help prepare you, the facilitator, to:

- Construct an interview that gives the learner a sense of the gap to be addressed in the learning process
- Discuss assessment results and tailor a learning plan with the learner

## Activity 1

---

### Assessment review

#### STEP-BY-STEP INSTRUCTIONS

1. Review the results of the assessment questions from one or more of the following assessment tools: NWT Apprenticeship Reading Assessment in Trade Entrance Exam Study Guide, Breakthrough to Math Placement Tests Level 1 to 3, Read Forward Locator Test.
2. Carefully prepare to discuss strategies that might have helped the learner to deal with specific problem questions.
3. Use results from the assessment to develop facilitator notes for a conversation with the learner. The following are examples of notes for questions 11, 12, 27, and 28 in Appendix 9: *NWT Apprenticeship Reading Assessment*.

Kathy Willem, Oct. 7/15 assessment notes:

Good work, Kathy

What was the assessment like for you?

Score 22/36

Review questions 11, 12, 27, and 28

Question 11: "**best** supports the **main** point in the passage" main or general idea/support or specific examples

Question 12: "**according to the passage**" (12) not general/personal knowledge

Question 27: "what would **not** be a reason..." (27) negatives easily overlooked if skimming

Question 28: "having the **edge**" (28) idiomatic/literal meaning

4. Discuss two or three reading assessment questions with the learner. This helps to generate trust and motivation to learn. Usually learners are surprised to have a reading error explained quite so simply. It's great insight for them and a step on the path to critical thinking skills so important in adult learning.

## Activity 2

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### Facilitator and learner collaborate on final learning plan

**Note:** Current apprentices will have a short-term goal to pass a particular AIT exam. Potential apprentices will have both short- and long-term goals. For example, a short-term goal would be to learn basic calculator skills. A long term goal would be to pass a trades entrance exam. It is important that the facilitator explicitly describe the connection between the learning/study plan and the goals of the client. Potential apprentices may need trades math, reading, and calculator skills at a more basic level.

### STEP-BY-STEP INSTRUCTIONS

1. Choose either Appendix 10: *Learning Plan Template 1* or Appendix 11: *Learning Plan Template 2* or use your own.
2. Review the learning plan with your learner.
3. Outline the type of materials, available timelines and nature of tutorial assistance you are able to provide. Ask and answer any questions.
4. With current apprentices, we suggest using practice tests from the Trade and Apprenticeship ExamBank as part of your learning plan (<http://trades.exambank.com>). See sample questions from Appendix 12: *Trade and Apprenticeship ExamBank Practice Test*.
5. With current apprentices, ask about the possibility for them to team up with a journeyman tutor for review of technical questions.

### Thoughts on “teaching to the test”

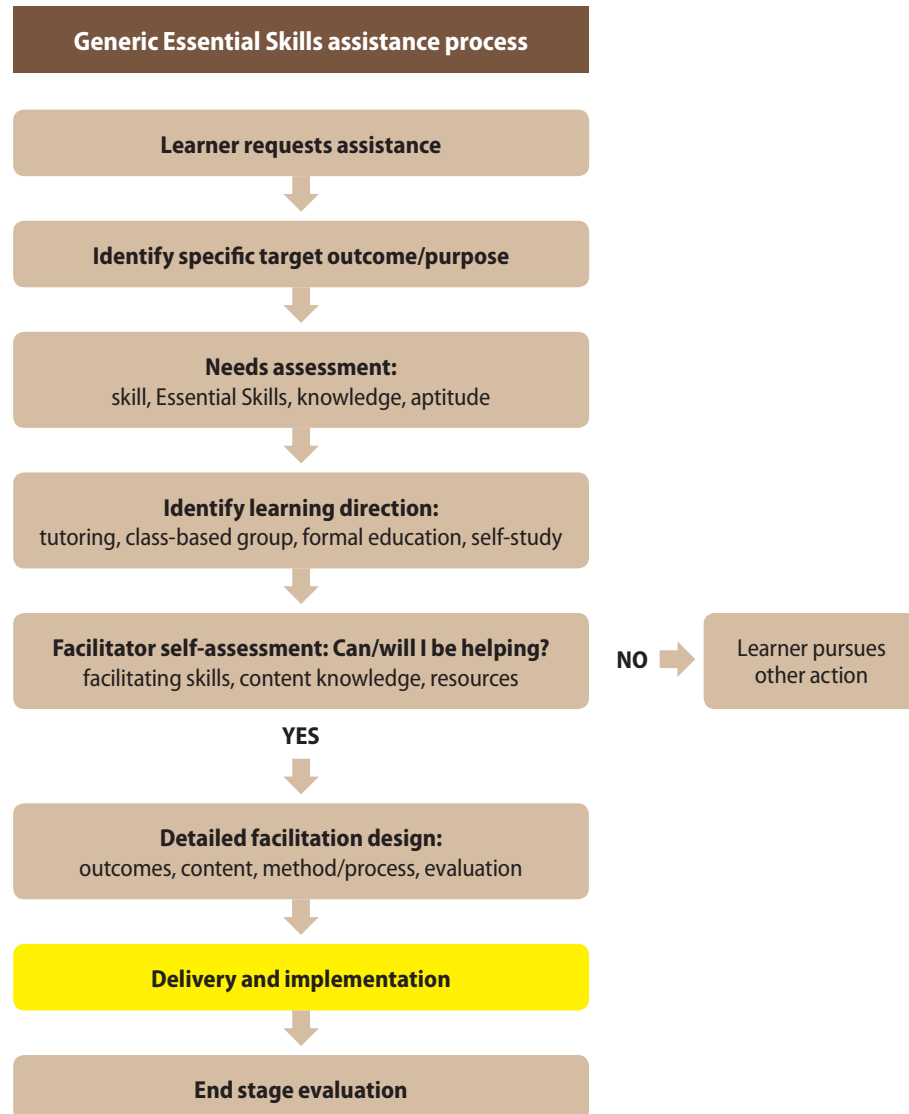
There is diversity of opinion on this matter, all of it worthy of consideration. Provincial trades exams are high stakes exams meant to separate the chaff from the wheat. Joseph Brean of the National Post said this about the physiological features of high stakes exams: “Broadly, exams are threatening situations and some people respond with anxiety manifested in heart palpitations, sweating, twitching, and dry mouth... The people who thrive under the pressure of exams and those who collapse under the stress are often showing the exact same physiological response. For some the sensation is thrilling, for others it can be traumatic. Ironically those most likely to fail in demanding situations are those who in the absence of pressure have the greatest capacity for success.” (Brean, 2015).

Helping adults to build strategies for coping with this stress is a valid objective in any trades or Essential Skills project. Practice tests are excellent tools for strengthening this skill. Appendix 12: *Trade and Apprenticeship ExamBank Practice Test* is a valuable resource for apprentices at any level in the compulsory trades. First, the exam bank is recommended by AIT. Second, the questions are structured much like those in the AIT exams. Moreover, they are organized the same as the units in the Individual Learning Modules (ILMs). Non-compulsory trades would also benefit from ILMs.

These practice tests are very inexpensive. We buy “credits” in bulk, which allow unlimited access to print and online test questions in randomized batches of 20 to 150 for all compulsory trades. Since a 20-question practice test costs \$1.50, our learners are happy to pay for them.

Used in conjunction with the ILMs from their technical training, exam bank questions provide good practice in literacy Level 1 to 3 text and document Reading Essential Skills. This content is of very high interest and value to trades clients, so they are strongly motivated to work at them. As they begin to see how some of the reading challenges can be solved, they develop confidence and focus that will help them well beyond this one exam.

# Module 8: Implementation



## Overview

Broadly speaking, this module equips the facilitator to tutor the learner in the specific areas required to meet the goals set.

## Objectives

The activities in this module help prepare you, the facilitator, to know:

- How to support learners in strengthening their foundational skills
- Which resources would be most useful for any given learner

## Background information

As a facilitator you do not need expertise in the trades to help a trades-bound client. Your expertise is first in understanding Essential Skills, specifically Document Use, Reading and Numeracy. Second, your wealth of strategies, tools and resources are the content to be provided to the learner. In fact, it is better to know nothing about the trade itself. This eliminates the temptation to try to “teach” technical knowledge and the discomfort of not knowing everything. As a facilitator you are strengthening the Essential Skills that underlie technical knowledge. As an equal partner in the process, you are modelling problem-solving strategies.

Separating outcomes for you and the learner helps to keep the focus of the tutoring where it belongs.

### Outcomes for facilitator:

- Know appropriate materials needed
- Know learning style of client
- Know numeracy/calculator problems of client
- Have enough information to continue or revise the learning plan

### Outcomes for the learner:

- Increased understanding of challenges that need to be addressed
- Confidence that challenges are solvable
- Motivation to address challenges

The majority of potential and current apprentices in the “real” world do very well in the trades, but for that percentage who are not at ease in the world of text and documents, the strategies that work for most literacy learners work just as well. The use of directly relevant content with which to practice basic skills is a significant advantage for the facilitator and for the trades learner. Though we are not trades workers ourselves, we can apply proven learning strategies to almost any content. Trades “content” is built of systems, structures, components, devices, and processes. The Individual Learning Modules used to instruct apprentices during technical training organize content in a linear fashion that progresses from fundamentals to more complex concepts. Tutors can use their understanding of how the trade is structured to determine the best strategies for reinforcing the content. The way to develop this understanding is to spend some time looking through the ILMs and the Trade and Apprenticeship ExamBank tests. The way these documents are organized reflects the way the trade’s content is organized. You will see the same organizing principle at work in the AIT results breakdown. In our experience, a major difficulty faced by apprentices is the inability to “see” how the content is organized. Until they fully realize this study skill, the modules and the test questions can seem inscrutable.

The following strategies work well with all types of content including trades:

1. Paired reading
2. Drawing pictures of structures
3. Vocabulary study
4. Organizing and searching modules
5. Error analysis:
  - a) Underline function words
  - b) Call attention to qualifiers
  - c) Review general/specific information

- d) Review question structure:
  - What is known/given vs. what is unknown/required
  - What = there is a thing
  - Where = there is a place
  - When = there is a time
  - Why = there is a reason/cause
  - How = there is a method or a process
- e) KWL study strategy (Campbell, 2003) is an acronym for
  - What I **k**now
  - What I **w**ant to know
  - What I have **l**earned

## Activity 1

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### Tutoring a current apprentice

#### STEP-BY-STEP INSTRUCTIONS

1. Go to Trade and Apprenticeship ExamBank website ([www.trades.exambank.com](http://www.trades.exambank.com)) and retrieve the appropriate trade and period test.
2. Have the learner start with a 20-question test from the practice test section that covers the learner's weakest score from his/her AIT results breakdown.
3. Instruct the learner to read the exam questions carefully, scanning for phraseology and typographical errors.
4. Have the learner read and answer the first ten questions independently, and to read aloud the second set of ten. Sometimes there will be a remarkable difference in the scores for the two sets.
5. You score the exam and discuss the entire exam with the learner.
6. Record these activities in Appendix 13: *Record of Learner Appointments*.

## Activity 2

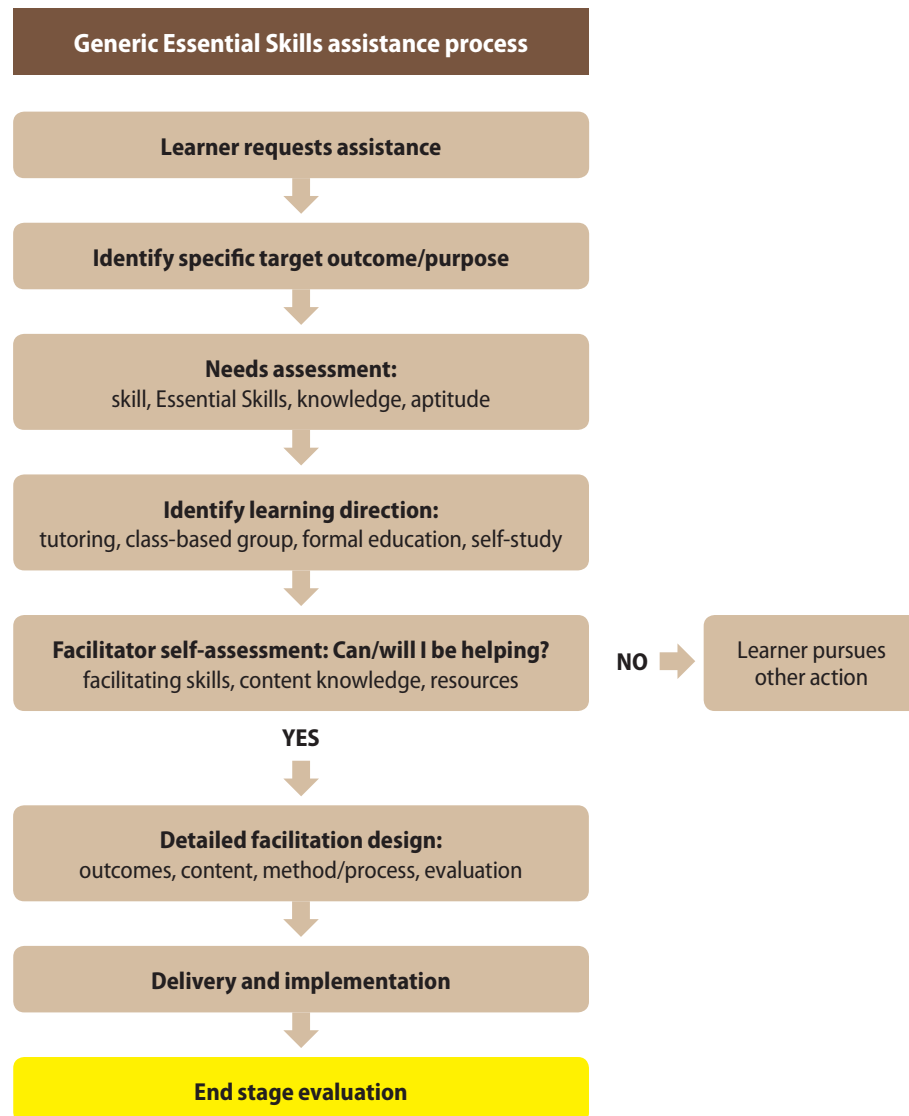
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### Tutoring a potential apprentice

#### STEP-BY-STEP INSTRUCTIONS

1. Have the potential apprentice work through the Trade Entrance Exam Study Guide: [http://tradesecrets.alberta.ca/sources/pdfs/exams/entrance/077\\_entrance\\_study\\_guide.pdf](http://tradesecrets.alberta.ca/sources/pdfs/exams/entrance/077_entrance_study_guide.pdf)
2. Score questions to track progress.
3. Discuss with the learner math questions that caused difficulty.
4. Record these activities in Appendix 13: *Record of Learner Appointments*.

# Module 9: Evaluations



## Overview

Broadly speaking, this module equips the facilitator to evaluate the effectiveness of the project for various audiences.



## Objectives

The activities in this module help prepare you, the facilitator, to

- Understand whether the trades exam project is meeting the goals of learners, the organization, and the funders
- Use information gathered to quantify the value and sustainability of the project.

## Activity 1

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### Learner evaluation

#### STEP-BY-STEP INSTRUCTIONS

1. Appendix 14: *Learner Evaluation* is an example of an evaluation that you could use with your learner. Or you could use an evaluation format that works better for you and your organization.
2. Gather data on registration, interview, learner sign-in form and exit evaluation to calculate the number of tutorial hours and the percentage of successful passes. Note other details like appropriateness of materials used, session productivity, what worked well, and so on.

## Activity 2

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### Cost and benefit analysis

#### STEP-BY-STEP INSTRUCTIONS

1. Determine the cost of the project.
2. Translate the information to outcomes-based measurements.
3. Use the data to revise your practices.
4. Communicate the benefits and costs of the project to employers, donors, and potential clients.

## Resources

- Alberta Workforce Essential Skills. (2015). *AWES Workup Practitioner Guide*. Retrieved June 2015 from [http://www.awes.ca/site/assets/files/1303/workup\\_practitioner\\_guide.pdf](http://www.awes.ca/site/assets/files/1303/workup_practitioner_guide.pdf)
- Alberta Apprenticeship and Industry Training Board. (2013). *Statistical Profiles 2013*. Retrieved May 2015 from [http://tradesecrets.alberta.ca/sources/pdfs/board\\_publications/statistical\\_profiles/2013\\_STATISTICAL\\_REPORT.PDF](http://tradesecrets.alberta.ca/sources/pdfs/board_publications/statistical_profiles/2013_STATISTICAL_REPORT.PDF)
- Apprenticeship and Industry Training. (2014). *Trade Entrance Exam Study Guide*. Retrieved June 2015 from [http://tradesecrets.alberta.ca/sources/pdfs/exams/entrance/077\\_entrance\\_study\\_guide.pdf](http://tradesecrets.alberta.ca/sources/pdfs/exams/entrance/077_entrance_study_guide.pdf)
- Apprenticeship and Industry Training. (2015). *Tradesecrets*. Retrieved May 2015 from [www.tradesecrets.alberta.ca](http://www.tradesecrets.alberta.ca)
- Bow Valley College. (2014). *Read Forward Locator Test*. Retrieved May 2015 from <http://www.readforward.ca/locators/>
- Brean, J. (2015, April 4). Is time up for the high-stress exam? *The Edmonton Journal*, A15.
- Campbell, Pat. (2002). *Teaching Reading to Adults: A Balanced Approach*. Grassroots Press.
- Canadian Apprenticeship Forum. (2015). Retrieved June 2015 from <http://caf-fca.org>
- Canada, E. a. (2014, July 17). *Skills Definitions and Levels of Complexity*. Retrieved May 8, 2015, from Employment and Social Development Canada: <http://www.esdc.gc.ca/eng/jobs/les/definitions/index.shtml>
- Employment and Social Development Canada (2013). *Literacy and Essential Skills*. Retrieved June 2015 from <http://www.esdc.gc.ca/eng/jobs/les/index.shtml>
- Employment and Social Development Canada (2014). What are Essential Skills for the Trades? Retrieved June 2015 from [http://www.esdc.gc.ca/eng/jobs/les/tools/awareness/what\\_are\\_es\\_trades.shtml](http://www.esdc.gc.ca/eng/jobs/les/tools/awareness/what_are_es_trades.shtml)
- Evetts, Julian. (1996). *Document Use at Work*. SkillPlan – BC Construction Industry Skills Improvement Council. Burnaby, BC.
- Fownes, L., Thompson, L., & Evetts, J. (2003). *Numeracy at Work*. SkillPlan – BC Construction Industry Skills Improvement Council. Burnaby, BC.
- Grecki, Sue. (2008). *Preparing for Heavy Equipment Occupations*. SkillPlan – BC Construction Industry Skills Improvement Council. Burnaby, BC.
- Human Resources and Skills Development Canada. (2010). *Document Use Refresher for Apprentices*. Retrieved June 2015 from [http://www.nald.ca/library/learning/nsde/doc\\_refresher\\_apprentices/doc\\_refresher\\_apprentices.pdf](http://www.nald.ca/library/learning/nsde/doc_refresher_apprentices/doc_refresher_apprentices.pdf)
- Human Resources and Skills Development Canada. (2009). *Essential Skills Self-Assessment for the Trades*. Retrieved June 2015 from [http://www.esdc.gc.ca/eng/jobs/les/docs/tools/es\\_self\\_assessment\\_trades.pdf](http://www.esdc.gc.ca/eng/jobs/les/docs/tools/es_self_assessment_trades.pdf)
- Human Resources and Skills Development Canada. (2011). *Essential Skills Workbook for the Trades with Answer Guide*. Retrieved June 2015 from <http://www.esdc.gc.ca/eng/jobs/les/docs/tools/WP-167-EN.pdf>

- Lew, J., & Hardt, M. (2011). *Controlling Complexity: An Introduction to Question Structure*. SkillPlan – BC Construction Industry Skills Improvement Council. Burnaby, BC.
- Lewe, G., & Macleod, C., (2001). *Step Into the World of Workplace Learning: A Collection of Authentic Workplace Materials*. Nelson Thomson Learning in cooperation with Human Resources Development Canada, and Canadian Government Publishing, Public Works and Government Services Canada.
- Missouri Valley Adult Education Association. (2001). *Calculator Lessons*. Retrieved May 2015 from <http://www.mvaea.com/casio.html>
- National Occupational Classification (2011). Retrieved June 2015 from <http://www5.hrsdc.gc.ca/NOC/English/NOC/2011/SearchIndex.aspx>
- New Readers Press. (2012). *Breakthrough to Math Levels 1, 2, 3, 4 Teacher's Directory*. Retrieved June 2015 from [http://www.newreaderspress.com/Downloads/3652\\_3775746\\_BTMTeachersDirectory.pdf](http://www.newreaderspress.com/Downloads/3652_3775746_BTMTeachersDirectory.pdf)
- Northwest Territories Apprenticeship Support Materials. (2003) Retrieved June 2015 from [https://epl.bibliocommons.com/item/show/571328005\\_nwt\\_apprenticeship\\_support\\_materials](https://epl.bibliocommons.com/item/show/571328005_nwt_apprenticeship_support_materials)
- Syzygy Research and Technology. (2014). *Trade and Apprenticeship ExamBank*. Retrieved May 2015 from <http://trades.exambank.com>
- Wong, V., Lew, J., & Lloyd, C., (2008). *Thinking Strategies for Numeracy: A Practitioner's Guide*. SkillPlan – BC Construction Industry Skills Improvement Council. Burnaby, BC.

# Appendix 1: Principles of adult learning and helping skills

## Purpose

Facilitating adult learning programs starts with asking yourself:

- What do I know about adult learners?
- Do I have a good foundation in adult learning to guide my practice?

Without having a basic understanding of adult learning principles, building positive relationships may be challenging for reasons not known to you. Equally important to knowledge about adult learning is your understanding and use of a process that guides your communication with a learner. If you reflect on your own adult learning experiences you may find that what made your experience positive or negative is how grounded your learning experience was in adult learning principles and whether the process was an engaging one that moved you towards your goal.

In this section, you are introduced to a theoretical construct or model intended to provide the foundation to build your relationship with adult learners. First, you'll explore Malcolm Knowles' (1982) theory for the purposes of understanding adult learning in the context of the Community Adult Learning System. His theoretical principles are used extensively with adult literacy learners. Knowles' work is a helpful guide for essential aspects of your work with adult learners. These include:

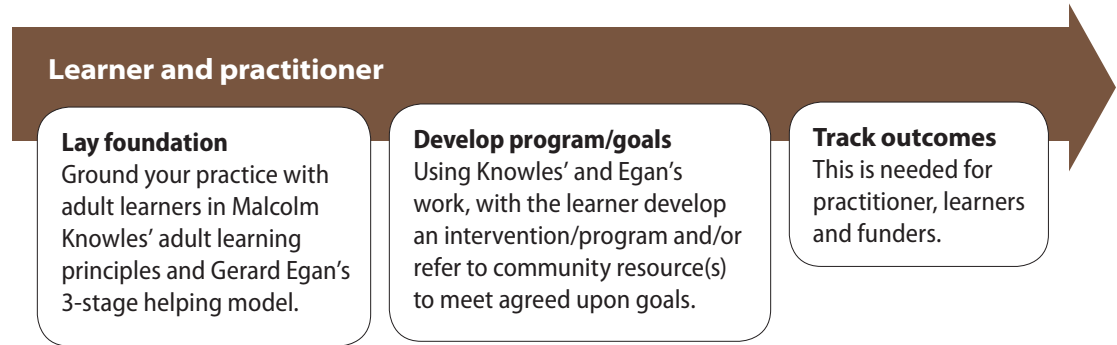
- Needs assessment
- Goal setting
- Action planning
- Development of an intervention/program
- Measurement of outcomes

For the purposes of this section, you will focus on adult learning principles only and not on adult learning styles. Learning styles elaborate the various ways learners learn, for example visual, auditory, kinesthetic and so on.

Second, an introduction to Gerard Egan's (1998) 3-stage model describes a simple process of "helping". A process provides a path with stopping off points for you the practitioner and your learner to explore important questions. Without a path, it is easy to get lost along the way in assisting your learner. From the starts and stops along the way, the learner and practitioner are continuously assessing the learner's progression and making adjustments as needed. Through consistent validation of the milestones accomplished, adult learners build the confidence and skills necessary to tackle further learning. For literacy learners, tackling further learning is one of the most important outcomes achieved.

The following schematic represents the process that lays the groundwork for the path shared by practitioner and learner.

### Building a pathway with adult learners



Often one of your biggest challenges is bridging the gap between theory and the application of theory to real-life situations. For the purposes of working with literacy learners we'll explore the definition of learning first, followed by Knowles' theory. When discussing the definition of learning, an important aspect to remember is the depth to which skills and knowledge are processed. Generally this definition of learning includes the concepts of reflective and non-reflective learning.

Jarvis (1992) pointed out that learning may be reflective and non-reflective. Non-reflective learning is memorization or repetitive performance of a simple task. Reflective learning requires more thinking; it is when learners seek to understand the "why's" of something. The knowledge or skill can be broken down into parts and reassembled in a new form to be used differently. Learning in this respect moves along a continuum; at one end is non-reflective learning while reflective learning is at the other end. For example, simply memorizing how to add fractions would be leaning towards the non-reflective end of the continuum. If, however, you wanted to use this mathematical operation to measure and calculate various lengths of wood and fabric, or to measure ingredients for a recipe, you would be moving toward the reflective end of the continuum. You would be processing this skill at a deeper level in order to apply it across a variety of situations. If we accept that learning is best viewed as occurring along a continuum, then when facilitating learning or designing a learning opportunity the process also needs to be viewed as a continuum based on your learner's strengths, needs and goals.

Just as there is a continuum in learning there is a range in adult education approaches. In the last 50 plus years, adult education has swung from pedagogy, commonly understood as a "teacher-centered" approach to andragogy, understood as a "learner-centered" approach. Today, the approach rests somewhere in the middle.

The following table distinguishes nicely the differences between pedagogy and andragogy (Herod, 2002).

Pedagogy (teacher-centered)	Andragogy (learner-centered)
Learners are dependent	Learners are independent and self-directed
Learners are externally motivated	Learners are intrinsically motivated (interested in learning)
Learning environment is formal and characterized by competitiveness and value judgments	The learning environment is more informal and characterized by equality, mutual respect and cooperation
Planning and assessment is conducted by the teacher	Planning and assessment is a collaborative affair between teacher and student
Teaching is characterized by transmittal techniques (lectures, assigned readings etc.)	Teaching is characterized by inquiry projects, experimentation, independent study
Evaluation is accomplished mainly by external methods (grades, tests and quizzes)	Evaluation is characterized by self-assessment

As the table shows there is stark contrast between pedagogy and andragogy approaches. These terms are a bit of a mouthful so many adult educators use the terms “directed learning” when referring to pedagogy and “facilitated learning” when referencing andragogy. Knowles used the term andragogy to mean the “art and science of helping adults learn” and other adult educators too came to see the false distinction between andragogy and pedagogy. For example, some children do well with a “facilitated” approach and some adults do well with a “directed” approach. It is through this discovery that Knowles later on in his work recognized the middle of the continuum best represented his theory about adult learning.

Near the middle of the continuum, his assumptions about approaches to adult learning are best described as “problem-based and collaborative”. He did not subscribe to a didactic and lecturing approach nor to a completely self-directed one, both of which are represented on the extremes of the continuum. Further, he acknowledged at any given time a learner may shift position on the continuum due to factors such as the subject matter, learning objectives and learning style. Generally, the characteristics of directed and facilitated learning and that which falls in between, problem-based and collaborative, are captured in the snapshot below.

### Characteristics of directed, problem-based/collaborative and facilitated learning

Directed learning	Problem-based and collaborative	Facilitated learning
Characterized by lecturing, drills, memorization, question and answer, and immediate feedback. Teacher acts as “sage on the stage” for setting learning objectives and assessing skills/knowledge.	Characterized by guided discussions, group work, problem-based learning. Teacher and students negotiate learning objectives to some extent. Assessment is a collaborative effort between teacher and learner.	Characterized by independent projects, learner-directed discussions, critical thinking. Teacher acts as “guide on the side”. Learners set learning objectives with some guidance.

This said, Knowles' (1984) research holds a set of assumptions about how adults learn. For adults to be engaged in learning he identified six principles. They are:

1. Adults are relevancy oriented
2. Adults are internally motivated and self-directed
3. Adults bring life experiences and knowledge to learning experiences
4. Adults are goal oriented
5. Adults are practical
6. Adult learners like to be respected

If you think back on your own positive and negative adult learning experiences, how many of the six adult learning principles were in place? Throughout your interactions with learners, being mindful of the six adult learning principles approaches to adult learning helps to stay focused more on the learner's needs and less on your own. Sometimes these principles may not always be evident with learners for a number of reasons – lack of confidence, fear, shame and so on. You as a practitioner, in building a relationship with your learner, must make every opportunity to recognize, use and applaud each of the six principles.

## Developing a helping relationship with your learner

Armed with a deepening understanding of adult learning principles, let's return to mapping out how you would apply this to a learner interaction. The mapping usually involves three steps:

1. First, a learner comes to seek information; he/she may have been referred or comes on his own. Or, you may see a community need to offer literacy training to a group.
2. In both cases, either working one-on-one or with a group, you need to build a respectful, trusting, and caring relationship. Without these elements in a "helping" relationship, the outcomes may not reflect the desire.
3. Next, as a practitioner, how do you build this relationship to establish goals, processes and outcomes with your learner? For some, you may have years of experience and/or formal training that provides you with the skills and confidence. For others, intuitively you may have a sense of what needs doing but not a clear process of how to proceed. Still others may be completely new to the field and grappling with how to go forward. In any case, an introduction to a simple, effective framework may serve your needs.

Gerard Egan, author of *The Skilled Helper – A Problem Management Approach to Helping* (1998), developed a simple 3-stage model. This model guides helpers to build relationships that empower people to take responsibility for their own goals and develop opportunities. The person's own agenda is central, and the model seeks to move the person towards action leading to outcomes which they choose and value.

This model is a framework for conceptualising the helping process, and is best used in working on recent past and present issues. Helping takes place in a variety of settings – teaching, facilitating and counselling. Egan's model can be used in all these helping relationships and for this reason it was chosen for working with literacy learners. Furthermore, a model keeps us from thrashing around wondering where to go next; it provides a road map of sorts.

The Egan model aims to help the practitioner and learner address three main questions. They form the skeleton of Egan's model.

1. What is going on?
2. What do I want instead?
3. How might I get to what I want?

In each of the three stages, there are three overall aims prompted by questions. By using the questions and directives with the learner you will more easily be able to help the learner identify the issues and plan accordingly to work towards resolution.

- Stage 1 current scenario:  
Gathering information will aid in getting a current picture of the learner's life and where the focus would be best placed.
- Stage 2 preferred scenario:  
You are helping the learner determine what they want and need in their life. The aim is to establish realistic, manageable and measurable goals.
- Stage 3 action strategies:  
The ultimate aim is to develop a realistic plan with specific actions to be taken complete with timelines.

Sometimes in your work, relationships come to an abrupt end with some of your learners and often there is little you can do about it. This said, stage models focussing on beginnings, middles and endings do help you to think about what might be involved at different times in the relationship and develop appropriate guidance.

### Egan's 3-stage model

Stage 1: Current scenario	Stage 2: Preferred scenario	Stage 3: Action strategies
<p><b>The Story</b> What's going on?</p> <p>↓</p> <p><b>Blind spots</b> What's really going on?</p> <p>↓</p> <p><b>Leverage</b> Need to focus/prioritize.</p>	<p><b>Possibilities</b> What do I want/need?</p> <p>↓</p> <p><b>Change</b> Establish goal(s).</p> <p>↓</p> <p><b>Commitment</b> Are goals right?</p>	<p><b>Possible actions</b> How many ways are there?</p> <p>↓</p> <p><b>Best fit</b> What will work for me?</p> <p>↓</p> <p><b>Plan</b> What next and when?</p>



## Summary

Using Knowles' theory and Egan's 3-stage model with your learners accomplishes two things. First, Knowles' work reminds you to view adults not as empty vessels waiting to be filled but rather as full vessels with a mixture of experience, skills and beliefs. This experience, skills and beliefs is what propels all of us in meeting our learning goals. At a different point and time in adult's lives, we may require adding new skills and experiences to the mixture in order to meet new goals.

Second, Egan's 3-stage model provides a process to guide how you and the learner ferret out the needed additions to the mix. The aim here is to help create a learner's pathway that will take us as learners from where we are now to where we want to be.

## Resources

Egan, K. (1998) *The Skilled Helper. A problem-management approach to helping*, Pacific Grove: Brooks/Cole.

Knowles, M. S. et al (1984) *Andragogy in Action. Applying modern principles of adult education*, San Francisco: Jossey Bass.

## Appendix 2: Introduction to Essential Skills

Over the years, the definition of “literate” has expanded beyond one’s ability to simply read, write and spell. With the increasing popularity of technology, demands on individuals to deal with a plethora of information in their workplace and at home has dramatically increased. Today being literate refers to the ability to locate, understand, evaluate, use and convey information at home, work and in the community. According to the Government of Canada (2014), this broader definition of being literate is best understood by referring to Essential Skills.

Generally, Essential Skills are used by people to carry out a wide variety of everyday life and work tasks. They are not the technical skills required by particular occupations but rather the skills applied in all occupations. For example, writing skills are required in a broad range of activities. The complexity and frequency of writing varies, of course. Some people write simple grocery lists, while others write training manuals.

Further, Essential Skills are **enabling skills** that:

- Provide people with a foundation to learn other skills
- Enhance people’s ability to adapt to change

The following table lists, describes and provides examples of the nine Essential Skills.

### The Nine Essential Skills

Essential Skills	Typical applications	Workplace examples	Community examples
<b>Reading</b> Understanding materials written in sentences or paragraphs (e.g. letters, manuals).	Scan for information or overall meaning. Read to understand, learn, critique or evaluate. Analyze and synthesize information from multiple sources or from complex and lengthy notes.	An airline sales agent reads notices on a computer screen, such as special handling requirements or weather information.	You may use this skill to understand a lease agreement for a new apartment.
<b>Document Use</b> Finding, understanding or entering information (e.g. text, symbols, numbers) in various types of documents, such as tables or forms.	Read signs, labels or lists. Understand information on graphs or charts. Enter information in forms. Create or read schematic drawings.	A bricklayer interprets blueprints to determine the height, length, and thickness of walls.	You may use this skill when referring to a bus schedule to plan an outing.
<b>Numeracy</b> Using numbers and thinking in quantitative terms to complete tasks.	Make calculations. Take measurements. Perform scheduling, budgeting or accounting activities. Analyze data. Make estimations.	Payroll clerks monitor vacation entitlements to prepare budget and scheduling forecasts.	You may use this skill to complete an application for a credit card.

<p><b>Writing</b></p> <p>Communicating by arranging words, numbers and symbols on paper or a computer screen.</p>	<p>Write to organize or record information.</p> <p>Write to inform or persuade.</p> <p>Write to request information or justify a request.</p> <p>Write an analysis or a comparison.</p>	<p>Human resources professionals write recommendations on issues such as workplace health and safety.</p>	<p>You may use this skill to complete an application for a credit card.</p>
<p><b>Oral Communication</b></p> <p>Using speech to exchange thoughts and information.</p>	<p>Provide or obtain information.</p> <p>Greet, reassure or persuade people.</p> <p>Resolve conflicts.</p> <p>Lead discussions.</p>	<p>Office clerks take messages and share information by phone and in person.</p>	<p>You may use this skill to explain a food allergy to a server at a restaurant.</p>
<p><b>Working with Others</b></p> <p>Interacting with others to complete tasks.</p>	<p>Work independently, alongside others.</p> <p>Work jointly with a partner or helper.</p> <p>Work as a member of a team.</p> <p>Participate in supervisory or leadership activities.</p>	<p>Municipal engineers work with technicians, inspectors, and suppliers to complete</p>	<p>You may use this skill when working with volunteers to organize a fundraising activity.</p>
<p><b>Thinking</b></p> <p>Finding and evaluating information to make a rational decision or to organize work.</p>	<p>Identify and resolve problems.</p> <p>Make decisions.</p> <p>Find information.</p> <p>Plan and organize job tasks.</p> <p>Use critical thinking.</p> <p>Use memory.</p>	<p>Paramedics diagnose a patient's condition based on medical charts and their own observations. They use their judgment to start an appropriate treatment plan.</p>	<p>You may use this skill to research and select courses at your local adult learning centre.</p>
<p><b>Computer Use</b></p> <p>Using computers and other forms of technology.</p>	<p>Use different forms of technology, such as cash registers or fax machines.</p> <p>Use word processing software.</p> <p>Send and receive emails.</p> <p>Create and modify spreadsheets.</p> <p>Navigate the Internet.</p>	<p>Telephone operators use customized software to scan databases for telephone numbers or long distance calls.</p>	<p>You may use this skill when withdrawing or depositing money at an automatic teller machine (ATM).</p>
<p><b>Continuous Learning</b></p> <p>Participating in an ongoing process of improving skills and knowledge.</p>	<p>Learn on the job.</p> <p>Learn through formal training.</p> <p>Learn through self-study.</p> <p>Understand your own learning style.</p> <p>Know where to find learning resources.</p>	<p>Retail sales associates improve their skills and knowledge by attending sales training and reading product brochures.</p>	<p>You may use this skill when attending a first aid course at a community centre.</p>

Essential Skills titles and descriptions serve as a common language between workers, employers, educators and service providers. Since Essential Skills use the language of the workplace, they serve as a way for educators to discuss skill gaps with employers and employees. In addition, because they describe functional tasks, Essential Skills can be used to describe what individuals do at home, at school and in the community. This common language is useful to individuals involved in skills upgrading and to the service providers supporting individuals as they work towards their next steps.

The common language of Essential Skills is based on international research. In 1995 research to understand the literacy levels of populations as a whole was carried out by the International Adult Literacy Survey (IALS). They sought to understand and compare literacy levels across countries. It focused on measuring the proficiency levels of processing information across three literacy domains: prose, document and quantitative. Prose literacy is described as the knowledge and skills needed to understand and use information from texts including editorials, news stories, poems and fiction. Document literacy is described as the knowledge and skills required to locate and use information contained in various formats, including job applications, payroll forms, schedules, tables and graphics. While quantitative literacy is the knowledge and skills required to apply arithmetic operations, either alone or sequentially, to numbers embedded in printed materials, such as balancing a chequebook, figuring out a tip, completing an order form or determining the amount of interest on a loan.

It was found that by simply categorizing commonly used skills into nine categories was not helpful enough for service providers to build training around acquisition of the skills. They needed to know whether the learner was a beginner or a more advanced user of the skill. This question led IALS to develop five broad literacy levels used to describe the level at which the learner was performing the task.

Descriptions of each of the five IALS literacy levels follows:

- **Level 1:** read relatively short text, locate and enter a piece of information into that text, and complete simple, one-step tasks such as counting, sorting dates or performing simple arithmetic.
- **Level 2:** the ability to sort through “distractors” plausible, but incorrect pieces of information, to integrate two or more pieces of information, to compare and contrast information and to interpret simple graphs.
- **Level 3:** demonstrate the ability to integrate information from dense or lengthy text, to integrate multiple pieces of information and to demonstrate an understanding of mathematical information in a range of different forms. Level 3 tasks typically involve a number of steps or processes in order to solve problems.
- **Level 4:** tasks involve multiple steps to find solutions to abstract problems. Tasks require the ability to integrate and synthesize multiple pieces of information from lengthy or complex passages, and to make inferences from the information.
- **Level 5:** requires the ability to search for information in dense text that has a number of distractors, to make high-level inferences or use specialized background knowledge and to understand complex representations of abstract formal and informal mathematical ideas.

Overall, it is generally accepted that individuals who can demonstrate competency with Level 3 tasks are able to manage the demands of daily life and of most entry-level jobs. For this reason, literacy programming tends to focus on skill development for tasks at Levels 1 and 2, with some upgrading reaching into Level 3. The key point here is that the level of literacy one needs depends on the context.

As a facilitator your goal is to:

- Help the learner assess which Essential Skills are needed to accomplish the task
- Assess the functioning literacy level of the learner
- Develop learning strategies that match the learner's level of literacy

To summarize, remember that Essential Skills are dormant until there is a task. Essential Skills are not tasks, they are used to complete a task. Furthermore, the literacy level of the learner needs consideration in order for the learning to be effective. For a more thorough discussion of Essentials Skills, review Unit 13 in *Creating Learning Partners* (2007).

## Resources

*Creating Learning Partners: A Facilitator's Guide for Training Effective Adult Literacy Tutors* (2007). Calgary, Alberta. Literacy Alberta.

Kirsch, I. (2001). *The International Adult Literacy Survey (IALS): Understanding What Was Measured*. Educational Testing Service (ETS).

*Ontario skills passport*. (2010). Ottawa, Ontario: Government of Ontario. Queen's Printer of Ontario.

## Resource List

Alberta Workforce Essential Skills. (2015). *AWES Workup Practitioner Guide*. Retrieved June, 2015 from [http://www.awes.ca/site/assets/file/1303/workup\\_practitioner\\_guide.pdf](http://www.awes.ca/site/assets/file/1303/workup_practitioner_guide.pdf)

Apprenticeship and Industry Training. (2014). *Trade Entrance Exam Study Guide*. Retrieved June, 2015 from [http://tradesecrets.alberta.ca/sources/pdfs/exams/entrance/077\\_entrance\\_study\\_guide.pdf](http://tradesecrets.alberta.ca/sources/pdfs/exams/entrance/077_entrance_study_guide.pdf)

Apprenticeship and Industry Training. (2015). *Tradesecrets*. Retrieved May, 2015 from [www.tradesecrets.alberta.ca](http://www.tradesecrets.alberta.ca)

Bow Valley College. (2014). *Read Forward Locator Test*. Retrieved May, 2015 from <http://www.readforward.ca/locators/>

Campbell, Pat. (2002). *Teaching Reading to Adults: A Balanced Approach*. Grassroots Press.

Canadian Apprenticeship Forum. (2015). Retrieved June 2015 from <http://caf-fca.org>

Employment and Social Development Canada (2013). *Literacy and Essential Skills*. Retrieved June 2015 from <http://www.esdc.gc.ca/eng/jobs/les/index.shtml>

Employment and Social Development Canada (2014). What are Essential Skills for the Trades? Retrieved June, 2015 from [http://www.esdc.gc.ca/eng/jobs/les/tools/awareness/what\\_are\\_es\\_trades.shtml](http://www.esdc.gc.ca/eng/jobs/les/tools/awareness/what_are_es_trades.shtml)

Evetts, Julian. (1996). *Document Use at Work*. SkillPlan - BC Construction Industry Skills Improvement Council. Burnaby, BC.

Fownes, L., Thompson, L., & Evetts, J. (2003). *Numeracy at Work*. SkillPlan - BC Construction Industry Skills Improvement Council. Burnaby, BC.

Grecki, Sue. (2008). *Preparing for Heavy Equipment Occupations*. SkillPlan - BC Construction Industry Skills Improvement Council. Burnaby, BC.

Human Resources and Skills Development Canada. (2010). *Document Use Refresher for Apprentices*. Retrieved June, 2015 from [http://www.nald.ca/library/learning/nsde/doc\\_refresher\\_apprentices/doc\\_refresher\\_apprentices.pdf](http://www.nald.ca/library/learning/nsde/doc_refresher_apprentices/doc_refresher_apprentices.pdf)

Human Resources and Skills Development Canada. (2009). *Essential Skills Self-Assessment for the Trades*. Retrieved June, 2015 from [http://www.esdc.gc.ca/eng/jobs/les/docs/tools/es\\_self\\_assessment\\_trades.pdf](http://www.esdc.gc.ca/eng/jobs/les/docs/tools/es_self_assessment_trades.pdf)

Human Resources and Skills Development Canada. (2011). *Essential Skills Workbook for the Trades with Answer Guide*. Retrieved June, 2015 from <http://www.esdc.gc.ca/eng/jobs/les/docs/tools/WP-167-EN.pdf>

Lew, J., & Hardt, M. (2011). *Controlling Complexity: An Introduction to Question Structure*. SkillPlan - BC Construction Industry Skills Improvement Council. Burnaby, BC.

Lewe, G., & Macleod, C., (2001). *Step Into the World of Workplace Learning: A Collection of Authentic Workplace Materials*. Nelson Thomson Learning in cooperation with Human Resources Development Canada, and Canadian Government Publishing, Public Works and Government Services Canada.

Missouri Valley Adult Education Association. (2001). *Calculator Lessons*. Retrieved May, 2015 from <http://www.mvaea.com/casio.html>

National Occupational Classification (2011). Retrieved June, 2015 from <http://www5.hrsdc.gc.ca/NOC/English/NOC/2011/SearchIndex.aspx>

New Readers Press. (2012). *Breakthrough to Math Levels 1, 2, 3, 4 Teacher's Directory*. Retrieved June 2015 from [http://www.newreaderspress.com/Downloads/3652\\_3775746\\_BTMTeachersDirectory.pdf](http://www.newreaderspress.com/Downloads/3652_3775746_BTMTeachersDirectory.pdf)

Northwest Territories Apprenticeship Support Materials. (2003) Retrieved June, 2015 from [https://epl.bibliocommons.com/item/show/571328005\\_nwt\\_apprenticeship\\_support\\_materials](https://epl.bibliocommons.com/item/show/571328005_nwt_apprenticeship_support_materials)

Syzygy Research and Technology. (2014). *Trade and Apprenticeship ExamBank*. Retrieved May 2015 from <http://trades.exambank.com>

Wong, V., Lew, J., & Lloyd, C., (2008). *Thinking Strategies for Numeracy: A Practitioner's Guide*. SkillPlan - BC Construction Industry Skills Improvement Council. Burnaby, BC.

## Tradesecrets Quiz

Use the Tradesecrets website [www.tradesecrets.alberta.ca](http://www.tradesecrets.alberta.ca) to answer the following questions. This website is very useful for a general understanding of the apprenticeship system in Alberta.

- 1) What does A.I.T. stand for?
- 2) Who can learn a trade?
- 3) What are the minimum Alberta or equivalent high school requirements?
- 4) Must you pass a trades entrance exam before you register as an apprentice?
- 5) What are the minimum education requirements for a Category “A” trade?
- 6) What is the difference between compulsory and optional certification trades?
- 7) Review info sheet for interpreter/reader in “Publications”.
- 8) Find a study guide for the trades entrance exam.
- 9) What is a counselling sheet?

### Answers

1. Apprenticeship and Industry Training
  - ‘About Us’ tab.
2. Canadians citizens or permanent residents of Canada and employed by an employer eligible to participate in the apprenticeship program.
  - ‘Links: Eligibility Requirements’ on home page or
  - ‘Learn on the Job’ tab
  - ‘Who Can Learn a Trade?’
3. Differ depending on trade





	MINIMUM REQUIREMENTS Successful completion of the following:	RECOMMENDED PATH Alberta High School Diploma includes the following courses:
<b>CATEGORY A</b>	English 10-2 Math 10-3 OR All five Canadian General Educational Development (GED) tests OR Entrance Exam	English 30-2 Math 30-3 Physics 20 OR Chemistry 20 OR Science 20 Related Career and Technology Studies (CTS) courses
<b>CATEGORY B</b>	English 20-2 Math 20-3 Science 10 OR Entrance Exam	English 30-2 Math 30-3 Physics 30 OR Chemistry 30 OR Science 30 Related Career and Technology Studies (CTS) courses
<b>CATEGORY C</b>	English 10-2 Math 10-3 Science 10 OR All five Canadian General Educational Development (GED) tests OR Entrance Exam	English 30-2 Math 30-3 Physics 20 OR Chemistry 20 OR Science 20 Related Career and Technology Studies (CTS) courses

- ‘Learn on the Job’
  - ‘Who Can Learn a Trade?’
  - Educational Requirements
  - Click link “Alberta or equivalent High School requirements”
4. No. You can still register as an apprentice in your trade if you do not meet the requirements, but you will be expected to meet them during your first year of apprenticeship.
- ‘Learn on the Job’
  - ‘Who Can Learn a Trade?’
  - Educational Requirements
5. English 10-2, Math 10-3 or All five Canadian General Educational Development (GED) tests or Entrance Exam
- ‘Learn on the Job’
  - ‘Who Can Learn a Trade?’
  - Educational Requirements
  - Click link “Alberta or equivalent High School requirements”

6.

<b>COMPULSORY CERTIFICATION TRADES – to work in a compulsory certification trade, a person must either hold a recognized trade certificate or be a registered apprentice in the trade. An employer wishing to hire persons to work in the trade must hire only certified journeypersons in that trade or apprentices registered in the trade and working under the supervision of a certified journeyperson. Compulsory certification trades usually involve work where public and worker safety needs to be closely monitored.</b>		
<b>Appliance Service Technician</b>	<ul style="list-style-type: none"> <li>CHEO-Boom Truck</li> </ul>	<ul style="list-style-type: none"> <li>Ironworker-Metal Building Systems Erector</li> </ul>
<ul style="list-style-type: none"> <li>Appliance Service Technician</li> </ul>	<ul style="list-style-type: none"> <li>CHEO-Wellhead Boom Truck</li> </ul>	<ul style="list-style-type: none"> <li>Ironworker-Structural/Ornamental</li> </ul>
<ul style="list-style-type: none"> <li>Commercial Appliance Service Tech.</li> </ul>	<b>Electrician</b>	<ul style="list-style-type: none"> <li>Ironworker-Reinforcing</li> </ul>
<b>Auto Body Technician (ABT)</b>	<b>Elevator Constructor</b>	<b>Motorcycle Mechanic</b>
<ul style="list-style-type: none"> <li>Auto Body Technician (ABT)</li> </ul>	<b>Gasfitter</b>	<b>Plumber</b>
<ul style="list-style-type: none"> <li>ABT - Auto Body Prepper</li> </ul>	<ul style="list-style-type: none"> <li>Gasfitter (A)</li> </ul>	<b>Recreation Vehicle Service Technician</b>
<ul style="list-style-type: none"> <li>ABT - Auto Body Repairer</li> </ul>	<ul style="list-style-type: none"> <li>Gasfitter (B)</li> </ul>	<b>Refrigeration &amp; Air Conditioning Mechanic</b>
<ul style="list-style-type: none"> <li>ABT - Auto Body Refinisher</li> </ul>	<b>Hairstylist</b>	<b>Rig Technician</b>
<b>Automotive Service Technician</b>	<b>Heavy Equipment Technician (HET)</b>	<ul style="list-style-type: none"> <li>Rig Technician 1</li> </ul>
<b>Boilermaker</b>	<ul style="list-style-type: none"> <li>Heavy Equipment Technician (HET)</li> </ul>	<ul style="list-style-type: none"> <li>Rig Technician 2</li> </ul>
<b>Crane and Hoisting Equipment Operator (CHEO)</b>	<ul style="list-style-type: none"> <li>HET-Heavy Duty Equipment Mechanic (Off Road)</li> </ul>	<ul style="list-style-type: none"> <li>Rig Technician 3</li> </ul>
<ul style="list-style-type: none"> <li>CHEO-Hydraulic Mobile Crane</li> </ul>	<ul style="list-style-type: none"> <li>HET-Truck and Transport Mechanic</li> </ul>	<b>Sheet Metal Worker</b>
<ul style="list-style-type: none"> <li>CHEO-Conventional Mobile Crane</li> </ul>	<ul style="list-style-type: none"> <li>HET-Transport Trailer Mechanic</li> </ul>	<b>Steamfitter-Pipefitter</b>
<ul style="list-style-type: none"> <li>CHEO-Mobile Crane</li> </ul>	<b>Ironworker</b>	<b>Welder</b>
<ul style="list-style-type: none"> <li>CHEO-Tower Crane</li> </ul>	<ul style="list-style-type: none"> <li>Ironworker</li> </ul>	<ul style="list-style-type: none"> <li>Welder</li> <li>Welder-Wire Process Operator</li> </ul>

<b>OPTIONAL CERTIFICATION TRADES – an individual is permitted to work in an optional certification trade if the employer deems the individual to have the skills and knowledge expected of a certified journeyperson in the trade. Employers may employ uncertified journeypersons and use uncertified journeypersons to supervise and train apprentices on the job. An employee working in an optional certification trade and learning the trade MUST become a registered apprentice if that employee is to work in the trade.</b>		
<b>Agricultural Equipment Technician</b>	<b>Landscape Gardener</b>	<b>Powerline Technician</b>
<b>Baker</b>	<b>Lather-- Interior Systems Mechanic</b>	<b>Power System Electrician</b>
<b>Bricklayer</b>	<b>Locksmith</b>	<b>Roofer</b>
<b>Cabinetmaker</b>	<b>Machinist</b>	<b>Sprinkler Systems Installer</b>
<b>Carpenter</b>	<b>Millwright</b>	<b>Structural Steel and Plate Fitter</b>
<b>Communication Technician</b>	<b>Natural Gas Compression Technician</b>	<b>Tilesetter</b>
<b>Concrete Finisher</b>	<b>Outdoor Power Equipment Technician (OPET)</b>	<b>Transport Refrigeration Technician</b>
<b>Cook</b>	<ul style="list-style-type: none"> <li>OPET-Power Equipment</li> </ul>	<b>Water Well Driller</b>
<b>Electric Motor Systems Technician</b>	<ul style="list-style-type: none"> <li>OPET-Recreational Equipment</li> </ul>	<ul style="list-style-type: none"> <li>Water Well Driller</li> </ul>
<b>Floorcovering Installer</b>	<b>Painter and Decorator</b>	<ul style="list-style-type: none"> <li>Water Well Driller – Earth Loop Technician</li> </ul>
<b>Glazier</b>	<b>Parts Technician</b>	
<b>Instrument Technician</b>	<ul style="list-style-type: none"> <li>Parts Technician</li> </ul>	
<b>Insulator</b>	<ul style="list-style-type: none"> <li>Parts Technician-Materials Technician</li> </ul>	
		<b>Total designated trades = 49</b>

19 Compulsory Certification Trades / 30 Optional Certification Trades

- “Trades and Occupations” tab
- “Certifications” heading

7.

If you have been approved to serve as a language interpreter or live reader as an accommodation to assist an examination candidate during an examination, the following conditions and procedures apply:

- **ALL** examinations may be subject to electronic monitoring, including **video** and/or **audio**.
- You **must** interpret/read the examination verbatim; that is, exactly as it appears in the examination booklet. You may not add emphasis, inflection, or read in such a way as to prompt or guide the examination candidate. You may not ask leading questions, provide suggestions, provide interpretations, or word definitions of any kind.
- You **must** interpret/read in such a way that the examination candidate understands the beginning and end of each sentence and paragraph. Without leading the examination candidate, you must be aware of and obey all punctuation and interpret/read in such a way that the examination candidate understands the use and purpose of the punctuation.
- You may repeat interpretations/readings as often as necessary and must interpret/read consistently in the same way each time.
- Examination candidates **must** complete the examination in the allotted time, unless additional time has been approved as an accommodation.
- An examination that is administered involving the accommodation of a language interpreter/reader shall take place in a separate writing area so that other examination candidates who are writing the examination are not disturbed.

**Note:** The language interpreter or reader may make one attempt to 'reword' a word or phrase to the examination candidate in comprehending terminology that is unfamiliar to the examination candidate. This 'rewording' or 'restating' **must not** lead the examination candidate, provide a definition or make a suggestion. 'Rewording' presents the word or phrase in an alternate way without inference. An example of 'rewording' is:

*Every other day* – not familiar to the apprentice; 'reworded' to *every second day* and the apprentice understands.

A contravention of any of these conditions and procedures may result in the **cancellation** of the candidate's examination, examination results or the issue of the certificate result of the examination. If you have any questions concerning the above conditions and procedures or any comments regarding the use of a language interpreter or reader to assist an examination candidate when writing an industry examination, you should contact the local Apprenticeship and Industry Training office.

- "Links" heading on Home Page
  - Click "Publications"
  - Click "Interpreter/Reader Information Sheet"

8. Search "Trades Entrance Exam Study Guide"

9. Find Counselling Sheet Welding



# Psychological Assessment Report

## RECOMMENDATIONS

1. These recommendations shall be reviewed and implemented at the discretion of the education program. *John Doe* would likely benefit from the support of individualized programming within his educational setting to promote his academic development. The results from *John's* cognitive profile indicated underdeveloped abilities in most areas of his cognitive profile with the exception of his precession speed. Given his "test anxiety," weak vocabulary, and reading challenges he will have difficulty completing examinations in a timely manner. Giving him "time plus one half extra time" during examinations would be helpful. He may also benefit from the provision of a quiet individualized testing room to reduce his anxiety difficulties. Added to this, providing him with hard copies of notes before/after class and/or the use of a recording device during instruction would be helpful considering that he may work slowly while transcribing education content. *John* would also benefit from alternative format course materials, such as an electronic dictionary (e.g., Franklin Language Master), a reduced workload, and a learning strategist or tutor to help him with his studies if he continues with academics in the future. If possible, an ATS assessment from Student Services personnel at NAIT and access to audio books would be helpful as well.
2. *John* is encouraged to consult with the school counsellor to help him reduce his anxiety during examinations.
3. *John* will benefit from the provision of a "reader" for examinations as it can help him to accurately perceive the content of the questions. It may also be beneficial to have him state what he believes the intention of questions on class assignments is to either his classmates or other friends to improve his ability to accurately interpret assignment questions. Additionally, underlining the important points in written directions may also help to develop his comprehension skills. On examinations where *John* does not know a word in a question that is not part of material that he is being tested on, he is encouraged to clarify the content with his teacher or reader. On assignments and examinations where the writing demands are high, he would also benefit from the use of a keyboard to help him organize his thoughts.
4. When *John* encounters a word that he does not know he should write it down and define it using a dictionary. Reviewing his list of vocabulary words weekly will help to develop his vocabulary skills.
5. *John* would likely benefit from assistance from his teachers to incorporate new strategies during times exams. *John* may improve his time management skills by reviewing the exam when he receives it and finishing easier questions first followed by more difficult questions. He should also allot specific amounts of time for questions as he considers factors such as mark value per question and difficulty level, all within the context of the overall time provided for the exam. Prioritizing, organizing, and keeping time allotments for each

question will help him produce a testing pace to complete the exam within the testing time frame.

6. *John* may also benefit from practicing timed exams where he incorporates these new strategies to evaluate and improve these new skills. He would likely benefit from additional strategies provided by his professors or he may also wish to consider acquiring educational materials that provide test taking strategies.
7. *John* would benefit from improving his academic skills. He may wish to take upgrading courses or access other agencies to promote his academic development. The Project Adult Literacy Society (P.A.L.S) is a volunteer operated mentoring program that offers literacy training for adults who wish to improve their reading and writing skills. They also provide English as a Second Language support as well as instruction for individuals who wish to improve their mathematics skills. Contact 780 424 5514 for more information.
8. *John* is hoping to complete the education requirement of the Heavy Equipment Technician Trade program at NAIT. He is encouraged to consult with an academic advisor in this program to inform this professional of the findings of this report.

SAMPLE

## AIT Results Breakdown

The following document is an example of an AIT result breakdown for a first year heavy equipment technician. For current apprentices who only wish to rewrite an exam, it is important to look carefully at these marks.

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Apprenticeship and Industry Training Result Letter (Breakdown) for ID: 0101010					
	Mark	Pass Mark	Subject	Score	Possible
Theory Exam 1	63%	70%			
			Std. Workplace Safety		15 20
			Suspension & Wheels		22 27
			Hydraulics & Brake Systems		14 25
			Electrical & Electronics		14 26
			Air Brakes		11 22

The subject marks as assessed by the institution are as follows:  
(Note: Pass mark is 65%, Hours attended: 240)

Subject	Mark
Standard Workplace Safety	68%
Suspension and Wheels	84%
Hydraulics and Brakes	65%
Electrical & Electronics	52%
Air Brakes	70%
Practical	89%

---

Adapted from Alberta Apprenticeship and Industry Training

# Trades Interview for Potential Apprentices

## Questions

1. How can we help you today?
2. How did you come to be interested in the trades?
3. Which trades do you think you might enjoy?
4. What do you know about that trade?
5. Are you familiar with the Alberta Information Learning Service (ALIS) website? Occupation Profiles?
6. Have you talked to anyone at Apprenticeship and Industry Training, other apprentices, or employers?
7. Are you working now?
8. Where?
9. Do you like the work?
10. How did you do at school?
11. What subjects did you like/ dislike?
12. Were you able to get extra help if needed?
13. When did you finish school? What grade level?
14. Do you have a statement of marks?

Grades 7- 9

Grade 11-12 in last three years

Note: You can also use questions from this list for current apprentices.

# Trades Interview for Current Apprentices

Adapted with Permission from the AIT Confirmation of Hours Document – May 2015

## Preparation for Trades Exam Rewrite

### 1. Identification

<b>Full Name</b>	
<b>ID Number</b>	<b>Trade Name</b>

### 2. Exam Information

Exam Type	Check (✓)	No. of Previous Attempts	
Interprovincial Red Seal			
Qualification Certificate			
Apprenticeship Level (circle one)			
		1	2
		3	4
Have you reviewed the breakdown of results from your last exam? Check (✓) one of the following		Yes	No
Accommodations (reader, text help, extra time)		Yes	No

### 3. Upgrading Completed in Preparation for Exam Rewrite

Type of Upgrading	Hours of Study	Provide Details (Required)
College Upgrading		
Union/Association Training		
Internal Employer Training		
Online Learning or Testing		
Individual Learning Modules (ILM's)		
Textbook(s)		
Tutoring by Journeyperson		
Other		
<b>Total Hours of Study</b>		

### 4. Confirmations - Required if tutoring by a certified Journeyperson, Employer Training, or Union / Association Training was part of the study plan.

Individual	Name (please print)	Signature	Date
Applicant			
Employer			
Journeyperson/Tutor			
CALP			



# Northwest Territories (NWT) Apprenticeship Reading Assessment

Reprinted with permission from NWT Apprenticeship Support Materials (Northwest Territories., 2003)

## Part 2

All five competency areas are combined in the following practice questions. Remember that the test is designed to assess your reading ability, not your knowledge about any subject. You may use **Part Two** as a pre- test to see what you need to review in **Part One**. You may also use it as a post- test after completing **Part One**.

### Reading A: Accurate Estimates of Materials Can Save Time and Money

An electrician needs to estimate how many feet of wire he needs, a mechanic needs to estimate how much oil he will need to change, and a carpenter will want to know how much lumber to order. In every case having a little more rather than a little less of what is required will be desirable in the long run. Err on the side of overestimating in order to avoid delays from running out of material – but don't err too much or it will cost you money if not time.

1. Question A-1: According to this passage, why should trades people err on the side of overestimating material for a job?
  - a) It saves money in the short run.
  - b) It avoids delays if materials run out
  - c) It might cost money in the long run.
  - d) It's always better to have a lot of extra material
  
2. Question A-2: What would count as an example of overestimating – but not too much?
  - a) Ordering twice as much material as the job requires.
  - b) Adding 10% extra to all materials estimated for the job.
  - c) Finding a way to be accurate.
  - d) Hiring a consultant to do the estimating.

### Reading B: Small Measurements

A mechanic has to make measurements on piston rings and valves that are accurate to within one thousandth of an inch. This can be done by using thin blades of metal on a feeler gauge. Decimal places are used to indicate how accurate a measurement is. .002 inches is accurate to plus or minus one thousandth of one inch, the measurement cannot be out by as much as one thousandth of an inch. If this measurement is accurate, a feeler blade of .003 won't fit in the gap, and one measuring .001 will be too loose.

3. Question B-1: How far off is a measurement allowed to be when a mechanic uses a feeler gauge?
  - a) 1 inch
  - b) .01 inch.
  - c) One thousandth of one inch.
  - d) Two decimal places
  
4. Question B-2: A feeler gauge is used to:
  - a) Measure thousandths of inches.
  - b) Measure small gaps

- c) Measure distances between pistons
  - d) Measure small distances.
5. Question B3: If a feeler gauge blade is too loose, what can we conclude from this passage?
- a) A blade twice as thick is needed.
  - b) The gap being measured is larger than the blade's thickness.
  - c) The gap being measured is smaller than the blade's thickness
  - d) The blade was not inserted properly.

### Reading C: Boom and Bust

The Cadillac Mine in the Mackenzie Mountains west of Fort Simpson opened during the last silver boom. A boom happens when the price for a commodity like silver goes significantly higher without warning. A bust can follow a boom just as quickly.

When the mine was ready to operate world prices for silver fell drastically. The mine was forced to close down before it had really started. This is one of the problems northern mining industries face when they depend on world markets to sell their product. The bad news from the market can catch up with a development after a great deal has been invested. Historically, the world diamond market offers a remarkably stable price for gem quality stones. This fact has helped propel enormous investments in diamond mining in the Northwest Territories in recent years.

6. Question C-1: The Cadillac mine was forced to close because:
- a) There was not enough silver to sell.
  - b) No one wanted to buy the silver produced by the mine.
  - c) No one thought the price of silver would fall so steeply.
  - d) The price offered for silver fell so low that the mine could not profit.
7. Question C-2: Based on this passage, what can be said about boom and bust?
- a) A boom makes everyone rich who gets in early.
  - b) A bust is bound to follow a boom.
  - c) A bust can happen just as quickly as a boom.
  - d) Boom and bust cycles are part of every mining industry.
8. Question C-3: According to the passage, what has helped motivate investment in the diamond mining industry in the Northwest Territories?
- a) The existence of diamonds in the ground.
  - b) The opportunity to sell to a world market.
  - c) The relative stability of prices offered for diamonds.
  - d) The recent boom environment for diamonds.

### Reading D: Proper Electrical Connections

Almost all electrical installations and repairs consist of connecting wires to terminals or to other wires. Cutting, splicing and connecting electrical wires must be done well or problems will result. A poorly made electrical connection will have a much higher than normal resistance. This results in an excessive amount of heat being produced at the connection when normal current flows through the connection. A poor electrical connection will also reduce the total energy normally available for the load. This is due to the

fact that a portion of the energy supplied is used to produce unwanted heat at the faulty connection point.

9. Question D-1: Which statement best summarizes the consequences of a faulty electrical connection?
- a) The wires are loose and can corrode to the point that they overheat.
  - b) The connection will cause problems including shorts and sparks.
  - c) The connection will produce unwanted heat and reduce the energy that is supplied to a load.
  - d) The resistance will be higher than normal and wires will heat up.
10. Question D-2: Which of the following statements is based on information contained in this passage?
- a) Unwanted heat at a faulty connection is the result of higher than normal resistance.
  - b) Energy supplied to a faulty connection is wasted when there is no place for it to go.
  - c) The resistance in a circuit is increased when the circuit heats up.
  - d) Cutting and splicing are responsible for faulty connections only when they are done without checking the load.

### Reading E: Not My Department

Safety in the workplace requires a combination of personal responsibility and teamwork. When a tool is used it must be returned in good condition and never replaced when something is wrong with it. Similarly, when a machine is used, some kind of lock out procedure should be used so that every user knows that the equipment was shut down and serviced properly by the last person who used it. One of the preventable causes of accidents in the workplace is the “not my department” attitude. Even though it may not be your job to correct someone else’s mistakes or negligence – it is your job to notice and report problems and to make safety your responsibility.

11. Question E-1: Which of the following facts best supports the main point made in this passage?
- a) Young workers have the highest rate of accidents suffered in the workplace
  - b) Accidents are prevented when lock out procedures are followed.
  - c) Proper maintenance of equipment will prevent accidents.
  - d) A combination of safety awareness and good lockout procedures prevents accidents in the workplace.
12. Question E-2: According to the passage, what is wrong with the attitude, “not my department”?
- a) This attitude is preventable.
  - b) This attitude contributes to accidents that could be prevented.
  - c) Everyone has to do their job.
  - d) Safety should be everyone’s responsibility.

### Reading F: Breakup

Several communities located on the shores of rivers in the Northwest Territories organize bets to see who can predict the day when the frozen river breaks up and starts to flow again after the long winter. Sometimes a flag pole is set up in the middle of the river as an indicator. When the object disappears with the movements of the river, breakup is declared officially. The pole is supposed to move only after breakup starts.

Problems with this way of measuring the start of breakup have troubled some communities. Who was watching when the flag pole disappeared? Was there a storm so that no one could see the flagpole? Did the pole fall over due to local melting before the river really broke up? Even the simplest ways to decide something can still cause problems it seems.

13. Question F-1: What would be the best example of an “indicator”, based on how this word is used in the passage?
- a) A wind sock at an airport.
  - b) A flagpole at a school.
  - c) A thermometer.
  - d) A circuit breaker.
14. Question F-2: Which observation best supports the writer’s comment that “Even the simplest ways to decide something can still cause problems it seems.”?
- a) People like to find things to argue about.
  - b) Flagpoles are untrustworthy for the purpose of indicating breakup.
  - c) Apparently simple ideas can lead to unexpected complications.
  - d) Nothing is as simple as it looks.

### Reading G: Doing and Thinking

It’s time to stop separating academic theory from trades’ knowledge. For too long, this division has prevented people from seeing how important both sides of the knowledge coin are. Theory and action belong together – not apart. Take just one example. Someone may know from experience that he or she can only siphon gas from one car to another when the receiving gas tank is lower than the source tank. They may also have learned from experience that if you fill the connecting hose with fuel first, you don’t have to suck on the lower end and risk getting a mouthful of gas.

However, if this person is asked to explain why things work this way, they may not have an answer. They know something – but they don’t understand what they know. This is like having a fish to eat for a day, but now knowing how to fish so you can eat every day. The explanation for siphoning introduces the concepts of atmospheric air pressure (standard pressure), creating a vacuum, and the force of gravity. When these concepts are added to experience, they can be used to solve many practical problems in new situations.

15. Question G-1: In this passage, what is the writer’s main point?
- a) Siphoning is a good example of experience that works without theoretical knowledge.
  - b) When concepts are added to experience, we have two sides of the same coin.
  - c) Theory and action belong together.
  - d) It’s better to know how to fish so you can eat everyday
16. Question G-2: What does the author mean by, “They know something – but they don’t understand what they know”?
- a) People can do things without academics.
  - b) People can know how to do something, but can’t explain why it works.
  - c) People can siphon gas but not know why it works.
  - d) Trades people know a lot based on experience.

17. Question G-3: Which statement is supported by the ideas in this passage?
- a) People need to stop trying to get an explanation for everything they can do.
  - b) Siphoning gas should be taught in science classes.
  - c) Concepts added to experience can be used to solve practical problems.
  - d) Trades education and academics should be separated.
18. Question G-4: Which statement is opposed to the main idea presented in this passage?
- a) Academic training is useful for trades.
  - b) Knowing what works should include explaining why it works.
  - c) People can do things correctly without knowing why it works.
  - d) The division between academic theory and trades' knowledge is a good idea.
19. Question G-5: What would be the best way to prevent getting a mouthful of gas when siphoning between two cars?
- a) Sucking gently at first
  - b) Increasing the vertical distance between the two gas tanks.
  - c) Putting pressure on the gas.
  - d) Filling the hose with gas and then using it to connect the tanks.

### Reading H: Impaired Driving

Alcohol dependency is acknowledged as one of the main barriers in the way of a solution to the problem of impaired driving. Put simply, if people didn't depend on alcohol, they wouldn't drive when they drink. Eliminate dependency, and you eliminate the problem. From a health perspective, impaired drivers need rehabilitation, not punishment. They need to be helped to overcome their dependency through treatment. However, not all impaired drivers are dependent on alcohol in the same way or to the same degree. A rehabilitation program can't simply be "one size fits all".

20. Question H-1: Which of the following is not a fact given in this passage?
- a) All impaired drivers have the same problem.
  - b) Rehabilitation is based on a health perspective.
  - c) Eliminating dependency will eliminate the problem.
  - d) Punishment is not part of rehabilitation
21. Question H-2: Why does the writer think that "one size fits all," won't work to rehabilitate impaired drivers?
- a) People are different
  - b) Rehabilitation is not for everyone who drinks and drives
  - c) Alcohol dependency is not the same for all impaired drivers.
  - d) A health perspective isn't for everyone.

### Reading I: Electromagnets

Electromagnets can be made much more powerful than permanent magnets. In addition, the strength of the electromagnet can be easily controlled from zero to maximum by controlling the current flowing through the coil. For these reasons, electromagnets have many more practical applications than do permanent magnets. Large industrial electromagnets are used with cranes to move scrap iron.

22. Question I-1: What can you conclude about the difference between a permanent magnet and an electromagnet from this passage?
- a) Permanent magnets last longer.
  - b) Electromagnets don't take as much current.
  - c) Permanent magnets don't go from zero to maximum.
  - d) Electromagnets can't be controlled as easily.
23. Question I-2: What is a reason given in the passage for electromagnets to have many more practical applications than permanent magnets?
- a) Electromagnets cost less
  - b) Electromagnets have the ability to vary their strength.
  - c) Electromagnets can be used with cranes.
  - d) Electromagnets are easier to make.

### Reading J: Hard Work

Hard work is not always productive. Human beings have a remarkable ability to schedule as much time as is available on a task if they have no competing pressures. The interesting point is that a lot of serious effort can go into doing very little.

For example, a person who has all day to clean their car could actually develop an all day schedule of actions that clean the car. One hour for glass cleaning, one hour for brushing the carpets, then sponging them off, then spraying them, etc. The reader gets the idea: where there is time, there is the opportunity to make work and spread it out until it fills all the available time. By six p.m., the weary car cleaner could feel that he had done a full day's work - and in one way he would be right - but he would only have succeeded in cleaning a car.

This tendency in human behavior has supported salary plans that reward how much work is done, not how long it takes to do the work. We pay for results, not for rationalizations about how long they take.

24. Question J-1: What would be an example of the tendency in human behavior that is described in this passage?
- a) Brushing your teeth ten times a day.
  - b) Insisting on perfection at all times
  - c) Making sure you have enough time for a job.
  - d) Working all day watering houseplants.
25. Question J-2: Based on this passage, how would you pay to have your car cleaned?
- a) By the hour.
  - b) According to the qualification of the cleaner.
  - c) By a fixed rate for cleaning the car to an agreed standard.
  - d) By amount of effort and care that was taken.
26. Question J-3: What is the idea that the writer wants the reader to get?
- a) All work requires effort.
  - b) People have a tendency to spread work out until it uses all the time available.
  - c) People always work as hard as they can.
  - d) Paying for work done by the hour has risks.

### Reading K: Wood Shingles

Wood shingles have the appeal that all wood has. They are a natural material, are nice to work with, weather to pleasant colors, and are durable. They are taper-sawed from decay-resistant species like cypress, redwood, and cedar, with cedar having the edge because of characteristics that include a low expansion and contraction ratio in relation to moisture content, a nice even grain, and a high impermeability to liquid. Unfortunately wood does not resist fire too well, so wood shingles may be frowned on in some areas unless they have been specially treated with a fire retardant. It's a point to check.

27. Question K-1: What would not be a reason in favor of selecting wood shingles?
- a) They are natural and weather to pleasant colors.
  - b) They don't let water through.
  - c) They need fire retardants in some areas.
  - d) They are decay resistant.
28. Question K-2: What does the author mean by "cedar having the edge"?
- a) Cedar is taper sawed to a sharp edge.
  - b) Cedar has additional advantages.
  - c) Cedar is straighter than other shingle material.
  - d) Cedar is more decay resistant.

### Reading L: Symptoms and Causes

A symptom is a sign that something is wrong. People who fix things, just like physicians who cure people, must learn to diagnose symptoms and find causes. Often there are several possible explanations for the same symptoms. How can a professional be sure that they have diagnosed the right problem to work on? Ruling out possibilities is a large part of the trouble shooting process.

For example, a vehicle may make noises when the steering wheel is turned and the driver may feel that more force than normal is required to turn the wheel. These symptoms could be caused by any of: a loose fan belt that powers the steering, low power steering fluid, a damaged steering linkage or broken lubrication seals. A skilled mechanic will rule out the most common and easiest to check possibilities first. Usually it's the fan belt or the fluid level. These can be checked first before looking under the vehicle. A final point: more than one cause may be involved.

29. Question L-1: What is an example of good troubleshooting skills?
- a) Finding the cause of the symptom quickly.
  - b) Investigating the most obvious and common causes first.
  - c) Checking all possibilities before making a decision.
  - d) Overhauling the system that is involved.
30. Question L-2: In this passage, what is the most important comparison made between a physician and a mechanic?
- a) Mechanics and physicians both solve problems.
  - b) Mechanics and physicians are highly trained specialists.
  - c) Mechanics and physicians diagnose symptoms and identify causes.
  - d) Physicians work in hospitals and mechanics work in garages.

31. Question L-3: What is significant about the final point made in the passage?
- a) Multiple causes means that the job isn't completed.
  - b) There can be more than one cause for a mechanical problem.
  - c) A mechanic cannot assume that fixing one cause will also fix the problem.
  - d) Mechanical problems can have several explanations.
32. Question L-4: In this passage we are told that ruling out possibilities is a large part of the trouble shooting process. What other parts of the process are identified in the passage?
- a) Knowing all of the possible causes for a symptom.
  - b) Knowing the most common causes of a symptom.
  - c) Thoroughly checking that all symptoms are accounted for by a solution.
  - d) All of the above.

### Reading M: Computers Give Orders

It is safe to say that all trades use computers for some part of their work. Many business functions are performed by computers including scheduling, record keeping, accounting, inventory management, communications with suppliers and customers, diagrams and blueprints, and project management.

One of the important benefits of computers is real time inventory management. When an item is taken out of an inventory, a computer program can immediately update all records based on that inventory. For example, if a certain gas fitting is taken from a warehouse several times a day, a manager can have a computer alert him when the supply is down to 500 fittings. The next step, already happening in some companies, is for the computer to automatically generate an order for more parts when the supply reaches a pre-set lower limit.

33. Question M-1: In order for the computer to do what this selection describes, what must be true?
- a) The manager will need to have Microsoft Windows manage the program.
  - b) The inventory will have to be large enough to need a computer.
  - c) Each time a fitting is taken the total must be reduced by one in the computer's records.
  - d) The inventory must never be allowed to reach 500 or a lower limit.
34. Question M-2: According to this passage, what would be an example of real time inventory management?
- a) Finding out how many items in an inventory are left at the end of a day.
  - b) Inspecting the inventory every week to see how many replacement items should be ordered.
  - c) Using a computer to print out reports on the size of inventory.
  - d) Recording every withdrawal from inventory at the same time that it is made.
35. Question M-3: According to this selection, when would the computer generate an order for more parts?
- a) When more parts are needed.
  - b) When the lower limit programmed into the computer is reached.
  - c) When the computer reports that supplies are dangerously low.
  - d) When the limit to the inventory size is reached.



36. Question M-4: Based on this passage, which is an example of something a computer doesn't do?
- a) Keep track of expenditures and income.
  - b) Hire employees
  - c) Contact customers.
  - d) Print out reports on inventory.

## NWT Apprenticeship Reading Assessment Answer Key

**Part 2 Answer Key Reading**

Question	Answer	
1 - A1	b	
2 - A2	b	
3 - B1	c	
4 - B2	b	
5 - B3	b	
6 - C1	d	
7 - C2	c	
8 - C3	c	
9 - D1	c	
10 - D2	a	
11 - E1	d	
12 - E2	b	
13 - F1	d	
14 - F2	c	
15 - G1	c	
16 - G2	b	
17 - G3	c	
18 - G4	d	

Question	Answer	
19 - G5	d	
20 - H1	a	
21 - H2	c	
22 - I1	c	
23 - I2	b	
24 - J1	d	
25 - J2	c	
26 - J3	b	
27 - K1	c	
28 - K2	b	
29 - L1	b	
30 - L2	c	
31 - L3	d	
32 - L4	d	
33 - M1	c	
34 - M2	d	
35 - M3	b	
36 - M4	b	

Total Correct

= \_\_\_\_\_

Percentage correct (divide total correct by number of items attempted and multiply by 100)

= \_\_\_\_\_

NWT Apprenticeship Reading Assessment Answer Sheet

EXAMPLE  a  b  c  d

A1.  a  b  c  d

A2.  a  b  c  d

B1.  a  b  c  d

B2.  a  b  c  d

B3.  a  b  c  d

C1.  a  b  c  d

C2.  a  b  c  d

C3.  a  b  c  d

D1.  a  b  c  d

D2.  a  b  c  d

E1.  a  b  c  d

E2.  a  b  c  d

F1.  a  b  c  d

F2.  a  b  c  d

G1.  a  b  c  d

G2.  a  b  c  d

G3.  a  b  c  d

G4.  a  b  c  d

G5.  a  b  c  d

H1.  a  b  c  d

H2.  a  b  c  d

I1.  a  b  c  d

I2.  a  b  c  d

J1.  a  b  c  d

J2.  a  b  c  d

J3.  a  b  c  d

K1.  a  b  c  d

~~K2.~~  a  b  c  d

L1.  a  b  c  d

L2.  a  b  c  d

L3.  a  b  c  d

L4.  a  b  c  d

M1.  a  b  c  d

M2.  a  b  c  d

~~M3.~~  a  b  c  d

~~M4.~~  a  b  c  d

\_\_\_\_ /36

## Learning Plan Template 1

## Learning Plan for Trades Exam Preparation

<b>1. Identification</b>	
Full Name	
ID Number	Trade Name

<b>2. Exam Information</b>		
<b>Exam Type</b>	<b>Check (v)</b>	<b>No. of Previous Attempts</b>
Interprovincial Red Seal		
Qualification Certificate		
Apprenticeship Level (circle one)	1 2 3 4	
Have you reviewed the breakdown of results from your last exam? Check (v) one of the following	Yes	No
Accommodations (reader, text help, extra time)	Yes	No

<b>3. Intake Assessments</b>		
<b>Type of Assessment</b>	<b>(v)</b>	<b>Provide Details (Required)</b>
AIT Results Breakdown	√	
NWT Reading Assessment	√	
NWT Math Assessment	√	
Psychological Report	√	
Other		

**4. Goal(s):** *Pass first year Welding with 75% by December 1st, 2015*

<b>5. Study Plan</b>		<b>Days/ times</b>
Learning Centre		<i>Monday/Wednesday from 9:00 am to 11:00 am</i>
Library		
Home		<i>Independent study - Saturday 1:00 pm - 3:00 pm</i>
Work		

<b>6. Strategies</b>	
<i>Analyse results breakdown</i>	<i>Paired reading</i>
<i>Organize ILM's</i>	<i>Snap questions</i>
<i>Review self-tests in modules</i>	<i>Check with mentor at work re: geometry/circuit formulas</i>
<i>Review test bank questions</i>	
<i>Correct any wrong questions</i>	

**7. Resources**

<i>ILM's</i>	<i>Calculator Exercises</i>
<i>Exam Bank Practice Tests</i>	<i>Khan's Academy</i>
<i>Breakthrough to Math</i>	

# Learning Plan Template 2

Learner \_\_\_\_\_

Placement \_\_\_\_\_

Date \_\_\_\_\_

Review Date \_\_\_\_\_

Objectives	Assessment	Strategies	Resources	Exit Assessment
	-			

# Trade and Apprenticeship ExamBank Practice Test

## Adapted with permission

### Welder Period 2

1. For groove weld joint preparation, if you are using nickel based filler metal, the groove angles need to \_\_\_\_\_ due to the sluggish weld puddle.
  - a. Increased slightly
  - b. Decreased slightly
  - c. Maintained the same
2. The terms heat and temperature have the same meaning.
  - a. True
  - b. False
3. What is brittleness?
  - a. It is the ability to withstand a rapidly applied load without breaking.
  - b. It is the ability to resist indentation or penetration.
  - c. It is the tendency of a material to fail suddenly by breaking.
  - d. It is the ability of material to stretch or deform under load.
4. What is tensile strength?
  - a. It the resistance of material to withstand a sharp high velocity blow.
  - b. It is usually measured with a punch and die set.
  - c. It is the ultimate pull a material will stand without fracture.
  - d. It is the stress point at which permanent deformation takes place.

### Answers

1. A
2. B
3. C
4. C

### Heavy Duty Equipment Mechanic (Off Road) Period 1

1. Which of the following best describes or is a characteristic of lead?
  - a. It is used for bushings and radiator cores.
  - b. It is usually non magnetic
  - c. It has a melting point of about 100 degrees Celsius
  - d. It has a high degree of corrosion resistance and a low melting point.
2. What is the metric term for force?
  - a. Joule
  - b. Calorie
  - c. Newton
  - d. Pascals
  - e. Centigram
  - f. Kelvin

3. A preventative maintenance program is used to:
  - a. Reduce the possibility of unexpected component failure
  - b. Replace the components as they fail.
  - c. Ensure that the maintenance staff have something to do.
  - d. Reduce the life expectancy of the equipment.
  
4. The frame of a heavy on-highway vehicle does not support which of the following parts?
  - a. The cab
  - b. The sleeper
  - c. The radiator
  - d. The fuel tanks
  - e. The wheels
  - f. None of the above.

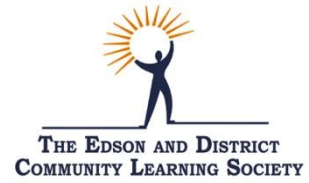
**Answers**

1. D
2. C
3. A
4. E



# Record of Learner Appointments

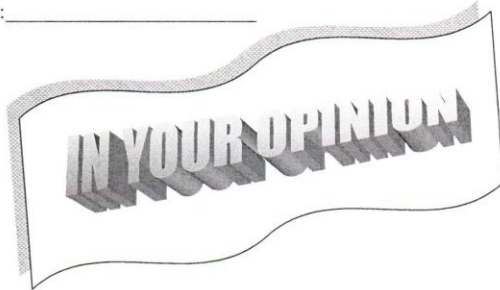
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Date	Reason for Visit	Time
January 17/15	Interview HET 1 Exam Bank 20 questions 63/70	1:00 - 2:30
January 21/15	no show	
January 28/15	Read Assessment 20/36, 20 question	9:00 - 11:00
	will bring Psych Assess.	
	will call to set next appt.	
Feb. 8	Calculator work	9:00 - 3:00
17-Feb-15	Calculator problems	9:00 - 3:00
	80 questions HET Period 1 complete = 67..5%	
	Brought in Psych Assessment	
20-Feb-15	Electrical Module work	9:00 - 3:00
	Khans' Academy	
3-Mar-15	Check 20 questions Safety	9:00 - 3:00
	Start 20 question Suspension	

# Learner Evaluation

Date: \_\_\_\_\_



Learning Centre services are (circle one)

Excellent Very Good Good Fair Poor



I liked...

Everything there, clean, quiet,  
nice people, organized

The material/programs were...

helpful  
up to date

What did you want when you came here?

Needed help to understand /  
read questions on exams

May we quote you? Yes  No

Name \_\_\_\_\_

(needed only if we can use your quote)

How can I use what I learned?

- To understand the questions
- What they want or need
- Get me ready for the next block - study

If I were running this program, I would....

Not much more to say  
I think they have it  
under control

Other training or services that would help me ....

maybe to be able to  
understand the computer  
better

How did you find out about us?

From an instructor at  
NAIT. He told me  
they could help me  
in a good way.