

Workplace Education Manitoba

---

*In partnership with Boeing Technology Canada*

# Essential Skills Refresher Training:

Preparation for the TOWES

Final Report

# **Essential Skills Training Pays Off!**

## *REPORT*

### **Summary**

*The exceptional results from the latest round of TOWES at a Winnipeg aerospace company speak loudly and clearly: Essential Skills refresher training works. After just six hours of Essential Skills training, one group's pass rate on the test was 55% higher than those without the refresher, while our second group's pass rate was **100%** higher.*

### **Background**

The multinational corporation has a multi-step external recruitment process. The first step is for candidates to present a certificate of Grade 12. Second, the company regularly uses a customized version of the TOWES (Test of Workplace Essential Skills) to pre-screen candidates for acceptable levels in the Essential Skills domains of reading, numeracy and document use. There are a total of nine Essential Skills that Canadian employers have identified as critical for workers to be able to work productively while evolving and successfully adapting to the constantly-changing needs of their job and workplace. The nine Essential Skills are reading text, document use, numeracy, writing, oral communication, working with others, computer use, continuous learning, and thinking skills.

To pass the TOWES requires a minimum score of Level 3, the level required to cope with everyday work and life tasks. Candidates who score lower than Level 3 do not move forward in the company's recruitment process. In 2006, the company gave the test to 1,019 external candidates. Disappointingly, only 19% scored Level 3 or higher in all skill domains.

At this point, Industry and Workforce Development along with Employment Manitoba proposed that a short course of Essential Skills refresher training would improve these results. For evaluation purposes, the grouped data for candidates tested in 2006 (who received no refresher training) has been compared to the individuals who received our Essential Skills refresher training session. The results of those receiving our training are grouped into two batches corresponding to the two dates the company offered for writing the TOWES.

### **Approach**

We began with the hypothesis that a portion of the people writing the TOWES were failing due to:

- atrophied document use and numeracy skills, and/or
- test-taking anxiety

Our prediction was that short-term skills gain training would positively influence the success levels of those who were close to passing, which includes mid- to high-Level 2s on the TOWES five-level scale. We also predicted that those scoring Level 1 and low

Level 2 would require significantly lengthier skills training. This was not part of our objective in this round of training. The prediction about those scoring at these lower levels is that there would be much more significant reading deficits, which cannot be diagnosed and remediated in a short space of time.

## **Training**

We designed a training program of a single six-hour session of Essential Skills refresher training, offered on six different occasions. In each session, experienced Essential Skills instructors lead learners through a skills-building process focusing on document use, numeracy and test-taking strategies.

Document use included understanding document structure, skimming-and-scanning for information, and strategies for document navigation. The numeracy portion gave our learners a preview of mathematical process tasks embedded in document use. Exposing learners to authentic TOWES-style questions helped ease test anxiety, which then paved the way for confidence building. Another strategy involved showing learners how to transfer everyday skills they already possessed into the workplace context.

## **Findings**

Our first prediction was that a short session of Essential Skills training would increase the success levels of those who were close to passing, which includes mid- to high-Level 2s on the TOWES 5-level scale.

As predicted, both refresher groups produced significantly higher numbers of Level 3 and above. The first refresher group saw a 100% upswing in numbers of those who passed while the second refresher group saw a 50% upswing.

It's worth noting that our aerospace contact reported that the recruitment screening process for our second refresher group was less stringent than for our first group. This may account for the much higher number of Level 1s in this second group.

Our second prediction was that individuals functioning at Level 1 and low Level 2 would require much lengthier training than that being offered. While there has clearly been a gain in success results, at the same time we still have a cohort of Level 1 scorers. This has confirmed our prediction that they would not be significantly affected by this training.

## **Conclusion**

Our goal was to prove that Essential Skills refresher training can positively influence the success levels of those TOWES writers who are close to passing. Our results clearly and strikingly show that this objective was achieved.

In TOWES ratings for Level 2 – which scores at 226 to 271 – it's regarded that those scoring higher than 250 can be helped with short-term skills gain training. Those scoring under this would require lengthier training: anywhere from two weeks or more depending on the diagnosis of the reading issue(s).

## Appendix – Project Data

### 2006 Notable Findings (contained in Bow Valley College Report) - Without Refresher Training -

Number of test takers = 1,019

Test Taker Proficiencies:

#### Proficiencies by Level (N = 1,019)

Level	Reading	Document Use	Numeracy
Level 1	18%	37%	13%
Level 2	37%	40%	34%
Level 3	37%	20%	39%
Level 4	8%	3%	14%

#### Test Takers Meeting Aerospace Company's Proficiency Requirements (N = 1,019)

Test Takers That ...	Number	Percentage
Met occupational requirements in all three domains	195	19%
Met occupational requirements in two of three domains	231	23%
Met occupation requirements in one of three domains	202	20%
Met occupation requirements in none of three domains	391	38%

45% of test takers scored Level 3 or higher in Reading and 53 % scored Level 3 or higher in Numeracy, while only 23% scored Level 3 or higher in Document Use.

### 2007 Notable Findings – Individuals with Essential Skills Refresher Training: TOWES Test – Written May 1, 2007

Number of test takers completing Essential Skills Refresher Training = 47

60% of test takers taking Essential Skills Refresher Training scored at Level 3 or higher in Reading, 40% scored at Level 3 or higher in Document Use, and 63% scored at Level 3 or higher in Numeracy.

#### Proficiencies by Level (N = 47)

Level	Reading	Document Use	Numeracy
Level 1	15%	34%	17%
Level 2	25%	26%	20%
Level 3	49%	23%	23%
Level 4	11%	17%	40%

#### Test Takers Meeting Aerospace Company's Proficiency Requirements (N = 47)

Test Takers That ...	Number	Percentage
Met occupational requirements in all three domains	18	38%
Met occupational requirements in two of three domains	9	19%
Met occupation requirements in one of three domains	4	9%
Met occupation requirements in none of three domains	16	34%

## Appendix – Project Data cont'd

### Individuals with Essential Skills Refresher Training : TOWES Test – Written May 24, 2007

36% of test takers taking Essential Skills Refresher Training scored at Level 3 or higher in Reading, 16% scored at Level 3 or higher in Document Use, and 47% scored at Level 3 or higher in Numeracy.

#### Proficiencies by Level (N = 64)

Level	Reading	Document Use	Numeracy
Level 1	27%	44%	19%
Level 2	37%	40%	34%
Level 3	25%	13%	33%
Level 4	11%	3%	14%

#### Test Takers Meeting Aerospace Company's Proficiency Requirements (N = 64)

Test Takers That ...	Number	Percentage
Met occupational requirements in all three domains	19	30%
Met occupational requirements in two of three domains	6	9%
Met occupation requirements in one of three domains	9	14%
Met occupation requirements in none of three domains	30	47%

#### TOWES Refresher Training: Lesson Plan Overview

1. Overview of TOWES
2. Reducing Anxiety – Test-taking Strategies
3. Navigating the Test Taking Process (understanding the organization of tests, understanding the question, finding the answer, confirming the answer)
4. Document Navigation (understanding document structure including graphs, charts and tables, skimming and scanning, strategies for locating information in documents)
5. Practice Questions – Reading, Document Use and Numeracy (TOWES sample test, How Do Your Skills Measure Up? practice questions)
6. Strategies for Transfer of Learning
7. Take-home Essential Skills Refresher Training Practice Booklet

# **Essential Skills Refresher Training: Preparation for the TOWES Test**

## **Workshop Curriculum**

## **Workshop Summary:**

We designed a training program of a single six-hour session of Essential Skills refresher training, delivered a number of times. In each session, instructors lead learners through a skill-building process focusing on document use and test-taking strategies. Reading and numeracy skills reviews were embedded into practice opportunities.

Document use included understanding document structure, skimming-and-scanning for information, and strategies for document navigation. The numeracy portion gave learners a preview of mathematical process tasks embedded into document use. Exposing learners to authentic TOWES-style questions helped ease test anxiety, which then paved the way for confidence building. Another strategy involved showing learners how to transfer everyday skills they already possessed into the workplace context.

The design of the workshop is based on the *scaffolding* model of instruction. The instructor models the skills to be learned and then provides opportunities for practice. As the learners become more confident, instructor support is gradually and methodically reduced.

The objective of this workshop is to instruct learners in the strategies and information required to achieve a test performance of Level 3 or higher on the TOWES. This is achieved through increased learner competence in using strategies to facilitate comprehension, analyzing the required task, reflecting upon and then connecting information to what they already know and don't know, creating and implementing a plan for completing the task, and then monitoring their own progress toward reaching that goal.

## **Lesson Plan Overview:**

1. Introduction
2. Overview of TOWES
3. Reducing Anxiety – Test-taking Strategies
4. Navigating the Test Taking Process (understanding the organization of tests, understanding the question, finding the answer, confirming the answer)
5. Document Navigation (understanding document structure including graphs, charts and tables, skimming and scanning, strategies for locating information in documents)
6. Practice Questions – Reading, Document Use and Numeracy (TOWES sample test, How Do Your Skills Measure Up? practice questions)
7. Strategies for Transfer of Learning
8. Review
9. Take-home Essential Skills Refresher Training Practice Booklet