
Technical Reading

The quiz below is to get you thinking about the type of reading you will do during technical training and on the job. Check your responses against the answers at the end of this chapter. I have included this exercise to point out how attitudes can get in the way and interfere with your learning.

Strategies for Reading Technical Material in Textbooks

Part A – True or False

Directions: Circle T for True or F for false.

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|---|---|---|
| 1. Workers on the job spend more time reading than many students in high school. | T | F |
| 2. Trades instructors are there to teach you technical skills not reading and math. | T | F |
| 3. Many trades people learn by doing, not by reading. | T | F |
| 4. Good readers guess a lot, then check for accuracy. | T | F |
| 5. Everyone finds reading difficult at times. | T | F |
| 6. Reading at work has a different purpose than reading in school. | T | F |
| 7. Reading skills improve with practise. | T | F |
| 8. People who do not read very well are unintelligent. | T | F |
| 9. Adults do not learn as well as children. | T | F |
| 10. Reading requires a lot of thinking. | T | F |

Part B – Multiple Choice

Directions: Circle your answer.

- 11) The textbooks and manuals used during technical training for apprentices:
- a) Are considered university-level reading.
 - b) Are about as difficult to read as the newspaper.
 - c) Present no particular reading problems.
 - d) Can be read easily by anyone with grade ten.
- 12) The reading skills needed by trades people:
- a) Are the same as those needed for general reading.
 - b) Are taught in high school.
 - c) Are taught in primary school.
 - d) Are not generally taught in most schools.
- 13) Skilled trades people typically read:
- a) Less than an hour a day.
 - b) Between one and two hours a day.
 - c) Between two and three hours a day.
 - d) Very little.
- 14) Technical reading is more difficult than general reading because of:
- a) Specialised vocabulary.
 - b) The way information is organised.
 - c) Diagrams and charts included with the reading.
 - d) All of the above.
- 15) Understanding of what is read depends on:
- a) Recognising every word.
 - b) The ability to “sound out” words.
 - c) Recognising main ideas.
 - d) Having some prior knowledge of the subject.

- 16) Before you study a section from your textbook, you should be able to:
- a) Relate the reading to what you already know.
 - b) Give you an overview of what the reading is about.
 - c) State a clear purpose for reading the selection.
 - d) All of the above.
- 17) The one hundred most commonly used words make up _____ of all the words used in textbooks.
- a) 15%
 - b) 25%
 - c) 45%
 - d) 60%
- 18) You may have difficulty reading when:
- a) You have no prior knowledge of the subject covered by the reading.
 - b) There are not enough pictures.
 - c) The paragraphs are too long and not divided correctly.
 - d) All of the above.
- 19) The best way to learn from textbooks is to:
- a) Read and re-read the text.
 - b) Underline important ideas.
 - c) Read the text aloud.
 - d) Make notes and solve problems using problem-solving skills.

Part A 1. - T; 2. - F; 3. - T; 4. - T; 5. - T; 6. - T; 7. - T; 8. - F; 9. - F; 10. - T
Part B 11. - a; 12. - d; 13. - b; 14. - d; 15. - d; 16. - d; 17. - c; 18. - d; 19. - d

Part A - Discussion of Answers

1. **T** - *Workers on the job spend more time reading than many students in high school.*

Surprised? Workers spend a lot of time reading memos, safety regulations, blueprints, work orders, manuals and codebooks.

2. **F** - *Trades instructors are **not** there to teach you technical skills not reading and math.*

Remember the statement in the introduction of this chapter: “Technical training is a combination of theory, technologies and skills related to your trade.” Your trades instructor will teach you the math required at each level of training. You will also be exposed to different types of reading: blueprints, diagrams, schematics, tables and graphs. If you are having difficulty with the reading and the math, you should talk to your instructor about getting extra help. There may be tutors available where you are doing your training or within the community.

3. **T** - *Many trades people learn by doing, not by reading.*

This makes sense if you think about how apprenticeship is a combination of theory and hands-on experience.

4. **T** - *Good readers guess a lot, then check for accuracy.*

In fact, ‘guessing’ or making predictions about what you are reading helps you to stay focussed or on task.

5. **T** - *Everyone finds reading difficult at times.*

It’s an assumption that once you learn how to read you can read anything and understand it. The reading you will do during technical training is complex and often above a high school reading level. Much of this reading material—blueprints, diagrams, schematics, tables, graphs—will be unfamiliar, which makes it more difficult at first.

6. **T** - *Reading at work has a different purpose than reading in school.*

Definitely! When you are on the job, you are reading-to-do or to solve a problem. Because of the way apprenticeship works, the reading you do during technical training is also often reading-to-do or solve a problem.

7. **T** - *Reading skills improve with practise.*

Everything improves with practise. As you read through this chapter, you will also learn some strategies for improving your reading skills.

8. **F** - *People who do not read very well are unintelligent.*

This is most definitely not true. There are a lot of reasons why people have difficulty reading. For example, not enough exposure or practise since leaving school, or a learning disability. It could even be as simple as needing a pair of reading glasses.

9. **F** - *Adults do not learn as well as children.*

This is another assumption that has been around for years. Studies show there is little or no truth to this statement. What is different between how adults and children learn is the length of time it may take to learn something new. Studies indicate that as we age we take a little longer for our long-term memory to kick in.

10. **T** - *Reading requires a lot of thinking.*

Yes it does! Especially the technical reading you will be required to do both on the job and during your technical training. Remember: you will usually be reading-to-do something or solve a problem. This process requires a great deal of thinking and problem-solving on your part and was explained in Chapter 2 of this book.

Part B - Discussion of Answers

11. **a** - *The textbooks and manuals used during technical training for apprentices are considered university-level reading.*

Does this surprise you? The textbooks and manuals you will be reading contain complex diagrams, schematics and tables, as well as text that is full of technical terms and jargon. All of these things combine to make the reading more complex.

12. **d** - *The reading skills needed by trades people are not generally taught in most schools.*

The reading you did in high school was reading-to-learn and meant reading, organising and memorising long passages of text. You will do some of this type of reading during technical training, but more importantly the emphasis will be on reading to solve a problem or to follow a process.

- 13. b -** *Skilled trades people typically read between one and two hours a day.*

Surprised? Trades people often don't recognise just how much reading they do in a day. This may be because they don't actually sit down and spend an hour reading something, but spend short periods – a couple of minutes at a time – reading something. Reading blueprints, notes from another tradesperson scribbled on one of the studs, a memo detailing a change in safety procedures, work orders, labels on a new product, or a codebook detailing how to repair a piece of equipment are all examples of the workplace reading you will be required to do.

- 14. d -** *Technical reading is more difficult than general reading because of specialised vocabulary, the way information is organised, and the diagrams and charts included with the reading.*

All of these things add to the complexity of what you are reading.

- 15. d -** *Understanding of what is read depends on having some prior knowledge of the subject.*

Knowing even a little bit about what you are reading increases your understanding. So don't worry, as you become more familiar with the trade, reading technical material will become easier.

- 16. d -** *Before you study a section from your textbook, you should be able to relate the reading to what you already know, give an overview of what the reading is about, and be able to state a clear purpose for reading the selection.*

Being able to do all of these things makes it easier for you to focus on what you are reading.

- 17. c -** *The one hundred most commonly used words make up 45% of all the words used in textbooks.*

These hundred words include: a, to, too, most, he, she, it, who, what.

- 18. d -** *You may have difficulty reading when you have no prior knowledge of the subject covered by the reading, there are not enough pictures, or the paragraphs are too long and not divided correctly.*

How the material is organised and whether or not you know a bit about the subject makes a big difference to your understanding of what you are reading.

- 19. d -** *The best way to learn from textbooks is to make notes and solve problems using problem-solving skills.*

The other choices help a little bit, but you are lot more focussed, and therefore learning more, if you are more active while you are reading and/or studying. Making notes and solving problems helps your brain stay active.