

Outcomes of Workplace Training in Essentials Skills – Results for New Brunswick

*Results from the Collaborative Project between
Norway and Canada-New Brunswick*

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1. Introduction

Lifelong learning is considered a key element of a knowledge-based economy. It goes beyond the preparation of young people for formal education and recognizes the value of citizens acquiring and updating their skills throughout their lives. Essential skills such as literacy have far reaching effects and serve as a basis to the economic and social well-being of individuals. For instance, high literacy skills are associated with positive labour market outcomes and help individuals nurture a culture of learning.

In recognition of the strong employment-related needs in literacy and other essential skills, the Government of New Brunswick has put in place the Workplace Essential Skills (WES) training program for its citizens. Skills for which training is offered include reading, writing, numeracy, computer use and communication. The WES program was designed to offer an alternative pathway (i.e. an opportunity for training outside of the secondary and postsecondary systems) for low-skilled adults to gain the skills they need to meet the rapidly changing demands of the labour market. The WES training program is not only vital in addressing the literacy challenges that the workforce of the province faces, but also in fostering a stronger culture of continuous learning.

The primary objective of this report is to examine whether workplace training, through the WES program, had any positive impact on the skills and learning behaviour of participants. Findings could be used to identify best practices, to build awareness of the different delivery methods, and to facilitate improvements in essential skills training.

The report is structured as follows: section 2 describes the data and methodology; section 3 highlights the New Brunswick's WES training program objectives; section 4 presents characteristics of the participants; Section 5 presents the self-assessed skills of participants; Section 6 presents their PDQ proficiency levels; section 7 examines the association between self-assessed and the objective assessment of literacy skills (i.e. the Prose, Document and Quantitative Literacy (PDQ) proficiency levels); Section 8 shows the outcomes of training for participants, which essentially are the comparison between their self-assessment skills before and

after training. Section 9 contrasts participants' skills before and after training with the retrospective assessment of their skills before training. The report ends with some concluding remarks in section 10.

2. Data and methodology

The analysis is based on two data sources: 1) the two questionnaires completed by individuals who participated in the WES training program; and 2) their literacy results, which were assessed through the PDQ test.

2.1 Data and sample

2.1.1 The WES questionnaires

Workers who participated in the training completed two questionnaires: one self-assessment questionnaire at the start of the training; and another one at the end of the training period. They were asked to rate their own reading, writing, numeracy, computer and oral communication skills, and were also asked to assess their ability and confidence in doing various tasks and how often they do those various tasks. Furthermore, they were asked to re-assess retrospectively their skills in reading, writing, numeracy, computer and oral communication skills before the training took place. In this post-assessment, they were also asked to give one specific example of how the essential skill training has impacted their ability to do various tasks and their attitude towards learning as an adult.

2.1.2 Objective assessment of prose, document and quantitative literacy

The three domains of literacy¹ (prose, document and quantitative) were assessed using the PDQ test. The test was developed by Education and Training Services (ETS) following the definitions

¹ Literacy is using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential (Statistics Canada, HRSDC 2005).

of literacy used in the International Adult Literacy Survey (IALS) 1994². The three domains of literacy are defined as follows:

Prose

Prose literacy measures how well an individual understands and uses information found in newspapers, magazines, novels, brochures, manuals or flyers. Most adults use prose literacy to answer questions, to learn how to do something or for entertainment.

Document

Document literacy measures how well an individual finds and uses information in forms, schedules, charts, graphs and other tables of information. Most adults use document literacy to find information they need or want or to give information to someone else.

Quantitative

Quantitative literacy measures how well an individual can use numeracy found in ads, forms, flyers, articles or other printed materials. Quantitative literacy is a little different from prose and document literacy because in addition to using a text to identify needed information, an individual also has to add, subtract, multiply, divide or do other math to get the information the individual needs. It measures numeracy skills to some extent although it is not as comprehensive as the way numeracy is assessed in current large-scale survey such as the 2012 Programme for the International Assessment of Adult Competencies or the 2003 Adult Literacy and Lifeskills Survey.

Scores are provided in five-point increments, from 0 to 500, and proficiency levels: Level 1, Level 2 or Level 3 or above, for each literacy scale (prose, document or quantitative). In this

² The scores from the PDQ test can be interpreted on the same scale as the International Adult Literacy and LifeSkills Survey (ALL) 2003.

report, proficiency levels will be used. Levels have been used to facilitate the interpretation of the scores and indicate generally the level at which an individual can use information as defined in prose, document and quantitative literacy. Level 1 and Level 3 or above representing the lowest and highest skill level, respectively.

2.1.3 Sample

As shown in Table 1, there were 71 participants, all employed, distributed into three firms that participated in the WES program. While all participants completed the initial self-assessment questionnaire (i.e. the self-assessment before training), three participants were not able to complete the PDQ test due to disabilities. Out of the 68 participants who completed the PDQ tests, a total of 55 participants completed the self-assessment after training (including the retrospective self-assessment). The analysis on the effects of workplace training on skills (see Section 8) is based on this sample of 55 participants. All other analyses use the sample of 68 participants who completed the PDQ.

Table 1: The number of participants			
Firms	Self-assessment before training	PDQ assessment	Self-assessment after training and in retrospective
Ganong Bros Ltd	15	14	12
Home Hardware Stores Ltd	38	36	35
Moosehead Breweries Ltd	18	18	8
Total	71	68	55

2.3 Methodology

Analyses in this report are descriptive and based on a quantitative analysis of the two data sources presented above. The general objective of the report is to examine whether training in literacy, through the WES program, has any positive impact on skills of workers who participated in the training. Specifically, it focuses on the following two questions:

- 1) What were the skills, from both their self-assessment and the objective assessment, of participants before training took place?
- 2) What were the outcomes of training? That is, did participants rate their skills differently after they went through the training in essential skills?

The first question is addressed by looking at participants' self-assessed skills and ability to perform tasks as well as their assessed prose, document and quantitative literacy skills. The association between the self-assessment and the direct assessment is also examined, which to some extent corroborates the validity of the self-assessment. The second question is answered through a comparison of self-assessed skills before and after training and through a retrospective assessment of their pre-training skills. The latter might provide a better assessment of their 'actual skill levels' before the training took place. Results of the data analysis are expected to inform on participants' learning outcomes and behaviour, which could in turn provide valuable information to facilitate improvements in essentials skills training.

3. Overview of the New Brunswick's WES training program and participating firms

This section presents an overview of the WES Program and of the training offered by the three firms that participated in the program.

3.1 Overview of the WES program

The Workplace Essential Skills (WES) Program targets employers and employees in both the public and private sectors, regardless of size, or sector. It is aimed at helping adults who are employed or seeking employment and requiring additional essential skills to succeed. It is also available to employers who are experiencing skilled workforce shortages and in need of

recruitment support. Courses are offered in both official languages free of charge for adult residents of New Brunswick.

The WES Program has been put in place by the New Brunswick Department of Post-Secondary Education, Training and Labour (PETL), which provides leadership and expertise to help carry the WES program forward. It is managed by seven regional offices. Furthermore, the WES training program focus on the specific tasks associated with either an individual's current job or desired occupation, or those apprentices who have experienced difficulties with taking certification exams.

The PETL provides an initial Training Needs Assessment³ prior entry into the program, which identifies the essential skills required in the specific workplace. Based on the results of the initial assessment of skill needs, training is customized to respond to the specific needs of workplaces and employees (including apprentices).⁴ The WES training ends with participants' evaluation of training impacts. Some recommendations for future learning opportunities are also usually made.⁵

3.2 Brief description of participating firms and of the training provided

Data come from three firms that participated in this WES initiative: Ganong Bros. Limited, Moosehead Breweries Limited and Home Hardware.

3.2.1 Ganong Bros. Ltd

The Ganong Bros. Ltd is a proactive firm that has a strong interest in creating a learning culture in their workplace. It is committed to their employees and has a "promote from within" strategy for the Production Supervisor positions.

³ Participants are assessed in the nine essential skills prior to entry into the program: Reading, document use, writing, numeracy, oral communication, working with others, thinking skills, computer use and continuous learning.

⁴ Essential Skills Assessment, Block tests or Red Seal Certification exams.

⁵ For more detailed information, see

<http://app.infoaa.7700.gnb.ca/gnb/Pub/EServices/ListServiceDetails.asp?ServiceID1=200971&ReportType1=ALL>.

The training took place from December 14th, 2012 to May 21st, 2013. Learners attended one 4 hour class per week for a total of 84 hours. In order to respond to the skills need of its workforce, the Ganong Bros. Ltd Company offered a variety of training opportunities, including (but not necessarily limited to):

- Document use - to facilitate appropriate use of several production documents introduced over the past couple of years aimed at increasing productivity and maintaining certification;
- Oral communication, thinking, and working with others - to improve leadership skills and enable supervisors to better motivate and engage their employees;
- Computer use - to ensure supervisors have the digital skills needed to use tablets to enter data electronically into the main company network.

3.2.2 Moosehead Breweries Limited

Moosehead Breweries modernized its manufacturing equipment resulting in changes to job descriptions and job tasks. As a result of this modernization, the company needed skilled workforce not only to run, but also to enable the troubleshooting of issues on their own in a computerized environment. To meet this demand, the company provided its workforce with following essential skills training:

- Computer use - to enable staff to use the new equipment which is significantly more technologically advanced than their current equipment;
- Document use - to enable staff to follow a computer screen for instruction on how to troubleshoot any issues that may arise on the manufacturing line;
- Thinking - to ensure employees can analyze and interpret information/instructions and make minor adjustments as needed.

The training took place from May 8th to August 30th, 2012. Learners attended one 2.5 hour class per week for a total of 60 hours.

3.2.3 Home Hardware

In order to respond to the training needs of its workforce, Home Hardware offered a range of Hardware, Construction and Renovation materials as well as home decoration products related training courses. The training took place from September 24, 2012 to June 28, 2013. Learners attended one 2.5 hour class per week for a total of 60 hours.

It should be noted that results reflect only those for individuals among the three firms that participated in the WES program. Two firms are from the manufacturing sector: Ganong Bros. Ltd, and Moosehead Breweries; and one is from the “Retail Trade and Wholesale” sector: Home Hardware. Results should neither be considered as representative of the New Brunswick “manufacturing” sector, nor the “Retail Trade and Wholesale” sector.

4. Profile of participants

Table 2 shows the distribution of participants across firms and their socio-demographic characteristics. Because of the small number of participants, and because they are not part of a random sample of the New Brunswick population or labour force, their characteristics might differ from the Census-based or large-scale survey-based population of New Brunswick. Hence, these descriptive statistics have to be used with caution and cannot be generalized to the workforce of New Brunswick.

Table 2 shows that the majority of participants (52.9%) worked at Home Hardware, while the remaining participants were distributed between the Ganong Bros Ltd and Moosehead Breweries - 20.6% and 26.5%, respectively. When compared to their counterparts, there were larger shares of men, core-age workers (36 to 55 years old) and participants with high school as their highest educational attainment. It also shows that the large majority of participants perceived that their health condition was either good, very good or excellent (95.6% in total), and that most of them were born in Canada (86.8%).

When they were asked what was the “first language they learned at home in childhood and still understand”, roughly half (52.9%) of them said English and slightly less than half (45.6%) said French, which reflect the bilingual nature of the province of New Brunswick.

Table 2: Proportion of participants across firms and selected demographic characteristics	
	Per cent
Firm	
Ganong Bros. Ltd	20.6
Home Hardware	52.9
Moosehead Breweries	26.5
Gender	
Male	58.8
Female	41.2
Age group	
16-35	23.5
36-55	66.2
56+	10.3
Highest level of educational attainment	
Less than HS	19.1
HS completion	47.1
Post-secondary education	33.8
Health status	
Excellent/very good	66.2
Good	29.4
Fair/poor	4.4
Country of birth	
Canadian-born	86.8
Abroad	13.2
First learned language at home in childhood and still understand	
English	52.9
French	45.6
Other	1.5

5. Self-assessed skills of participants before training

5.1 Self-assessed skills

Participants were asked to assess their skills in reading, numeracy, writing, computer/technology and communication on the bases of five categories – “unable, poor, fair, good and very good”.

Because of small sample size, responses are aggregated into three categories– “Unable/poor, fair and good/very good”.

As illustrated in Figure 1, participants reported having higher skills in numeracy and reading and lower skills in computer/technology and communication. The proportion of participants who reported having “good/very good” skills is 66.2% in numeracy and reading, 50% in writing and below 50% in computer/technology and communication. Note that a quarter of participants reported having “unable/poor” skills in communication. This is a much higher proportion than what was reported for other skills.

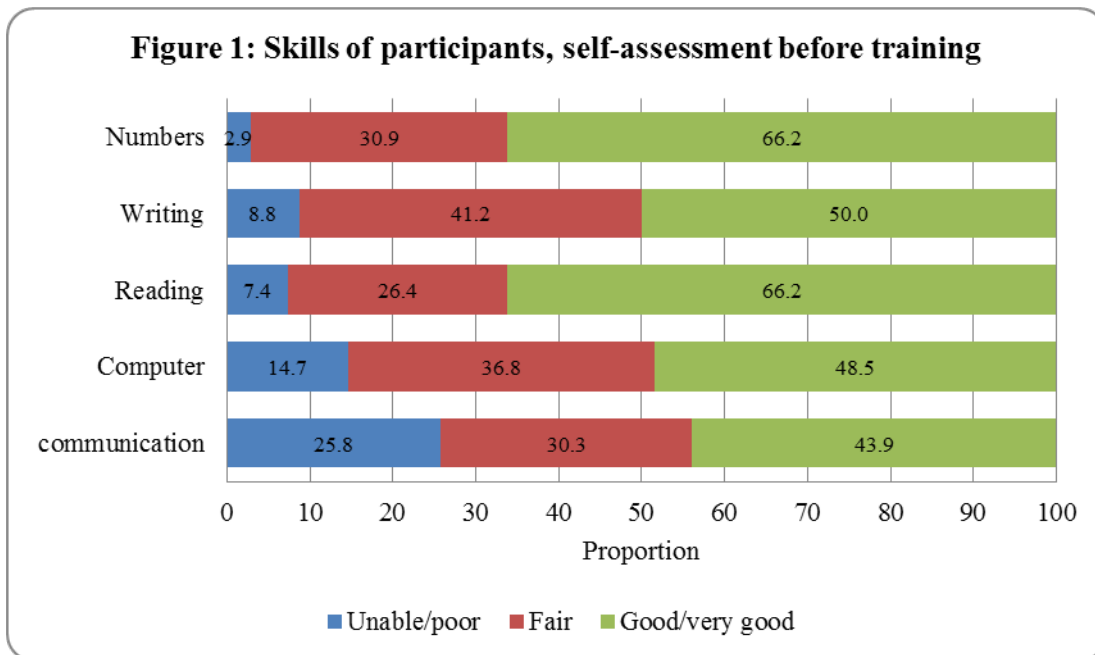


Table 3 shows the proportion of participants who reported having “good/very good” skills in the five competencies across firms.⁶ As shown in Figure 1, results indicate that participants in the three firms reported having higher reading and numeracy skills and lower computer/technology and communication skills. However, proportions vary in magnitude across firms, which is not surprising given the different tasks that may be required of employees within each firm, as well as the different skill sets that might be required to perform these tasks.

Table 3 – Proportion (in %) of participants with good or very good skills, by participating firm			
	Moosehead Breweries	Home Hardware	Ganong Bros
Numeracy	83.3	58.3	64.3
Writing	61.1	41.7	57.1
Reading	61.1	61.1	85.7
Computer/technology	44.4	44.4	64.3
Communication	27.8	52.9	42.9

5.2 Self-assessed abilities to perform various tasks

Before training, WES learners were asked to assess their ability and confidence⁷ to perform the following tasks: doing calculations, reading brief or large documents, working with what you read, writing short messages and using technology.

Table 4 shows that the majority of participants reported “good/very good” ability to perform these tasks, with the exception of reading large documents. Actually, over three quarters of WES learners (77.9%) ranked their ability to read brief documents, such as notes, emails and memos as “good/very good”, whereas 37.9% of them assessed their ability to read large documents, including reports or manuals, as “fair”. Note that a large number of participants

⁶ Because the number of participants is small in each firm, especially in Ganong Bros. Ltd and Moosehead Breweries, only the proportion of participants who reported having good or very good skills is shown.

⁷ Results for self-assessed confidence in performing various tasks are very similar to those for self-assessed ability in doing tasks. Hence, results are not shown.

(26.3%) assessed their ability to use technology as “unable/poor”, which could reflect that the use of technology is not necessarily or always required in the work participants did.

Various activities	Per cent		
	Unable/poor	Fair	Good/very good
Doing calculations	12.3	30.8	56.9
Reading brief documents	2.9	19.1	77.9
Reading large documents	16.7	45.5	37.9
Working with what you read	6.2	32.3	61.5
Writing short messages	9.1	30.3	60.6
Using technology	26.3	14.0	59.6

5.3 Frequency of doing various tasks

Participants were also asked to assess how frequently they perform various activities related to literacy, such as reading emails, books, doing conversions (working with numbers), and using internet or social media. The frequency of using these activities is presented in Table 5.⁸ In terms of activities related to reading, the majority of participants read emails or the internet often or regularly, and only a third of them read books often or regularly. In terms of activities more closely related to quantitative literacy, a large proportion (43.8%) never or rarely do conversions of numbers (e.g. metric-imperial conversion).

⁸ Table A.1 in the Appendix presents frequency of use for additional activities.

Table 5: Participants' pre-training self-assessment of their frequency in doing various tasks			
Various activities	Per cent		
	Never/Rarely	Little	Regular/Often
Reading emails	26.6	18.8	54.7
Reading internet	15.4	21.5	63.1
Reading books	30.2	38.1	31.7
Conversions (working involving numbers)	43.8	26.6	29.7
Surfing the internet	19.4	17.9	62.7
Using social media	44.8	14.9	40.3

6. Proficiency levels in prose, document and quantitative literacy

This section examines participants' skills in prose, document and quantitative literacy. As mentioned in Section 2, these skills were assessed objectively through the PDQ test. Skill scores are presented in terms of proficiency levels: Level 1, Level 2, and Level 3 or above. Level 1 corresponds to a low skill level, Level 2 to a low-intermediate skill level and Level 3 or above corresponds to an intermediate or advanced skill level.

Figure 2 shows that the majority of participants are at Level 3 or above in the three domains of literacy. Skills are greater in quantitative literacy than in prose or document literacy, as the proportion of participants at Level 3 or above is the highest and the proportion of participants at Level 1 is the lowest. Participants display very similar skills in prose and document literacy.

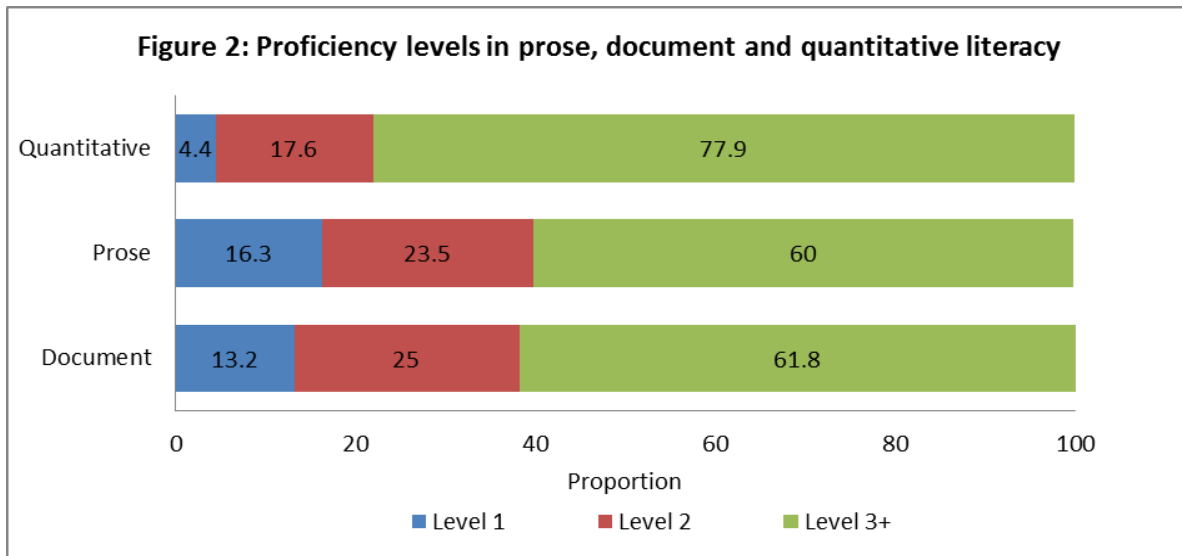
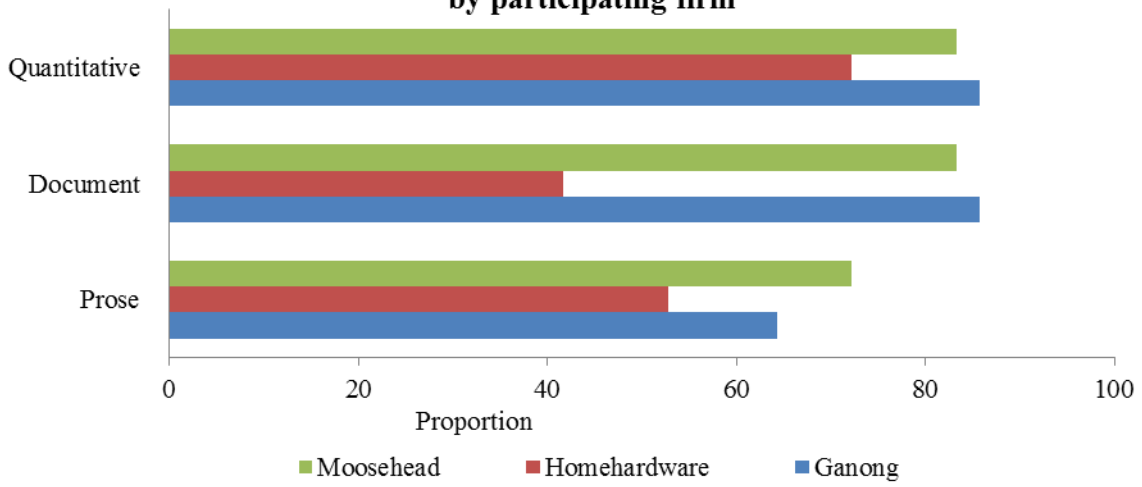


Figure 3 show that the proportions of participants at Level 3 or above vary across firms. Using the proportion of participants at Level 3 or above as a benchmark, participants from Moosehead Breweries and Ganong Bros. Ltd businesses, the two manufacturing firms, had greater skills before training than those in Home Hardware.

Figure 3: High proficiency levels (Level 3 or above) in literacy, by participating firm



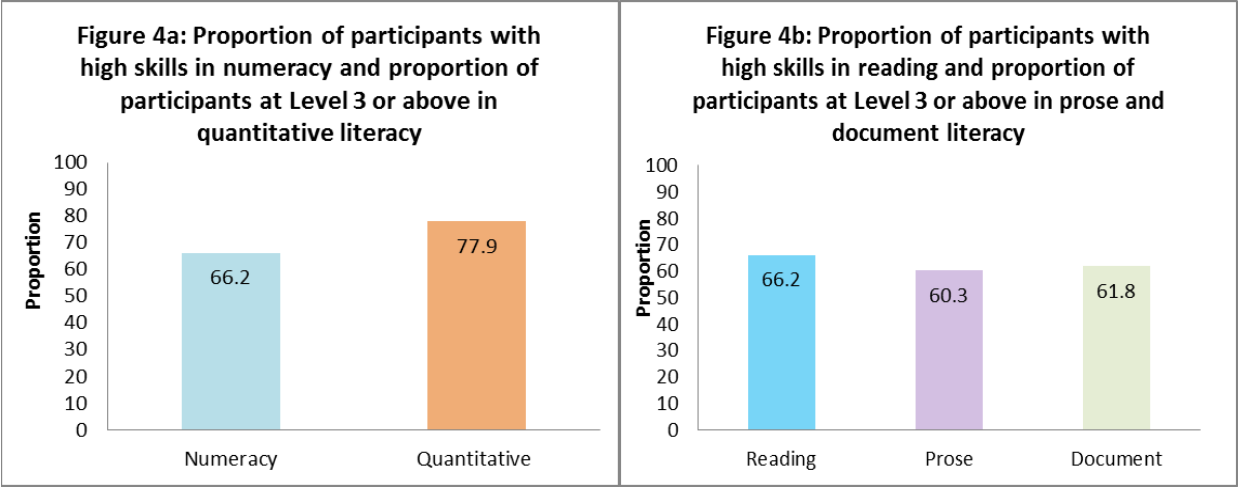
7. Association between self-assessed skills and literacy proficiency levels

7.1 Skills in numeracy and reading and literacy proficiency levels

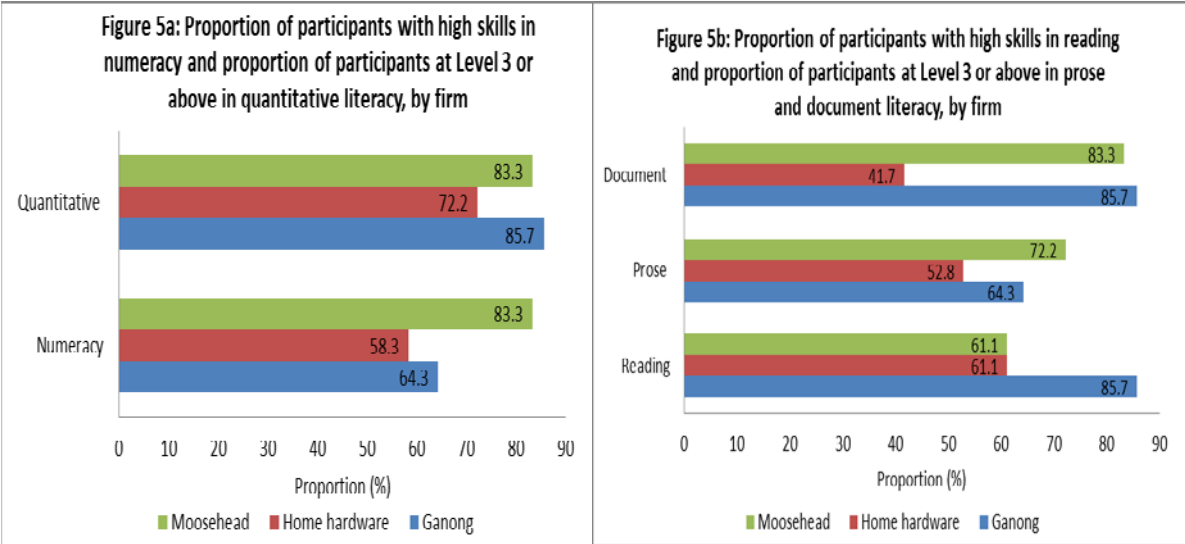
Participants were asked to assess their ability with numeracy and reading. These two “skills” measure concepts that are similar to the assessed skills in prose, document and quantitative literacy. Numeracy is related to quantitative literacy while reading is closely related to prose and document literacy. Although not directly comparable, a look at the association between skills in numeracy and reading and PDQ skills indicate to some extent the degree of consistency between the level of skills reported by individuals and their actual skills as measured by the PDQ test.

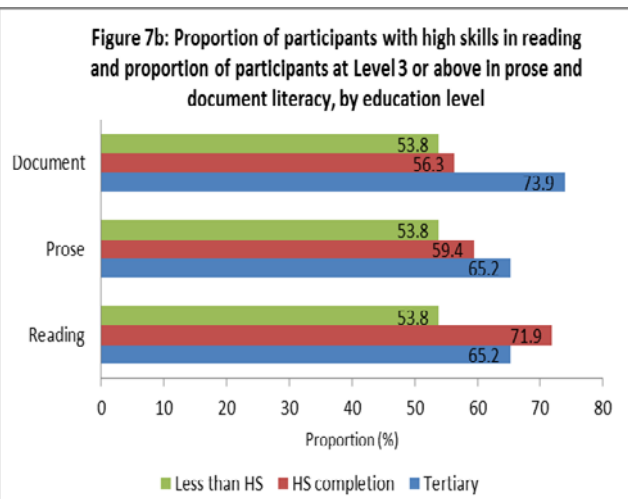
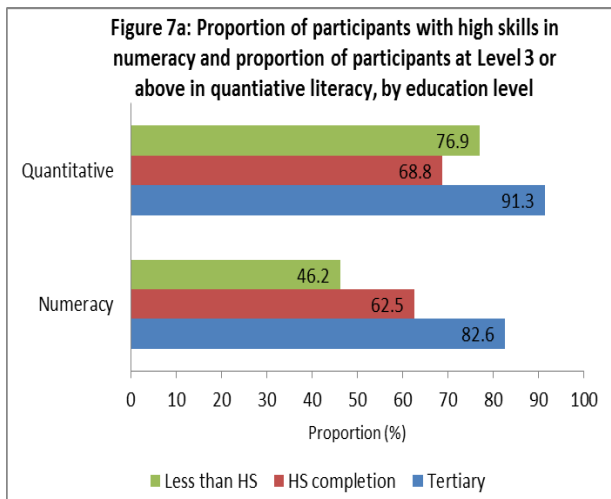
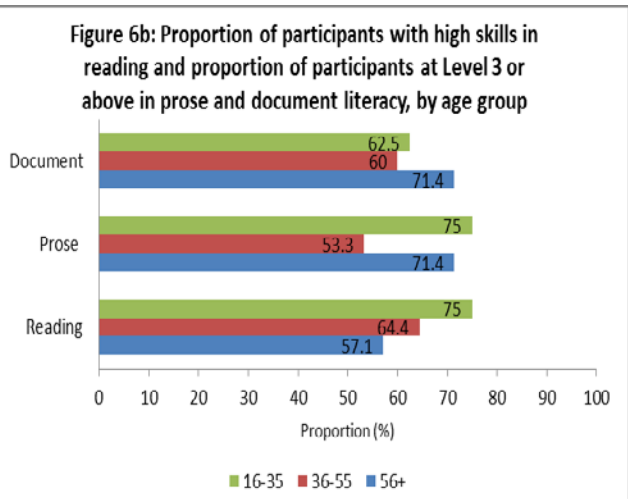
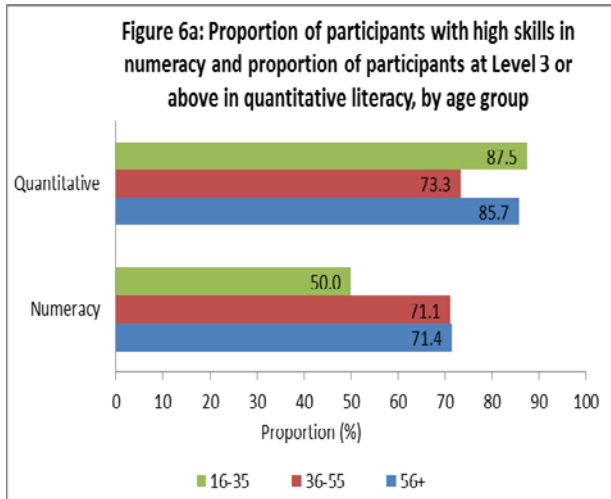
Figures 4a and 4b contrast the proportion of participants who reported high skills in numeracy with the proportion of participants at Level 3 or above in quantitative literacy, and the proportion of participants who reported high skills in reading and prose with the proportion of participants at Level 3 or above in document literacy, respectively.⁹ Both figures indicate that the majority of participants have high skills, based on both the self-assessment and the direct measurement of literacy skills. The direct assessment of quantitative literacy also indicates that participants may have greater skills than what they perceive when dealing with numbers (based on their self-assessment). Inversely, participants may have lower skills than what they perceive when comparing skills in prose and document literacy to self-assessed reading. However the difference is small.

⁹ High skills corresponds to reporting “good/very good” skills in numeracy or reading in the pre-training self-assessment and being at Level 3 or above in the direct assessment of literacy (prose, document or quantitative).



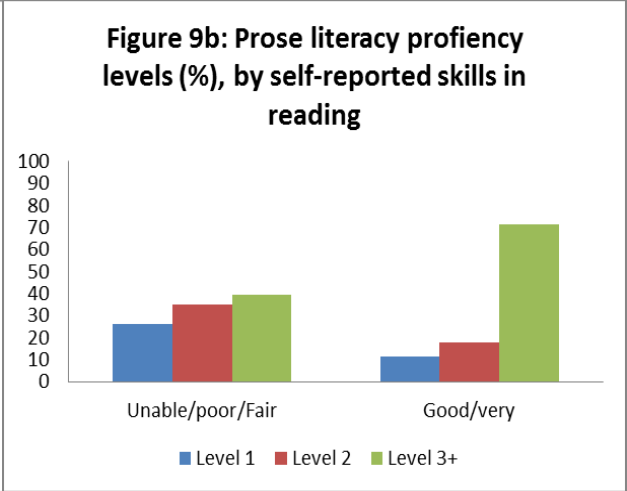
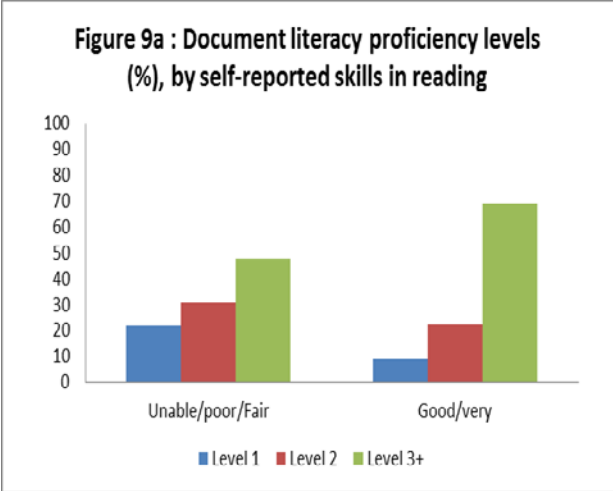
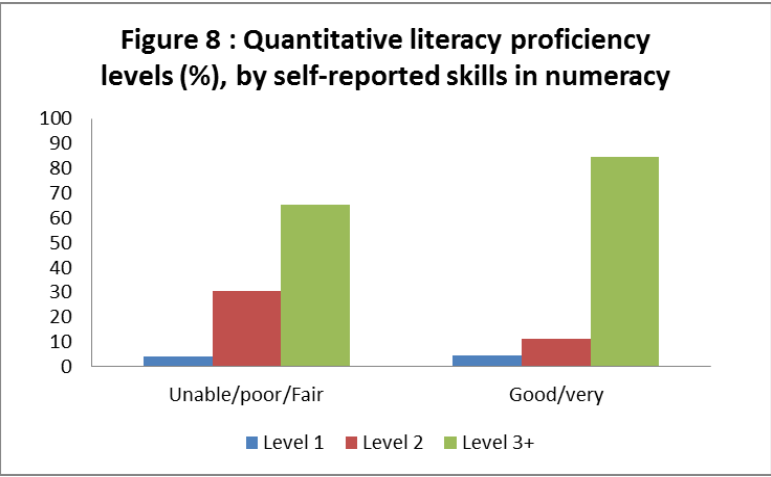
Proportions presented in Figure 4a and 4b are broken down further by firm (Figures 5a, 5b), age group (Figures 6a, 6b) and educational attainment (Figures 7a, 7b). Similarly to what is found in Figures 4a and 4b, the majority of participants reported high skills in the self-assessment and were at Level 3 or above in prose, document or quantitative literacy. Some differences exist though and the largest discrepancies between the self-assessment of the ability with numeracy and the direct measurement of quantitative literacy are observed among the youngest age group (16 to 35 years old) and among individuals who never complete a high school diploma (i.e. less than high school).





7.2 Literacy proficiency levels of participants by self-assessed skills

Generally, findings above indicate a positive association between the two forms of skills assessments - the self-assessment and the PDQ proficiency levels. Taking the analysis a step further, Figures 8, 9a and 9b examine literacy proficiency levels among participants who reported having “good/very good” or “unable/fair/poor” ability in numeracy and reading. Results show that the proportion of participants at Levels 3 or above (Level 1) in literacy is higher (lower) among participants who reported the highest ability in numeracy and reading, which is further evidence of this positive relationship between self-assessed skills and the objective measurement of literacy. This is particularly true for quantitative skills and numeracy.



8. Outcomes of training

This section examines the effects of training on learning outcomes, which are self-assessed skills and ability to perform various tasks. The analysis in this section is based on the 55 participants who completed the self-assessment of their skills both before and after the training took place. It is expected that participants would report an improvement of their skills after the training.

Specifically, the section looks at the three following outcomes of training:

- 1) What is the difference between self-assessed skills of participants before and after training?
- 2) What is the difference between self-assessed ability of participants in performing various tasks before and after training?
- 3) Is there any difference in how often various tasks are done by participants before and after training?

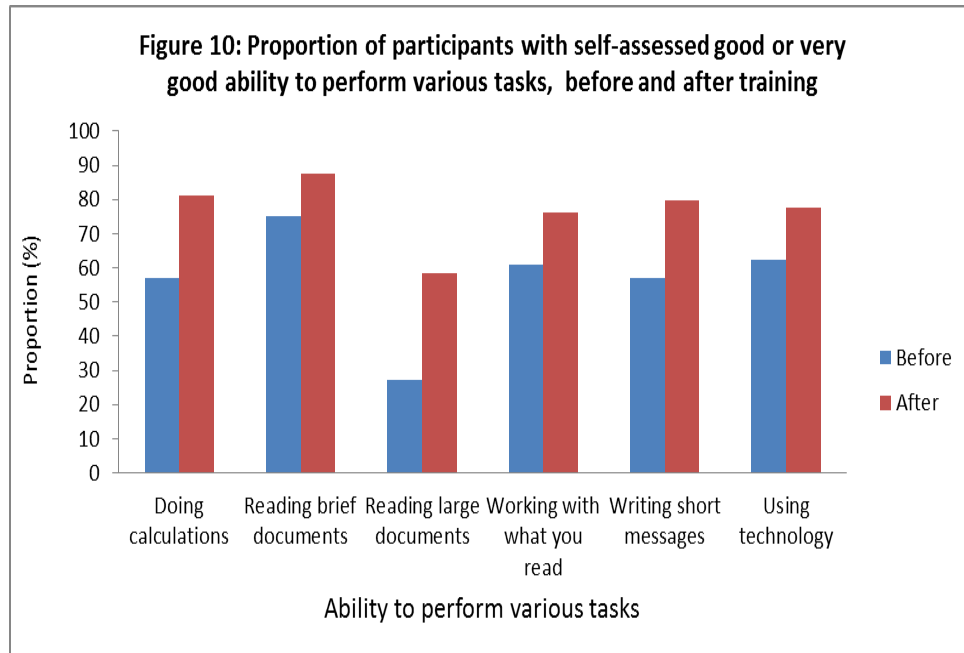
8.1 Effect of training on self-assessed skills

Table 6 presents the proportion of participants who assessed their skills as being “good/very good” before and after training. There is a striking difference between the two self-assessments, as participants reported significant improvements in the five skills, 15 to 30 percentage point increase for each skill, once they completed the training.

Type of skills	Per cent	
	Before	After
Numeracy	56.5	87.0
Writing	47.1	76.5
Reading	63.8	78.7
Computer/technology	46.0	76.0
Communication	47.6	76.2

8.2 Effect of training on self-assessed ability to perform tasks

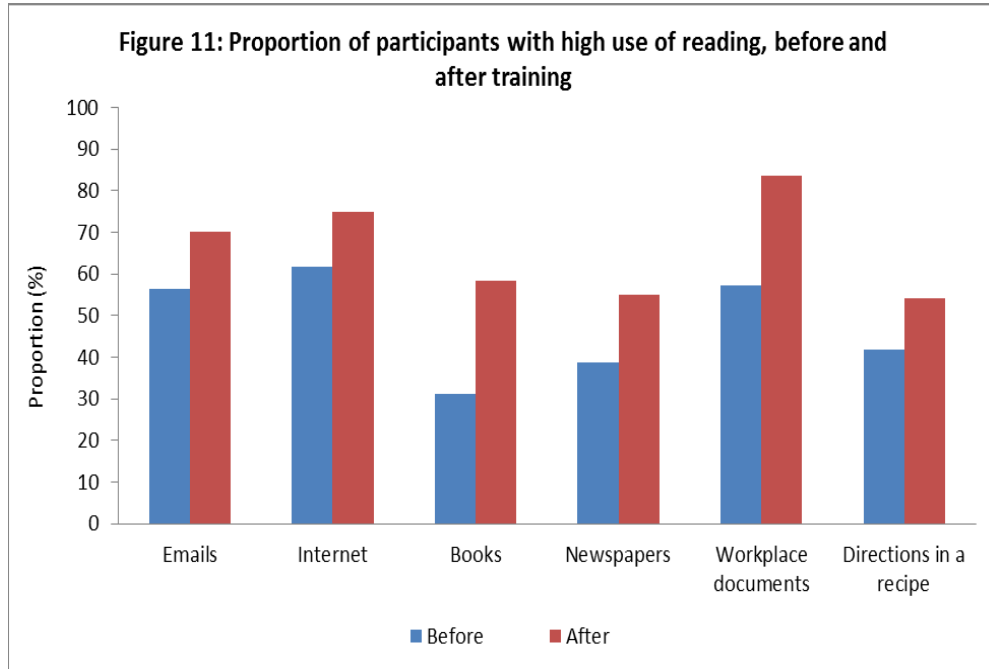
Large differences, 15 to 30 percentage point increases, are also observed between self-assessed ability in performing various tasks before and after training (see Figure 10). Actually, more than three-quarters of participants reported ‘good or very good’ ability in performing tasks related to calculations, reading and writing after training.



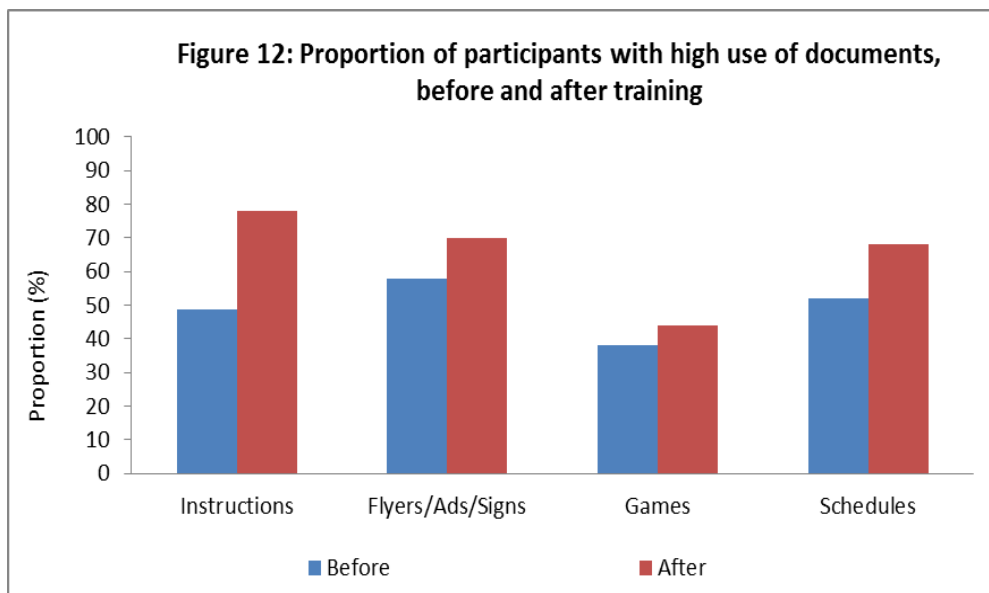
8.3 Effects of training on how often do they do various tasks

The next series of figures, Figure 11 to 15, examines how training influenced the extent to which participants performed various tasks related to reading, document, working with numbers, writing and using technology. In other words, did the training change positively the frequency at which they perform these tasks? Results show there were much larger proportions of participants who reported doing these various tasks “often or regularly” after training than before training, which may in turn have positive effects on the development of individuals’ ability and essential skills now and in the future.

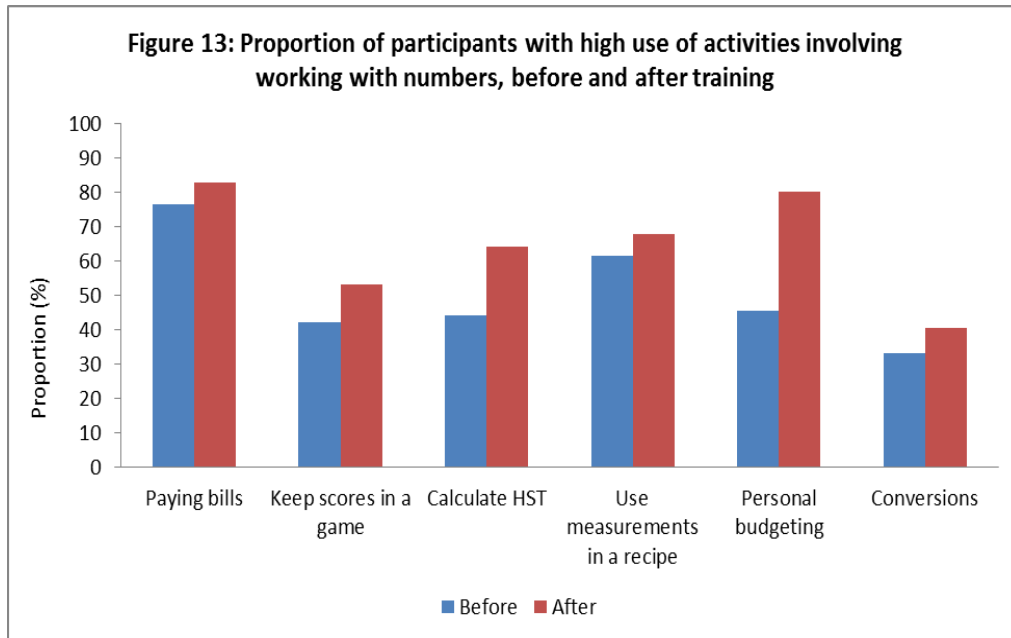
Reading activities



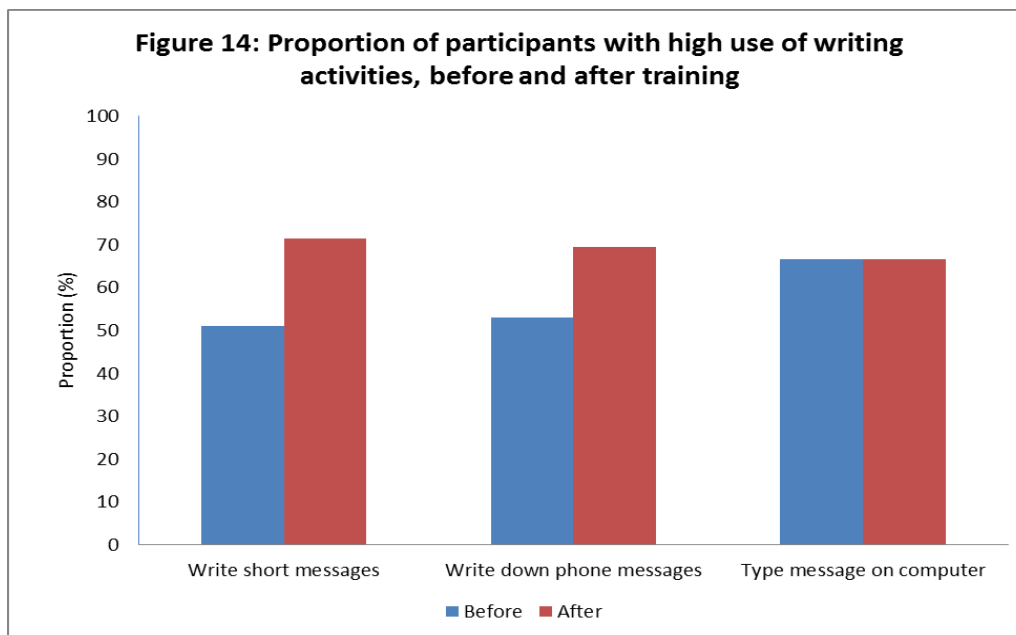
Using documents



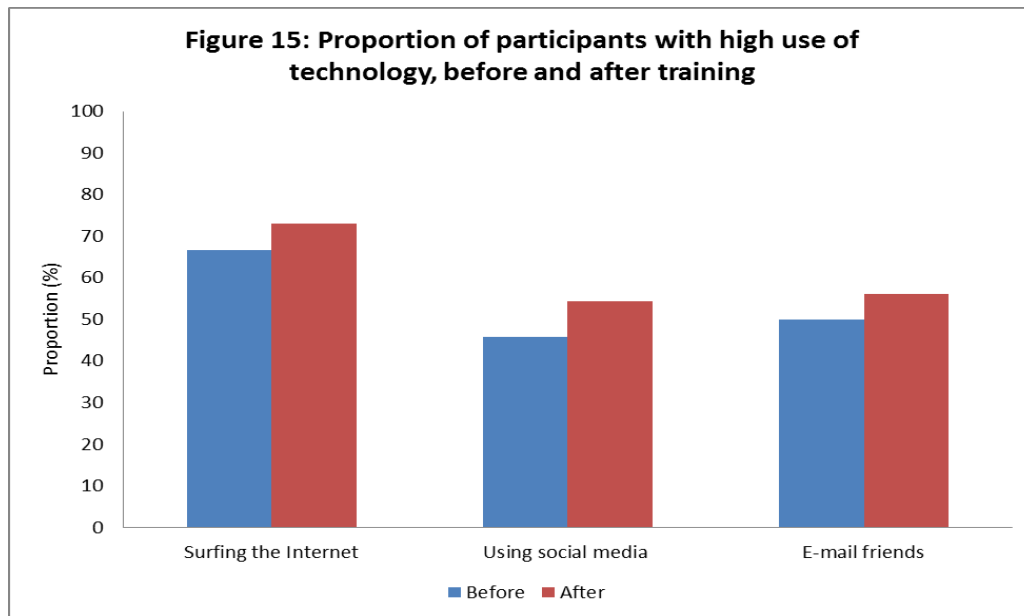
Working with numbers



Writing



Using technology



8.4 Effects of training on self-assessed skills by PDQ proficiency levels

The positive effects of training on skills may differ according to the initial level of skills in literacy. Although all participants went into training to develop and upgrade their skills, individuals with lower skills levels in literacy might benefit the most from the training in essential skills. Figures 16 and 17 present the proportion of participants with high reading skills before and after training, distinguishing between participants with low and high proficiency levels¹⁰ in prose and document literacy, respectively. Increases in the proportion of participants who reported high skills in reading were by far the largest among individuals with lower proficiencies in prose and document literacy.

¹⁰Low proficiency levels correspond to participants who scored at Level 1 or Level 2. High proficiency levels correspond to participants who scores at Level 3 or above.

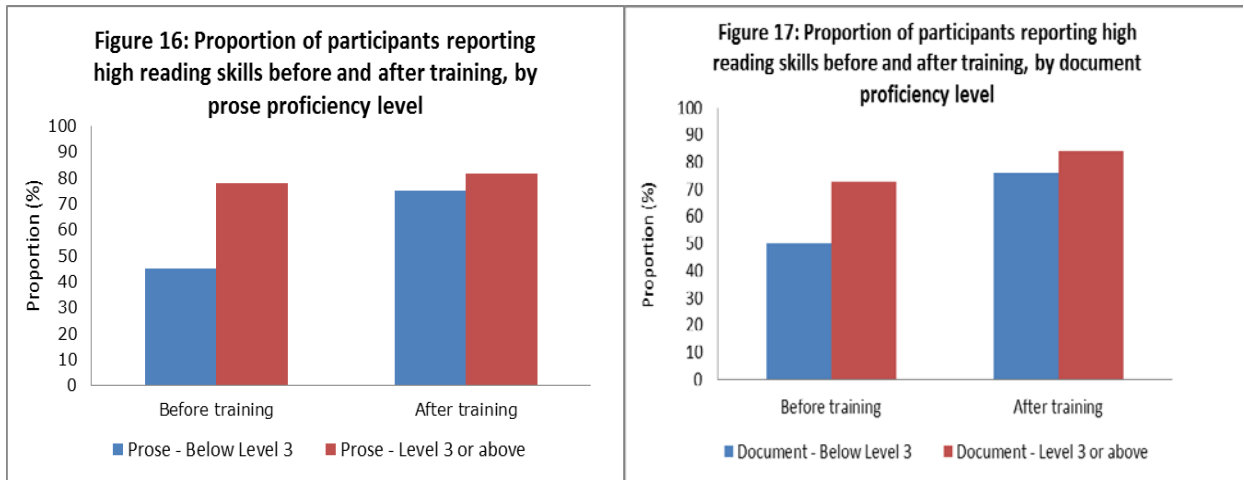
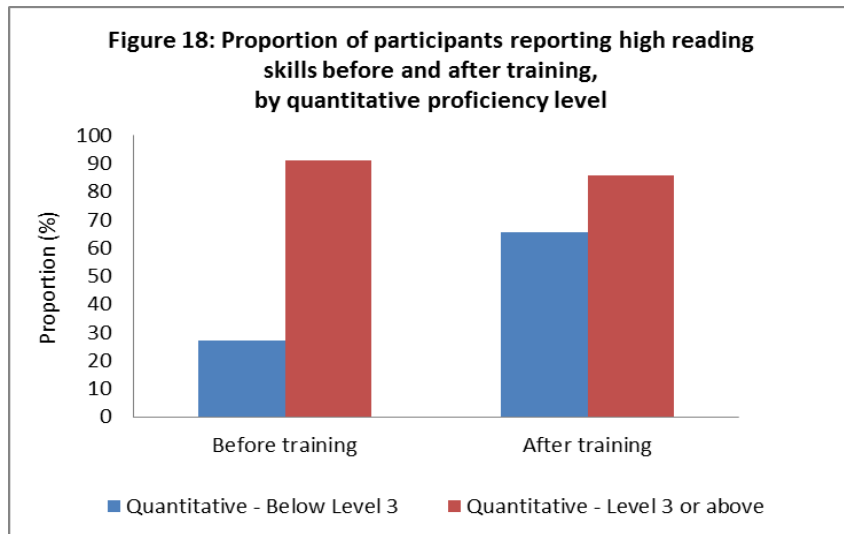
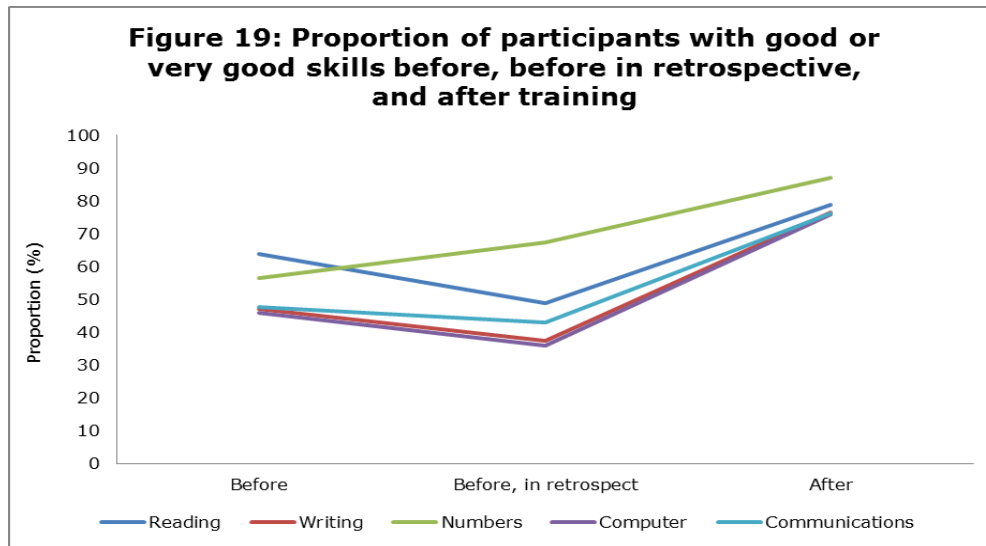


Figure 18 presents the proportion of participants with high numeracy skills before and after training, distinguishing between participants with low and high proficiency levels in quantitative literacy. Similar to results from Figures 16 and 17, the proportion of participants with lower skills in quantitative literacy who also reported high skills with numeracy saw the largest increase after training (more than doubled). In contrast, the proportion of participants with higher skills in quantitative literacy who also reported high skills with numeracy slightly decrease after the training took place.



9. Participants' retrospective assessment of their skills

As part of the WES program, participants were also provided the opportunity to rate their skills retrospectively. Thus, knowing what they know about the main topics or knowledge and skills covered in the training they took, participants rated for a second time what their skills were before training. Because the training provided participants additional information about what they did not know, it was expected that participants in retrospective would rate their skills before training at a lower level than at the initial self-assessment. Results from Figure 19 show that the proportion of participants who reported with 'good or very good' skills in retrospect is smaller for all skills than in the initial self-assessment, with the exception of numeracy. These findings are in line with what was expected. Usually, individuals are more critical of their skills after the training took place or after they upgraded their skills.



Concluding remarks

The general objective of this report was to examine the impact of training on skills of workers who participated in the WES training program. Results indicate that training had positive and significant effects on self-assessed skills. That is, the proportion of participants who reported ‘good or very good’ skills (i.e. skills in numeracy, writing, reading, use of computer and technology, and communication) was much larger, between 15 to 30 percentage points, after the training took place than what was reported before training. Effects of training were also positive on the self-reported ability to perform tasks related to essential skills and on how often they do these various tasks. Another key result is that training had a larger impact for workers with lower “assessed” prose, document and quantitative literacy skills than for workers with higher skills. Hence, the program appears to positively impact workers who need it the most.

A limitation of the analyses is the fact that the impact of training could only be examined for skills as they were assessed by a small number of workers. It was not possible to examine the impact on prose, document and quantitative literacy skills, which are objective measures of essential skills, because they were assessed once and before the training took place. Because of the subjective nature of the self-assessment, the results on the effects of training could be biased. However, a look at the association between the self-assessment of skills in numeracy with quantitative literacy, and between the self-assessment in reading with prose and document literacy, shows that the two measures are positively correlated. This finding suggests that results from subjective measures are reliable in this report.

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Table A.1: Use of various tasks, self-assessed by participants			
	Per cent		
	Never/Rarely	Little	Regular/Often
Various reading materials			
Reading			
Emails	26.6	18.8	54.7
Internet	15.4	21.5	63.1
Books	30.2	38.1	31.7
Newspapers	17.9	40.3	41.8
Workplace Documents/materials	16.7	27.3	56.1
Directions in a recipe	23.9	32.8	43.3
Using documents			
Instructions	12.1	37.9	50.0
Flyers/Ads/Signs	13.6	28.8	57.6
Schedules	16.7	28.8	54.5
Working with numbers			
Paying bills	7.5	14.9	77.6
Keep score	28.4	32.8	38.8
Use measurements	27.9	17.6	54.4
Calculate HST	30.3	25.8	43.9
Personal budgeting	22.1	29.4	48.5
Conversions	43.8	26.6	29.7
Write			
Short messages	22.1	32.4	45.6
Type a message on a computer	26.5	14.7	58.8
Use technology			
Using internet	19.4	17.9	62.7
Using social media	44.8	14.9	40.3
E-mailing friends and family	38.8	17.9	43.3

Table A.2: Proportion of participants reporting high use* of various activities			
Various activities	Participating firms (Per cent)		
	Ganong	Home Hardware	Moosehead
Reading			
Emails	40.0	40.0	20.0
Internet	26.8	43.9	29.3
Books	10.0	55.0	35.0
Newspapers	21.4	46.4	32.1
Workplace Documents	29.7	51.4	18.9
Directions in a recipe	27.6	58.6	13.8
Using documents			
Instructions	30.3	51.5	18.2
Flyers	21.1	52.6	26.3
Schedules	16.7	50.0	33.3
Activities involving numbers			
Paying bills	21.2	50	28.8
Keep score	23.1	57.7	19.2
Use measurements	21.6	64.9	13.5
Calculate HST	24.1	51.7	24.1
Personal budgeting	21.2	51.5	27.3
Conversions	31.6	57.9	10.5
Writing			
Short messages	32.3	48.4	19.4
Type a message on a computer	35.0	50.0	15.0
Using technology			
Internet	23.8	50	26.2
Social media	29.6	55.6	14.8
E-mailing friends and family	34.5	51.7	13.8

*High use is defined as participants reporting doing these various activities regularly or often.