

TRADES QUALIFICATION LEARNING SUPPORTS

Strategies for Writing Multiple-Choice Exams
How to Study for Certification Exams
Preparing a Learning Plan
Learning Resources

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Introduction

This Trades Qualification Learning Supports (TQLS) document was developed by Apprenticeship Manitoba's Trades Qualification Unit to help you prepare to write the Interprovincial/Provincial Certification exam in your designated trade. This document is designed for Trades Qualifiers who have been approved to challenge the exam. It provides relevant and meaningful information that can be used when preparing to write the exam such as: strategies for writing multiple-choice exams; a comprehensive study guide; developing a learning plan; non-accredited TQ upgrading courses and learning resources (textbooks, CD's, learning modules, online texts, question banks, etc).

Part A Strategies for Writing Multiple Choice Exams

There are very few "right ways" or "wrong ways" to prepare to write an exam. As you will see, there is no single "right way" to approach multiple choice exams or how to take notes, so do not be fooled into thinking there is. There is no single method that works for everyone. Here are a few techniques and tips that may work for you.

Test preparation depends on many factors such as your attitude (are you writing the exam because you want to or is your employer, friends, or spouse pressuring you?), the length and intensity of the training (how much time and energy are you prepared to put into your studies), your prior knowledge (do you have a broad scope of the trade?), and whether or not you use test-taking tips or visit the aWEST drop-in centre.

It is also important to be familiar with the test format and materials (is a code book required? How many questions are there in each area?), timing structure (how much time do you have to complete the exam?), and the content of the exam (what you will be tested on). If you write the test with only 50% of the knowledge required, you may not attain the required 70% pass rate. Performing well on the certification exam is a combination of knowing a broad scope of your trade and knowing how to approach the exam.

Confusion precedes the learning of knowledge. So tell yourself it is okay to be confused and learn how to get past it. You are not expected to understand everything the first time you read it through, and learning something slowly does not mean there is something wrong with you. You may be studying a subject that everyone learns slowly, or the text book may have been poorly written. You have up to a year to study before you must write the exam so take your time. Be confident that you will gain new knowledge while you are preparing to write the exam.

How to Approach Writing Multiple-Choice Exams

There are three approaches to writing multiple-choice exams:

1. Begin with the first question and do not stop until you are done, regardless of the difficulty level of the question.
2. Answer the easy questions first, then go back and work out the difficult ones.
3. Answer the difficult questions first, then go back and do the easy ones.

It is important to note that none of these three approaches is inherently right or wrong. Each approach may be of value to different individuals.

The first approach appears to be the quickest because you do not have to scan all the test questions to locate the easy or difficult ones. Providing you do not spend too much time on a single question, this is most likely the quickest approach.

The second approach is useful because the more questions you answer in a row, the more confident you will be when it comes time to answer the difficult ones.

The third approach suggests it is best to do the most difficult questions first and then the easier ones. If time is running out, it will be easier to answer the easy questions in the limited time available. By the end of a three hour exam your mind may not be as focused as it was in the beginning, so answering the questions that require the most interpretation and analysis makes sense in this scenario. Consider in advance which approach works best for you.

Helpful Tips for Writing Multiple-Choice Exams

1. Read each question fully and completely while covering the answers. You may already know the answer and will not be distracted by the answers (a, b, c, d). Do not go against your first impulse unless you are sure you are wrong.
2. If you are not absolutely sure of the answer, read every answer before you select one. Well constructed certification exam questions will have plausible responses. Be careful not to be fooled by the first response because that may tempt you to answer before you have considered the other answers.
3. Be careful not to read too much into a question. It is best not to try and second guess the test writer by looking for patterns or trick questions, such as always answering (c). Test writers are aware of this and design tests accordingly.
4. Lightly underline key words or phrases to isolate what the question is asking. Exam questions should contain one central problem.
5. A positive answer is more likely to be correct than a negative one.
6. If two possible answers are similar, the answer is probably neither of them.
7. If two possible answers are opposite, one of them is probably correct.
8. Check for negatives and other words that are intended to make you think carefully. Exams generally avoid negatives and **bold** them when they do use them.
9. The answer is usually wrong if it contains the words “all”, “always”, “never”, or “none”. Exam questions generally avoid using these specific determiners.
10. The longest or most complicated answer is often correct because the test writer is forced to add qualifying phrases to ensure the answer is clear and accurate.
11. Pay close attention to words like the “best” and “preferred” practice. There are many ways to complete a task on-the-job and taking short-cuts is common. The way you complete a task may be an industry practice, but is it the “best” way to perform the task?

Guessing: The Educated Guess

There is nothing wrong with guessing on the exam. The question is how often to guess and on what you are basing your guess. There are no penalties for incorrect answers on exams, so you should

never leave a question unanswered. However, you should do all you can to improve your odds of answering the question correctly. All exams use multiple choice questions with four responses; therefore, you have a 25% chance of being right and a 75% chance of being wrong each time you guess. If you can eliminate one answer you are reasonably certain is incorrect, your chances improve to 33%. If you can eliminate two answers, your chances of guessing correctly are 50/50.

If you have been able to eliminate an answer or two, but are still unsure as to the correct response, here are a few tips to make your guesses more educated:

1. If two answers sound alike, choose neither.
2. The most obvious answer to a difficult question is probably wrong, but an answer that is close to the question is probably correct.
3. If the answers to a mathematical question cover a broad range, eliminate the extremes and choose a number in the middle.
4. If two quantities are very close, choose one of them.
5. If two numbers differ by only a decimal point (and the others aren't close), choose one of them. (For example: 3.2, 41, 2.5, 25; an educated guess is either 2.5 or 25).
6. If two answers to a mathematical question look alike, whether formulas or shapes, choose one of them.

Learning the process of elimination can also be a helpful test taking tool. Consider the following math problem:

$$334 \times 412 = ?$$

- (a) 53, 211
- (b) 267,940
- (c) 21,488
- (d) 137,608

By multiplying the last two digits of each number (4×2) the last number in the answer must be 8. So (a) and (b) can be eliminated quickly. Of the two remaining numbers one has 5 digits and the other 6. If we simply multiply 334×100 we get 33,400. Therefore, (c) cannot possibly be correct as it is less than 33,400. (d) is the answer by process of elimination.

Keep in mind that guessing is not the desired way to pass the exam: these are just a few tried-and-true ways to improve your guessing when you have nothing else to go on.

The Importance of Vocabulary

No matter how much time you spend studying principles and techniques, you will have difficulty understanding the questions if the words used on the exam are not in your vocabulary. A broad vocabulary is essential to doing well on the certification exam since you are more likely to understand what the question is asking of you and what the possible answers will be. Certification exam questions are written simply and clearly, influenced slightly by trade specific language. Build up your vocabulary as much as possible. Write down words you have not come across in your work and become familiar with them. Read trade journals, text books (which often have glossaries and tool lists) and the Occupational Analysis (which is available at www.red-seal.ca) for your trade.

Be sure to review the terminology associated with your trade as trade specific slang can be misleading. Processes, tools and equipment will be referred to by their formal term. So, if you have learned to call a particular tool one name, you will be surprised on the exam when another name is used. Also, you may perform a subtask in a slightly different way than what is described on the exam, but remember to choose the answer that best demonstrates how the subtask should be performed.

Part B

How to Study For Certification Exams

Once you have been approved to challenge the certification exam in your trade you will be required to recall information you were taught in grade school, which may have been decades ago. It is no secret that the longer you have been out of school the more likely it is you do not remember what you were taught. You may feel out of practice when it comes to studying for the exam. You may not remember how to use the table of contents or the index in a textbook or how to figure out what information should be highlighted for review. You may also be working full time while raising a family. Therefore, you face some important challenges.

All of these factors can lead to a certain amount of fear and apprehension. Some of that fear is valid, but most is not! You may be worried about your performance on the exam because you were not a strong student in your youth. The difference today is that you have gained a great deal of knowledge in your trade, as well as knowledge gained through life experiences, and are far better prepared to write the exam as a result. The following study guide is designed to help you remove the rust on your study skills.

Study Schedule

When will you review this material? Set up a study schedule, but be realistic. When you make up your schedule, decide how much time you can realistically devote to study and divide that time among your subject areas. It's better to spend half an hour on each subject than to plan one hour for each one and not follow through.

Establish a regular study area (home, work, library, etc.)

When you study in the same place every time, you become conditioned to study there. Your mind will automatically kick into gear even when you don't feel like studying. A regular study area also gives you a permanent place to keep your notes, texts, pens, calculator and other supplies. You won't waste 10 minutes each day collecting the materials you need—they will already be there.

Study short and often

Your brain takes in information faster and retains it better if you don't overload it. Four short study periods a week are more effective than two long ones for two reasons: (1) frequent repetition is the key to building your memory, and (2) if you leave a long time between study periods, you may forget a good portion of the material you studied.

Making individual note cards identifying or describing ideas and concepts that are difficult to understand is very helpful. You can quickly review those notes any time during the day since they fit into a pocket or hand bag.

Begin study sessions on time

It sounds like a small detail, but it's amazing how quickly those ten minute delays add up. Train yourself to use every minute of your scheduled time.

Study when you are wide awake

The majority of people work most efficiently during daylight hours. In most cases, one hour during the day is worth 1½ hours at night. Of course it is difficult to study during daylight hours since many tradespeople work during the day. That's another reason to use the "note cards" during daylight hours.

Decide on the best time of day to study and schedule your study time accordingly. You accomplish more when you are alert. If you find yourself falling asleep, give in to it. It's better to study when you are refreshed rather than trying to study when you can't think straight.

Set a specific goal for each subject you study

You will accomplish more and do it faster if you set a specific goal for each study session. For example, let's say you set aside 30 minutes to read 15 pages of a text. If you start reading without a particular purpose, you may only read 11 pages. But if you set a goal of 15 pages in that period of time, you will probably finish all 15, even if you go past the 30 minute mark by a few minutes.

Don't worry if you don't reach your set goal within the allotted time. Either reschedule the task into your next study period or go back to it later that evening, if you have the time. Do yourself the favor of not stressing out because you cannot attain the goal you set for yourself. Remember, you have up to a year before you must write the exam—don't rush unnecessarily.

Study your most difficult subjects first

You're most alert when you sit down to study, so that's when you will be in the best shape to attempt the most difficult questions. You will also feel better getting the "worst" out of the way and you won't be tempted to spend all your time on the easier or favorite subjects.

Vary your work

Try to give yourself variety in the type of studying you are doing. For example, if you tried to read textbooks for three hours, you would not only get bored, you would have trouble processing the information. Instead, alternate reading texts with working on a CD or learning modules, taking notes, doing chapter ending questions. It is important to vary the subjects you are working on since a change is as good as a rest.

Reward yourself

When you complete one of the goals you set for yourself, give yourself a reward. It doesn't have to be anything elaborate - a movie, snack, magazine, TV show, etc.

Test Anxiety

Do you freeze during tests and miss questions you know the answers to? You may be experiencing test anxiety. A little tension is healthy as it may sharpen your awareness. However, extreme tension may cause loss of sleep, loss of appetite, nervousness, fear, irritability and a sense of hopelessness. Here are a few tips to help you reduce your test anxiety level:

1. Find out what you are being tested on. (The *Work Experience Form* will help with this)
2. What percentage is required to pass the exam? (70%)
3. How many questions are on the exam? (This varies from trade to trade: typically 100 to 125.)
4. How much time do you have to write the exam? (Typically 3 hours)
5. Where and when will the exam be held? (You will be notified of this in writing.)
6. Have you made arrangements for a translator, reader or foreign language dictionary? (If you need these resources contact Apprenticeship Manitoba.)
7. What is the test format? (Multiple-choice)
8. How many points will be assigned to each question? (One)
10. What can I take with me on examination day? (You will be notified in writing about this.)
11. Will I be penalized for incorrect answers? (No)

In an attempt to alleviate test anxiety, get some form of physical activity (ride a bike, take a walk, go for a swim—work up a sweat!). Also, resist the temptation to “cram” for the exam as cramming does not work. Depriving yourself of valuable sleep the night before the exam does not create the well rested state you need for writing the exam, and your brain needs time to process information. If you feel that you must cram, do so in the early morning. It is more effective to go to bed and get up early than to go to bed late and wake up exhausted.

Once you are writing the exam, take a washroom break so that you can walk up and down the hall or take a minute to relax at your desk before continuing with the exam. Feelings of anxiousness can make information retrieval seem impossible. A simple relaxation technique involves deep breathing exercises. Lean back in your chair, relax all your muscles, (especially your shoulders as they tend to want to reach for your ears), and take a few very deep breaths. Count to ten with each breath and let them out slowly. You may be surprised to find how effective this simple method is.

Meditation exercises are also useful when you find your mind is distracted by a jumble of facts, figures, techniques and processes. There are several meditation techniques that can help you focus your mind on one thing while excluding everything else. One technique is to focus on an object in the test room, even if the object does not relate to the test (it could be a word on a poster or a spot on the wall). Your mind can't think about anything else while you are intently focused on one thing. This will allow your mind to slow down a bit. Be careful not to do this for too long since the test has a time limit.

Part C

Preparing a Learning Plan

Introduction

The knowledge you have acquired over several thousand hours of your working life will be tested against a provincial or national standard that is broad in scope. You will improve your chances on the exam if you have developed a clearly defined learning plan.

The **first step** in developing a Learning Plan is to define a learning goal. This step is already complete as your goal is clear—you want to become a certified tradesperson.

The **second step** is to undertake a self-assessment. You have already accomplished this step by completing the Work Experience Form in your application package. The Work Experience Form you completed with your TQ application is based on the sub-tasks outlined in the Occupational Analysis for your trade and is your best source for identifying any training gaps. It is important to note that the test questions are developed at the subtask level.

The **third step** is to acquire learning resources. The Learning Resources document will assist you in locating learning resources to fill the training gaps defined in your Work Experience Form.

The **fourth step** is application. This step asks how you will apply the new knowledge you have gained through writing the exam. Please reference the How to Study for Certification Exams section.

The **fifth and final step** involves measuring your outcomes. Sample tests are helpful, but your measurable outcomes are defined by how well you perform on the exam. If you are not successful on the first writing, you will receive a breakdown of your marks at the block level. This will identify where you had difficulty and where further review is required.

One of the most effective ways of improving your chances on the exam is by practicing all the subtasks identified on the Work Experience Form while on-the-job. This will require performing duties and working with machines that may be different than those regularly assigned to you. You will have to discuss scheduling arrangements with your employer. The vast majority of employers are eager to support TQ qualifiers in their pursuit of certification and are often willing to help you find practice time at your job-site.

Learning Plan Checklist

- | | | |
|---|------------------------------|-----------------------------|
| Do you have a copy of your Work Experience Form? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Do you have a copy of the Strategies for Writing Multiple-Choice Exams? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Do you have a copy of How to Study for Certification Exams? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Have you identified your Learning Resources? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Do you have a Learning Plan? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

Part D

Learning Resources

rrc.mb.ca/bookstore

The Red River College bookstore has a list of books that apprentices use during their training toward certification. Get a copy of the list for your trade. As someone challenging the certification exam, you may not require each and every text on the booklist. Utilize your Work Experience Form to help you pin-point specific texts.

tradesecrets.gov.ab.ca/ilmorder/order.html

Alberta Apprenticeship and Industry Training provide Individual Learning Modules (ILMs) that can be ordered online. These modules are an excellent source of trade specific information presented in a format that provides rational statements, specific outcomes, detailed objectives, technical terms, formulas and a self-test (answers included). RRC can also order the ILMs for you.

centennialcollegepress.com/auto.html

Centennial College (Ontario) provides Certificate of Qualification (C of Q) Test Preparation books for the Automotive Service Technician and Truck and Transport Technician trades. These texts feature more than 200 questions (and detailed answers) written in the certification exam format.

www.thelearningpit.com

This site provides online interactive learning for electrical students. Also includes curriculum and support for trades and technology training, as well as tutorials, a glossary of terms, tools and tables and related web links.

allaboutcircuits.com

This site provides a series of online textbooks covering electricity and electronics. Topics include: basic concepts of electricity, Ohm's law, electrical safety, series and parallel circuits, batteries and power systems, capacitors, electromagnetism, etc.

exambank.com

This site claims to offer, for a fee, practice questions in several trades that have been developed by qualified instructors to prepare to write Interprovincial exams. The site offers free practice exams.

itabc.ca/page30

This website (BC Industry Training Authority) offers free practice exams for several trades. These are level tests and do not cover all levels of technical training.

meleague.net/id13.html

This website offers, for sale, code products for the Construction and Industrial electrical trades. They also offer a Self Evaluation CD they claim has been developed to assist electricians pass the Certificate of Qualification exam. They offer more than 1000 questions they claim are based on the National Occupational Analysis for the above mentioned trades.

milady.com

This website offers a wide variety of Milady products and services including textbooks for both the Hairstyling and Esthetics trades. Some text books are offered in a few different languages.

red-seal.ca

This site provides the all important National Occupational Analysis (NOA) for your trade. The Work experience form you completed upon applying to challenge the exam comes directly from the NOA. You should read this document cover to cover as it is the primary document for developing both the apprenticeship training model and the exam you are attempting to write.

tradesinfo.ca

This site offers an electronic version of the NOA that allows you to identify any training gaps in much the same way as the Work Experience form. This site is valuable for immigrants who want to compare their knowledge with the Canadian standard.

Non-Accredited Trades Qualification (TQ) Upgrading Courses

There are several non-accredited TQ upgrading courses available at local community colleges, unions and through private providers. These providers are not accredited by Apprenticeship Manitoba and there is no guarantee that the courses are taught by certified tradespeople or that the instructors hold a teaching credential or that the courses they offer follow the Occupational Analysis. Since you have developed a Learning Plan based on the Occupational Analysis for your trade it is fair to ask these providers if they have developed their upgrading course based on that source document.

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