



DOUGLAS COLLEGE

OUTCOMES REPORT FOR THE WORKPLACE TRAINING PROGRAM, BRITISH COLUMBIA



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Prepared by the Social Research and Demonstration Corporation

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EXECUTIVE SUMMARY

Executive summary

WTP program and research evaluation overview

The Workplace Training Program (WTP) is an innovative program designed to provide training opportunities to lower skilled individuals working in the retail and food & beverage sectors throughout British Columbia. The program was launched in December 2011 and will end in July 2013. The WTP tests the proposition that essential skills training, which teaches transferable skills, can break the vicious cycle of employee under-investment while addressing core business issues such as low productivity and poor operational excellence, by equipping employees to be better able to absorb technical training and to adapt to a full range of job tasks.

WTP tests a 'sectoral' integrated approach to designing essential skills training. By focusing specifically on clusters of frontline service occupations in two large sectors of province's economy, Douglas College aimed to design a set of high-quality core curricula that could be efficiently piloted across the province in partnership with other post-secondary institutions. Investing resources in designing one high-quality curriculum for each occupation cluster and then leveraging the post-secondary delivering system to deliver training to employers and employees across the province would allow the program to have a much larger impact than previous models that designed a new curriculum for every workplace that was engaged.

This evaluation study was conducted by the Social Research and Demonstration Corporation (SRDC) on behalf of Douglas College to evaluate the effectiveness and viability of the WTP model. The evaluation of the WTP utilized a longitudinal research design that captured changes in outcomes of interest before and after training. Our research focused on both immediate and intermediate outcomes. Employees were surveyed on the first day of training and the last day of training, and at a one-month follow-up. They also completed a customized version of the TOWES test prior to training and immediately following training. Employers were engaged early on in the process through a business needs assessment that helped to inform the design of the curriculum; a smaller sample participated in a follow-up interview once the training was completed to provide overall feedback on the training and its impact on their employees.

Executive summary

Key questions framing the research

The primary objective of the research is to determine whether there is a ‘business case’ for delivering sectorally-designed essential skills training to frontline employees in the retail and restaurant sectors. We designed a research framework to answer three key questions:

1. Skills gains – Does participating in the WTP improve the essential skills of employees in the service sector?
2. Job performance – Does participation lead to direct improvements in on-the-job performance?
3. Business results – Do employers perceive that essential skills training is a good investment?

Overall research findings provide a strong business case for the effectiveness of the program

Overall findings from the outcomes research indicate highly positive results on all outcomes of interest for both employees and employers and provide strong evidence for the effectiveness of the WTP model. Employees who completed the training experienced statistically significant gains on all outcomes of interest including document use and numeracy, non-cognitive skills, and on-the-job performance. The research findings, above all, indicate there is a causal link between skill gains and performance and value to employers. Gains in motivation and engagement and future orientation among employees are found to be linked with employee self-rated performance improvement and also with employer-reported performance improvement, which in turn is linked with employers’ valuation of the training. A testament to the success of the program is that a substantial proportion of employers we interviewed – when asked through a choice model question – expressed a high perceived value of the training and a willingness to have more employees trained through the program. Overall, a majority of both employees and employers who completed the research rated the program highly in terms of satisfaction and utility, and said they would strongly recommend the program to other employees.

Executive summary

Significant gains in essential skills – document use and numeracy

A key outcome of interest was to measure whether employees experienced any gains in essential skills through the WTP. We used a customized version of TOWES conducted pre- and post-training to measure changes. Overall, employees achieved significant score gains in both document use and numeracy, an average of 19 points and 17 points, respectively, immediately after training. The program was particularly effective for individuals whose pre-training essential skills levels were low, as the largest average score gains were seen among the lowest initial starting skill levels (lower/upper level 1, and lower level 2). This key finding is further supported when looking at the distribution of learners from pre-training to post-training. In document use, the proportion of learners who were at level 1 decreased by 19 percentage points, while there was a corresponding increase in the proportion of learners at level 3 or higher by 17 percentage points. A similar pattern of gains is also seen with the distribution change in the proportion of learners for numeracy (the proportion of learners at level 1 and lower level 2 decreased by 9 and 11 percentage points, respectively, while those at or above level 3 increased by 19 percentage points).

Non-cognitive skills gains – strong predictors of improved job performance

We also measured other skills that were identified by employers to be important to workplace performance such as self-efficacy, problem solving, and perseverance. These non-cognitive skills have been demonstrated in previous research to be linked to labour market success and include four types: attitudes towards learning, motivation and engagement, future orientation, and self-esteem. On average, employees significantly improved their scores immediately after training in each of these non-cognitive areas, and in almost all but one case these improvements were either maintained or even increased one month later, suggesting that non-cognitive outcomes may continue to grow as employees apply their new skills and knowledge on the job.

Our research also indicates a significant link between gains in non-cognitive skills and performance. For all four non-cognitive skills areas, post-training gains turn out to be direct predictors of improved on-the-job performance. For example, learners who realized higher gains in motivation/engagement and higher gains in future orientation after training reported significantly higher levels of improvement in job performance.

Executive summary

Learners' characteristics also play a strong role in predicting gains in outcomes

Also of note is that learners' characteristics, including non-cognitive factors such as training motivation and future orientation, play a role in generating gains in essential skills and in performance. Learners with higher *initial* levels of motivation/engagement reported significantly higher levels of training satisfaction and utility, and realized significantly higher gains in numeracy, attitudes towards continuous learning, and future orientation. Similarly, those with higher *initial* levels of future orientation realized significantly higher gains in numeracy, attitudes towards continuous learning, motivation/engagement, and self-esteem.

These non-cognitive skills are a key element in measuring outcomes, not only because they are responsive to training and can thus act as enabling factors for further skill application and performance gains but also because their pre-training presence facilitates training success. While experienced instructors may already recognize this intuitively, these findings suggest that more formally understanding learners' initial mindsets can be useful as an early indicator of the extent to which they are likely to benefit and may point to the importance of ensuring learners understand the purpose of the training and have clear personal objectives that are aligned with course objectives.

Workplace factors predict outcomes – implications for design and delivery of training

Workplace and training cohort factors also play a role in predicting outcomes. Those who trained only with other learners from the same employer (i.e., same cohort) realized higher gains in document use and numeracy as well as significantly higher levels of improvement in job performance than those who trained with learners from multiple employers. This finding has significant implications for the design and delivery of future programs. In addition, workers who had held their job for two years or less realized significantly higher gains in attitudes towards learning and self-esteem than their longer-tenure counterparts, suggesting this program is particularly effective for newer and less established employees.

Executive summary

Significant gains in all outcomes of interest among ‘at-risk’ subgroups

The research findings indicate that overall outcomes were strikingly positive even for subgroups that are often considered to be comprised of potentially vulnerable learners: those without high school, young learners under 25 years old, immigrants, Aboriginals, low incomes, and males. Overall, there were few systematic differences among subgroups across all outcomes of interest. For example, individuals without a high school diploma, a particularly vulnerable group, fared equally well as individuals with diplomas. Aboriginal learners realized smaller (but still statistically significant) gains in numeracy than other learners, but they also reported significantly higher levels of training satisfaction and utility, as well as significantly higher gains in attitudes towards continuous learning. Similarly, immigrants also experienced gains, although these gains were slightly smaller than gains experienced by non-immigrants. They were more likely than native English speakers to report performance improvements, however. These overall positive results for at-risk subgroups challenge the conventional wisdom that individuals with low skills need intensive interventions over a long period of time before they can realize significant gains. While more intensive and contextualized interventions may bring additional value, these results also challenge the notion that various subgroups require a curriculum that is highly contextualized to their nuanced learning needs.

PSE delivery model with a lead institution lends itself to greater consistency in outcomes

We also examined whether employee outcomes differed depending on the institution where they received their training. Although participating institutions may have had different levels of experience and capacity in delivering workplace essential skills training, and engaged employees with varying demographic characteristics from across the province, all institutions were successful in delivering the program. The findings show that where an employee received their training had little impact on the magnitude of gains they enjoyed. This may be a testament to the role that a carefully designed core curriculum can play in ensuring high standards across the province as well as the role that Douglas College played in providing support and coaching to other institutions throughout the program.

Executive summary

Overall reported improvement in job performance

A key finding to establish the business case for essential skills training is that the training actually changes on-the-job performance. For this outcome, we based results on employee self-reports and a small subset of employer reports on performance. Overall, a majority of employees reported that their performance improved in three or all four measured performance areas, which focused generally on attitudes, sales, and service in each of the sectors. A majority of employers whom we interviewed also said that all or most of their trainees had shown performance improvements in three or in all four areas. In the follow-up interviews, many employers said they saw the value and benefit of structured training and expressed high levels of satisfaction with their employees after the program, reporting changes in attitudes towards work, higher levels of confidence, as well as improved performance.

Employees' improved performance linked to employers' perceived value of training






As an exercise to quantitatively measure the extent to which employers valued the training, we asked them whether they would rather have training for one more employee or incremental amounts of cash to invest in their business. In general, most employers valued the training highly. Almost two-thirds expressed that they would rather have more training than receive \$200 for their business, half expressed a preference for more training over receiving \$500, and about one in five expressed a preference for more training over receiving \$1000 or more.

Most significantly, employee self-rated performance was linked with employer perceived value of the training. Employers who had employees who were more likely to report performance improvements were more likely to report a higher perceived value of the training (more than \$500). In other words, based on the results of our employer follow-up survey, to a large extent, employers recognized improvements reported by employees, and in turn, indicated a higher perceived value of the training. This result establishes a chain of evidence from skill gains (especially non-cognitive skill gains) to employee-reported gains in job performance to employer perceived training value.

1. PROJECT OVERVIEW

Project overview

The Workplace Training Program (WTP) is an innovative essential skills training program designed to provide training opportunities to lower skilled individuals working in the retail and food & beverage sectors throughout British Columbia.

	<p>As the lead institution, Douglas College designed the program in consultation with affiliated institutions, industry associations, employers, and employees. Douglas College provided leadership over the life course of the program.</p>
	<p>As industry partners, the Retail Council of Canada (formerly ShelfSpace) and BC Restaurant & Food Services Association were actively engaged in recruitment, design, and delivery.</p>
	<p>As the research partner, the Social Research and Demonstration Corporation (SRDC) is conducting a comprehensive outcomes and implementation research study.</p>
	<p>As the lead ministry, the Ministry of Jobs, Tourism and Skills Training provided overall leadership and strategic direction on behalf of the Government of British Columbia.</p>
	<p>The program was delivered by the BC Consortium for Skills Development, a partnership of 14 post-secondary institutions across British Columbia.</p>



Funding provided through the Canada-British Columbia Labour Market Agreement.



A closer look at the BC Consortium for Skills Development

The Workplace Training Program (WTP) was led by The Training Group at Douglas College and delivered by the BC Consortium for Skills Development, a partnership of 14 post-secondary institutions across British Columbia. A key goal of the Consortium is to build the capacity of its members to deliver high-quality training and to demonstrate their excellence as lifelong learning hubs. WTP is an opportunity for the Consortium to demonstrate its effectiveness in delivering an innovative workplace training program for less educated adults. More broadly, WTP is an opportunity to demonstrate the viability of the post-secondary system as a leading player in workforce development.



Lower Mainland



Vancouver Island



NORTH ISLAND
COLLEGE



BC Interior

College of
New Caledonia



Background and policy context

Long-term structural changes and increasing concern about skills gaps

Over the past decade, long-term structural trends in the Canadian economy, such as declining labour force growth, low productivity growth, and skills mismatches across some industries have heightened the importance of closing the nation's skills gap. Within this macro-economic context, policymakers have become increasingly concerned about the high proportion of individuals with lower literacy and essential skills and the challenges that small and medium size businesses face in providing training for these individuals. While there is mounting evidence that a high school diploma no longer prepares individuals for jobs that pay a decent wage, many individuals still do not possess the requisite level of skill observers believe are needed to maintain competitiveness in an increasingly global economy.

Challenges faced by small and medium size businesses in training employees with lower skills

Adding to the problem, numerous studies show Canada is under-performing in workplace learning compared to competitor nations. Most significantly, workplace training tends to be concentrated among younger workers and those with higher education and skill levels, leaving out those workers who need training most. Although small and medium size businesses consistently report that skills gaps are hurting their competitiveness, they are also often reluctant to provide training, especially to their employees with low skills and education.

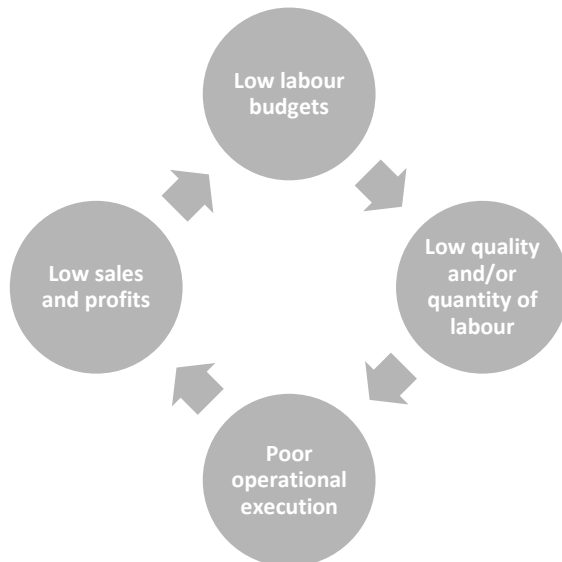
Why do employers tend to under-invest in training?

Businesses often cite the direct and indirect costs of training as a major barrier. In an increasingly competitive marketplace, businesses face intense pressure to compete on price and may under-invest in employees as part of an effort to offer lower prices. Thus, many managers believe that the only way to ensure low prices is to spend less money on employees. This belief is reinforced because the financial benefits of under-investing in employees are direct, immediate, and easy to measure. In contrast, the negative effects are indirect, longer-term, and more difficult to measure. However, a growing body of research suggests that under-investing in employees to keep costs low creates a vicious cycle whereby lower investments in workers leads to poor operational execution, higher turnover, and lost profits, which in turn leads to even less training for workers and even poorer operational execution (Ton, 2012).

A closer look at under-investment in the retail and tourism sector

In the retail and restaurant sectors, under-investment in training may be particularly common, since labour is often a manager's largest controllable expense. Not surprisingly, many frontline service managers see labour as a cost driver rather than as a sales driver. However, new research shows that this under-investment cycle can be broken if employers adopt a set of operational practices, including cross-training employees and empowering them to make small on-the-spot decisions (Ton, 2012). Employees who can perform a variety of tasks are able to shift their tasks according to customer traffic and better respond to customer needs, which leads to improved customer satisfaction and even employee satisfaction.

Vicious cycle



In the vicious cycle scenario, managers vary the number of employees to match changes in customer traffic. This often means shortening shifts and sending staff home with little or no notice when customer traffic is low, which results in low morale, and in turn can lead to poorer operational execution, greater absenteeism, and turnover.

Virtuous cycle



In the virtuous cycle scenario, managers invest in their staff by providing cross-training. Although this drives up their labour cost, it also generates a higher quality of labour which in turn leads to better operational execution which ultimately leads to higher sales and profits. **Source: Adapted from Ton, 2012.**

Program rationale and key features

Making progress on closing skills gaps

How can we break the cycle of under-investment in skills development? As the Canadian Chamber of Commerce recently concluded: *“No one owns the skills issue and likewise no one player — be it government or business or the education sector — can resolve it alone.”* The key to making further progress is to bring together business, educators, workers, and policy people, both inside and outside of government.

Could a sectoral partnership approach lead the way forward?

In an innovative effort to move forward, the British Columbia government has invested over \$4.2 million in the *Workplace Training Program* (WTP) to provide training and development opportunities to lower skilled individuals employed in the retail and tourism sectors. WTP aims to provide a high-quality, cost-effective solution to as many employers and employees as possible, by leveraging design and delivery efficiencies in five distinct ways:

1. **Industry partnerships** – WTP takes a sectoral partnership approach with deep industry engagement, involving industry associations and employers from the retail and tourism sector in all program phases.
2. **Sectoral curriculum** – Resources are invested in the design of one high-quality curriculum for each target occupation that can be rolled out to many employers. In this way, each employer does not need to re-invent the wheel. A carefully conducted industry needs analysis ensures the curriculum meets the performance needs of employers in each sector.
3. **Integrated Essential Skills** – Essential skills training is integrated seamlessly with technical content to help maximize job-relevance, and to help ensure that further technical training sticks. The training also targets non-cognitive skills to foster other skills employers value such as task perseverance and increased motivation and engagement in work.
4. **PSE delivery** – WTP uses the existing delivery infrastructure of the post-secondary system so that the curriculum can be rolled out across the entire province, including often under-served regions like the Interior. To ensure quality and consistency, Douglas College provided on-going coaching and support to other participating post-secondary institutions.
5. **Attractive incentives** – The program is offered at no direct cost to employers. A flexible delivery schedule allows employees to take training outside their regular shifts. Employees receive a stipend for completing the program.

Overview of the key features of WTP

DESIGN

- Sectoral approach with deep industry engagement in all phases
- Curriculum is aligned with business needs, specific on-the-job performance requirements, and underlying essential skills gaps
- Essential skills modules are integrated seamlessly with technical content
- Common curriculum rolled out across the province

TARGET GROUP

- Individuals with lower education and essential skills currently employed in retail and food & beverage sectors in frontline occupations such as sale associates, cashiers, servers, hosts, and bartenders

DELIVERY

- One lead institution designed the curriculum and a consortium of 14 post-secondary institutions delivered it across the province
- Training delivered on post-secondary campuses outside of regularly scheduled work hours

INCENTIVE STRUCTURE

- Flexible delivery with a modular design that allows training sessions to be broken down in a variety of ways
- No direct costs to employers
- Employees who complete the program receive a \$500 stipend

Designing a province-wide program to reach individuals working in the service industry

This program will build greater capacity for organizations and for the people of British Columbia employed in the important retail and food & beverage sectors. Through the Workplace Training Program, workers in this sector will get an opportunity to improve or gain skills, making them more employable.

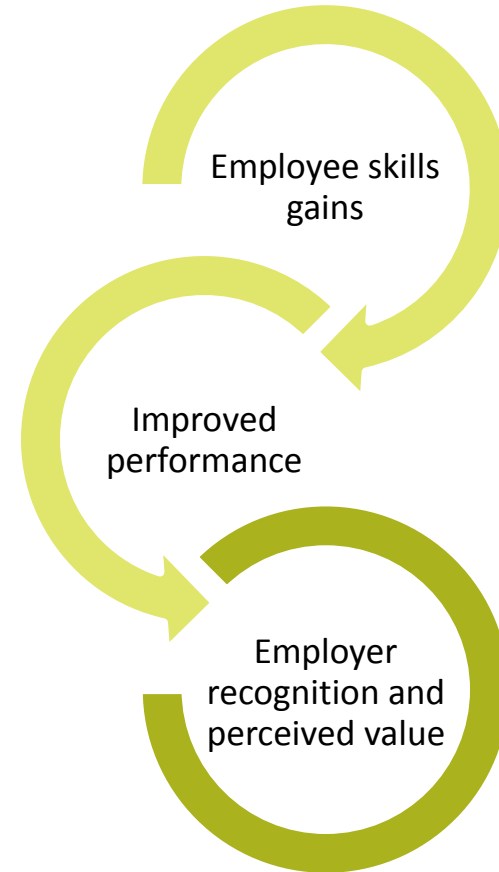
- Former Minister of Jobs, Tourism and Innovation Pat Bell

2. RESEARCH OBJECTIVES AND DESIGN

Research objectives

The primary objective of this research is to determine whether there is a 'business case' for delivering a sectorally-designed essential skills training program to frontline employees in the retail and restaurant sectors. Three broad research questions framed this study:

- 1. Skills gains** – Does participating in a well-designed sectoral essential skills training program improve the Essential Skills of employees in the service sector? In addition, does it improve other skills that are valuable in the work place such as problem solving and task perseverance?
- 2. Job performance** – Does participating in essential skills training lead to direct improvements in the on-the-job performance of employees?
- 3. Business results** – To what extent do employers perceive that essential skills training is a good investment? In other words, based on their own assessment of changes in individual employee and overall store/restaurant performance, do they now see essential skills training as a valuable part of an effective business strategy?



Relating this program back to the virtuous cycle of employee investment:

WTP tests the proposition that Essential Skills training, which teaches transferable skills, can break the vicious cycle of employee under-investment by equipping employees to be better able to absorb technical training and to adapt to a full range of job tasks, and to take more ownership for solving operational problems and providing a high level of customer service.

Measuring skills, performance, and business results

This table provides a high level overview of how we measured skills, performance, and business results. See Appendix A for more details on how we measured changes for participating employees and employers for all outcome areas.

Measuring skills gains	<p>Essential skills: Essential skills are the foundation for learning all other skills and help people evolve with their jobs and adapt to workplace change. These skills are used at work and throughout daily life in different ways and at varying levels of complexity. We measure changes in the skill levels of participating employees for two of these skills – Document Use and Numeracy using a customized version of the Test of Workplace Essential Skills (TOWES), a standardized test developed by Bow Valley College.</p> <p>Non-cognitive skills: We also measured other skills that were identified by employers to be important to workplace performance such as self-efficacy, problem solving, and perseverance. These non-cognitive skills have been demonstrated in previous research to be linked to labour market success. We measured changes on four non-cognitive skills – <i>Attitudes towards learning; motivation and engagement; future orientation; and self-esteem</i> – by asking employees using items drawn from standardized scales.</p>
Measuring job performance	<p>A key finding to establish the business case for essential skills training is that the training actually changes on-the-job performance, ideally assessed using independent observations – e.g., ‘mystery shopping.’ See Appendix B for a description of this approach. Due to logistical challenges this was only done for a very small subsample of participants. We thus relied primarily on employee self-reports with a small subset of employer reports.</p>
Measuring business results	<p>The employer is the ultimate customer and thus weight should be given to whether training meets their expectations. Employers were asked to reveal the value they attached to the training, using a ‘Revealed Preference Design.’ This approach involved asking managers to make a series of ‘real stakes’ financial decisions which involved choices between progressively larger amounts of cash to invest in their business versus an opportunity to have one more employee training at no additional cost.</p>
Satisfaction and utility	<p>In addition to skills, performance, and business results we also measured the extent to which employees and employers were satisfied with the training and felt that it is useful.</p>

3. METHODOLOGY

Measuring outcomes using a “pre-post” longitudinal research design

We used a longitudinal research design that captured changes in outcomes of interest before and after training. Employees were surveyed on the first day of training and the last day of training. Approximately one month after their training ended, employees also completed an online follow-up survey.

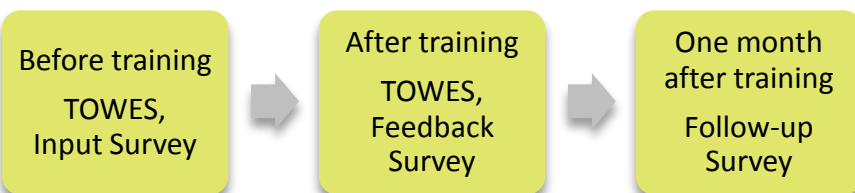
Employers completed a training needs assessment before training began. A small subset of employers completed a follow-up interview approximately one month after training ended.

Note: Given that the follow-up survey was administered within a relatively short window of time, the focus of this study is on what are often referred to as ‘intermediate’ outcomes. We are not measuring changes on longer-term outcomes such as earnings or career advancement.

Employees

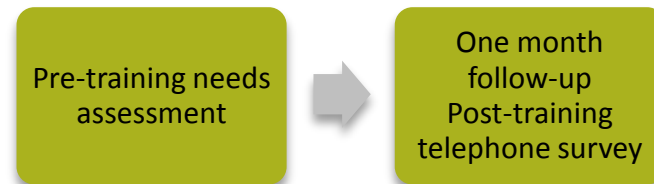
Employees were surveyed at three points in time: immediately before training, immediately after training, and then again one month later.

In addition, employees wrote the TOWES immediately before and after training.



Employers

A representative from each post-secondary institution met with each participating employer to complete a business needs assessment in-person or by phone during the engagement phase. Approximately 1-3 months after training, an SRDC researcher conducted a telephone interview with as many employers as possible.



Employee program and research participation rates

Employee program completion rate during research period

A total of 1358 employees completed an intake form from January 2012 to March 2013. An additional 173 completed by June 2013 for a total of 1531 employees completing an intake form.

Of the 1531 employees, 1356 (89%) were deemed eligible for the program.

Of these 1356 deemed eligible, a total of 1208 started the program.

A total of 1063 employees (1049 full and 14 partial) completed the program by the end of March (88% completion rate). An additional 145 employees (141 full and 4 partial) completed by June 2013, producing a total of 1208 employees who completed over the course of the program.

During the research study, the program was delivered by 14 institutions to 112 training cohorts – intake and training for the cohorts was on-going throughout the research study period. An additional 15 cohorts were launched after the research period ended for a grand total of 127 cohorts.

Research participation rate

The research study period began in January 2012 and ended in March 2013.

A total of 974 employees* were invited to participate in the research. Of these, 820 employees completed all three surveys including the pre-training, post-training, and one-month follow-up surveys, resulting in an overall response rate for all three surveys of 84%.

All of the results reported in this report are based on responses from these 820 employees. This group which completed all three surveys represents 77% of all of the 1063 employees who completed the program by the end of the research period.

**Note that of the 1208 employees who started the program, 234 employees were not invited to participate in the research for one of three reasons: 1) some institutions chose not to participate in the research during the early three month pilot phase; 2) one college (Selkirk College) chose not to participate in the research study at all; and 3) between April and June 2013, an additional 145 participated in training but were not included in the research results.*

Employer program and research participation rates

A total of 431 employers participated in the WTP. Of these 431, 188 employers completed a pre-training business needs assessment, representing 44% of employers. And of these 188 employers, 45 completed the follow-up interviews. Given this low participation rate at follow-up, results are not representative of the overall employer sample, and thus should be taken as suggestive only.* However, it is important to note, however, that these 45 employers represented a relatively large number of employees – 201 out of the 820 employees who participated in the research or 25% of the total employee sample. For more information on the profile of employers, please see page 33.

**It is important to note that we were unable to calculate a true research participation rate for employers because institutions did not consistently record which employers they invited to participate in the research and which employers they did not invite. Institutions reported significant challenges in enrolling employers in the research study. These challenges are likely related to the employee eligibility criteria which resulted in institutions needing to approach a much larger number of employers than originally anticipated to reach their employee participation targets. All participating institutions reported that recruitment took considerably more resources than expected which left less time to spend with each individual employer and less time to engage them in the research study.*

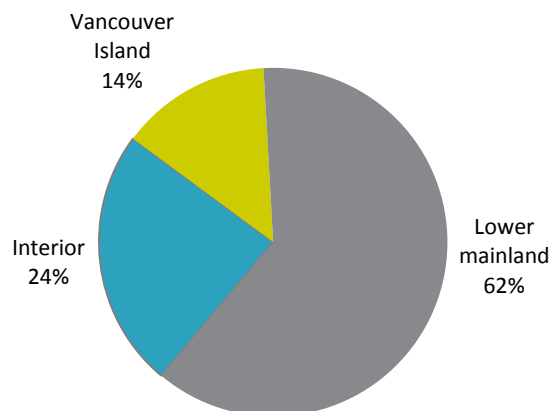
4. PROFILE OF PARTICIPANTS

A. Profile of employees

B. Profile of employers

College/regional profile of participating employees

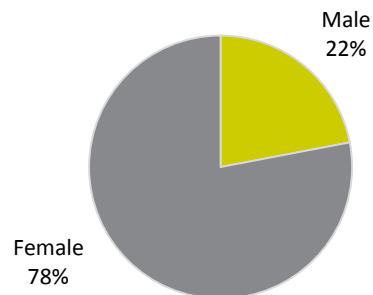
Employees by region of college, n=820



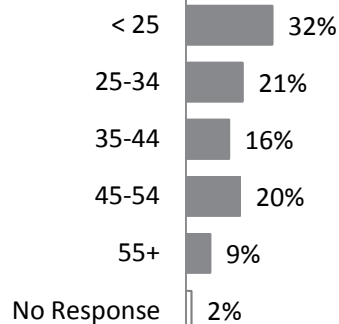
	Total number of employees	Total percentage of employees
	n=820	100%
Douglas College	272	33%
Vancouver Community College	109	13%
College of the Rockies	96	12%
University of the Fraser Valley	72	9%
Vancouver Island University	52	6%
Capilano University	44	5%
North Island College	41	5%
Okanagan College	38	5%
Northwest Community College	29	4%
College of New Caledonia	22	3%
Camosun College	19	2%
Northern Lights College	15	2%
Langara College	11	1%

Demographic profile of participating employees

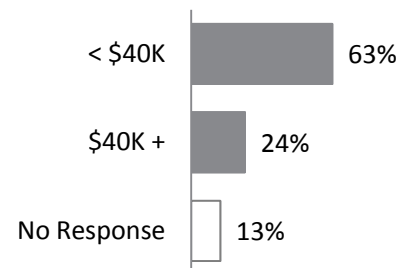
Gender



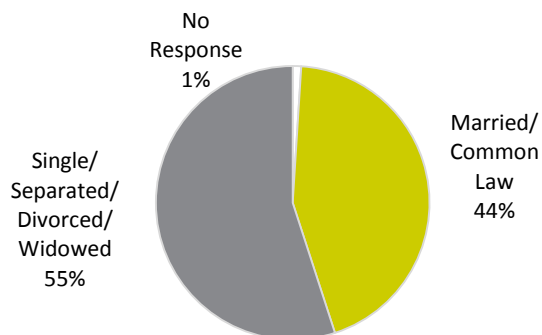
Age



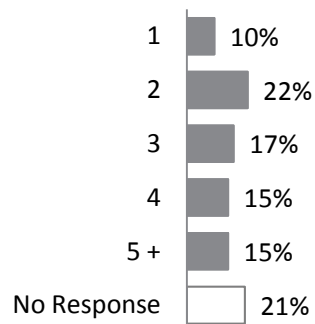
Household Income



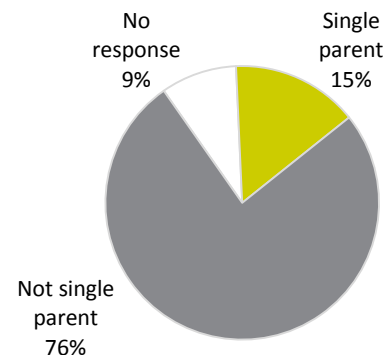
Marital Status



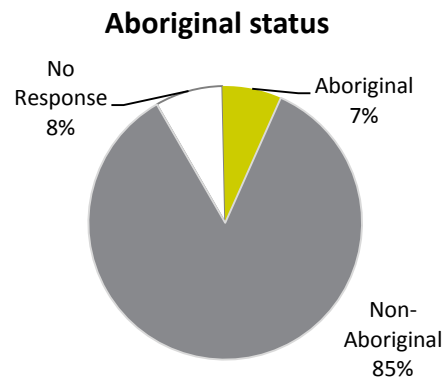
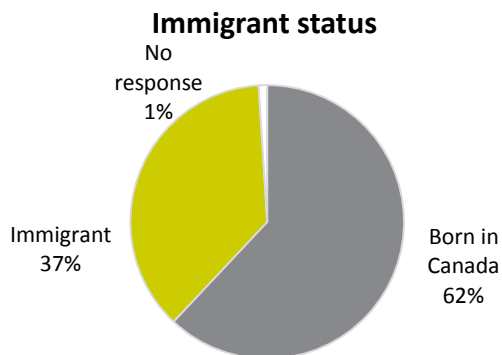
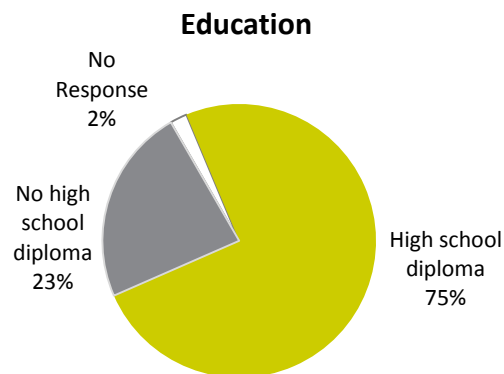
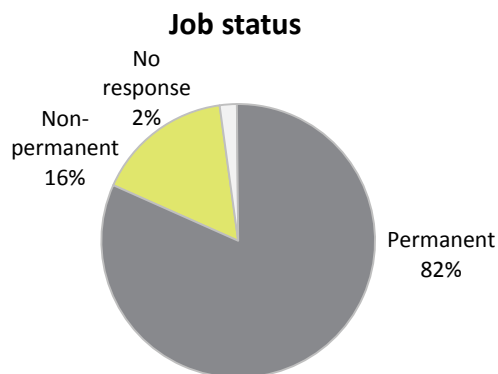
Number of people in household



Parental status



Demographic profile of participating employees (continued)



Language most commonly spoken at home

English 69%

Other
(note that many employees mentioned speaking more than one language spoken at home)

31%
Chinese (Cantonese, Mandarin, other Chinese) – 10%
Tagalog – 7%
South Asian (Urdu, Punjabi, etc.) – 3%
Other mentions – 10%

Key subgroups by demographics

	All employees	Male	Without HS	Under 25	Low household income <\$40k	English as other language (EOL)	Aboriginal
	N=820	N=178	N=191	N=265	N=515	N=250	N=59
Gender							
Male	22%	100%	14%	26%	22%	22%	12%
Female	78%	-	85%	74%	78%	78%	88%
Age							
<25 yrs old	32%	38%	26%	100%	28%	9%	36%
25-34	21%	26%	20%	-	24%	27%	27%
35 plus	45%	34%	50%	-	45%	61%	34%
Single parent status							
Single parent	15%	11%	16%	20%	16%	10%	20%
Not single parent	76%	80%	72%	67%	73%	79%	69%
Income level							
<40K	63%	64%	71%	55%	100%	74%	59%
40K plus	24%	24%	16%	22%	-	18%	20%
Job status							
Temp	16%	19%	14%	23%	17%	24%	20%
Perm	81%	80%	82%	75%	82%	75%	73%
Education							
HS	74%	83%	-	80%	72%	77%	61%
No HS	23%	15%	100%	18%	26%	21%	39%
Location of college							
Lower mainland	62%	64%	54%	60%	61%	94%	54%
Vancouver Island	14%	13%	16%	13%	15%	0.4%	15%
Interior	24%	23%	30%	28%	24%	6%	31%

Green circles indicate that the proportion of individuals with a particular demographic characteristic was higher for the particular subgroup than it was for the total sample of employees. For example, the proportion of females without a high school diploma was higher than the proportion of females in the total sample.

How motivated were employees and why did they decide to take the training?

Learners were highly motivated and ready to learn

Before training, most employees were highly motivated and ready to learn:

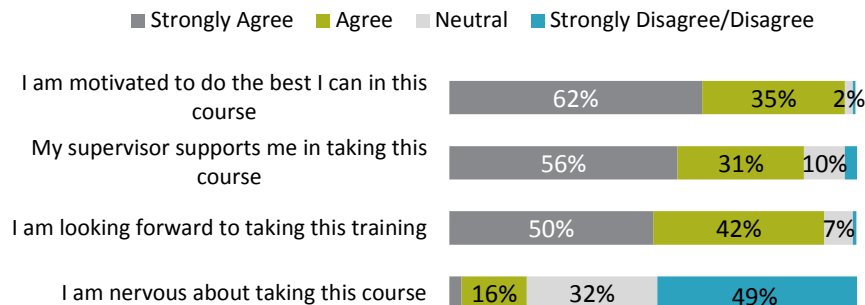
- 97% said they were motivated to do the best they could in the course
- 92% reported looking forward to taking the training
- 87% said they had their supervisor's support

The most common reasons reported by employees for taking the training were to:

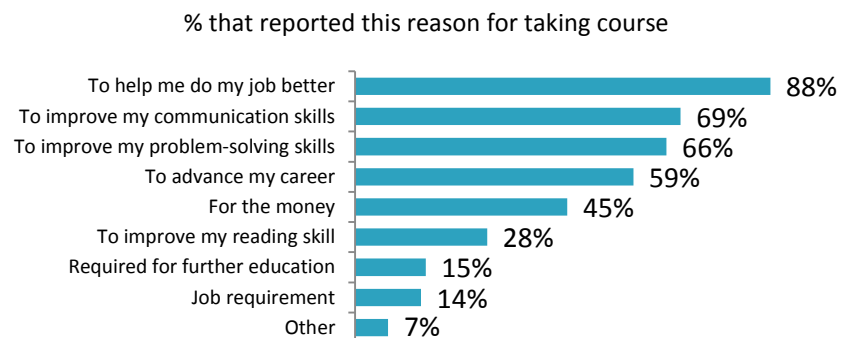
- help them do their job better (88%)
- improve communication skills (69%)
- improve problem solving skills (66%)
- advance in their career (59%)

Most employees reported multiple reasons for taking the training. Although almost half of employees (45%) indicated that the stipend (money) was one of the reasons for participating in the training, most of these employees also indicated that other factors were important as well. And 35% of learners reported 3 or more reasons for taking the training that didn't include money.

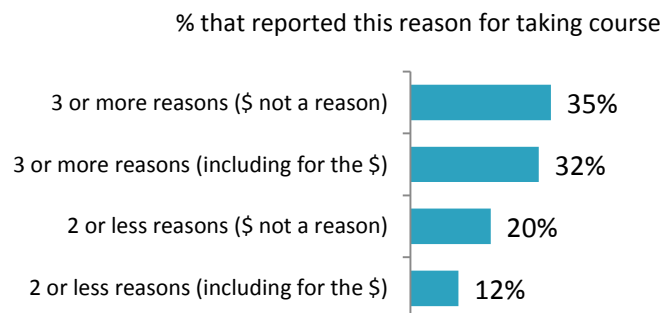
Motivation to take training



Reason for taking training

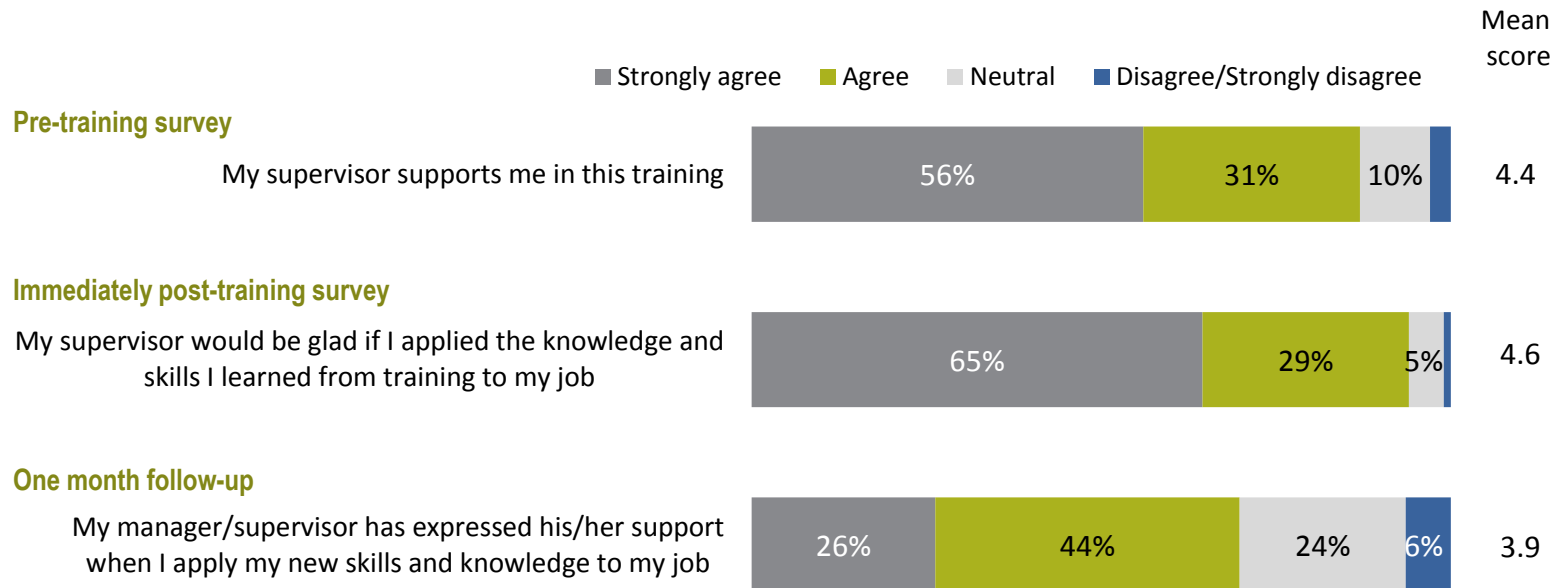


Number of reasons for taking the course



To what extent did employees believe they had their supervisor's support?

The extent to which employees believed they had the support of their supervisor was measured before, immediately after, and one month after training. Most learners reported having supervisor support before training (87%) and immediately after training (94%). One month later, the proportion of learners who reported receiving support from their supervisor when applying new skills and knowledge on the job declined considerably (70%).



Interestingly, as we discuss in the findings section, decline in perceived supervisor support had no impact on employee's gains in non-cognitive skills or perceived performance improvement during this period. Indeed, employee scores on non-cognitive items actually increased in the one month follow-up period. (See page 74).

4. PROFILE OF RESEARCH PARTICIPANTS

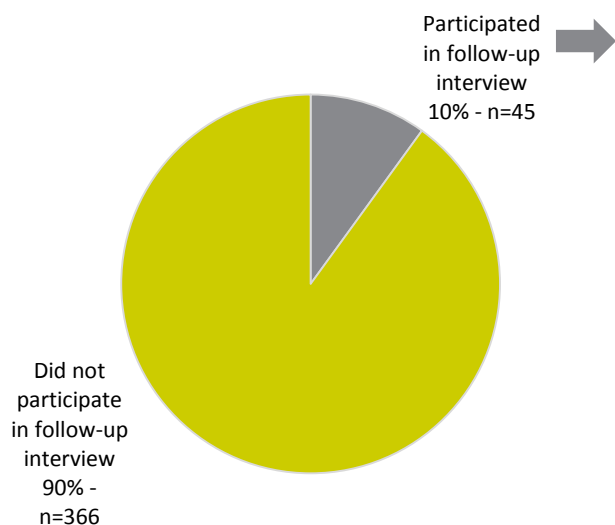
A. Profile of employees

B. Profile of employers

Profile of employers who participated in program and interviews

A total of 431 employers participated in the Workplace Training Program; 188 completed a business needs assessment prior to training and 45 completed the follow-up interview (a sample of 10% of total employers). While $n=45$ is a small sample, the number of employees who belonged to this small group of employers represents a sizable proportion of employees – 25% of the total employee sample. While the relatively large number of employees covered is a positive, there is some evidence to suggest that the training experience for employees whose employers participated in the follow-up interview was slightly different than the experience of those employees whose employers did not participate. One key difference between the two groups was that the employees whose employers participated in the follow-up interview were more likely to belong to a single employer cohort (53%) than employees whose employers did not participate (23%). And because participating in a single cohort was associated with higher document use gains, employees whose employers participated in the follow-up interview also tended to have higher document use gains. There were no other notable differences between the two groups.

All employers who participated in study ($n=431$)



Total employers who participated in the program ($n=431$)		
	$n=45$ employers who participated in the follow-up interview	$n=366$ employers who participated in the program but did not participate in the follow-up interview
<i>Employees belong to...</i>	201 employees belong to this sub-sample of $n=45$ employers	619 employees belong to the group of employers who did not participate in follow-up interviews
Single employer cohort	53%	23%
Cohort that included 2 to 4 employers	14%	24%
Cohort that included 5 or more employers	33%	53%

*Note that the research data set does not contain information for employees attached to 20 employers that participated in the program. This is because the data set only includes information for employees that completed all three surveys.

Profile of employers who participated in interviews

It is also important to note that the profile of employers who completed the follow-up interviews differs from the original sample of 188 employers who completed the business assessment (skewing slightly more food and beverage as well as medium/large size).

Size of business		
	N=45 employers who participated in the follow-up interview	Employers who completed business needs assessment N=188
Micro	7%	9%
Small	33%	45%
Medium	18%	13%
Large	9%	4%

Business sector			
	N=45 employers who participated in the follow-up interview	Employers who completed business needs assessment N=188	All employers attached to employees in the dataset N=366
Retail	56%	65%	62%
Food and Beverage	40%	33%	36%
Grocery	5%	2%	2%

5. SUMMARY OF KEY FINDINGS

Summary of key findings

This slide summarizes the key findings of the research study. Each finding is discussed in detail in the remaining sections of the report.

1. **Positive outcomes for employees** – A large majority of employees reported high satisfaction with the training. On average, employees had statistically significant gains on *all* outcomes of interest, including document use and numeracy, all non-cognitive skills, and all on-the-job performance areas. Learners with lower initial document use gained the most.
2. **Positive outcomes for all employee subgroups** – All subgroups of interest (men, those without a high school diploma, those with low income, younger learners, immigrants, and Aboriginals) gain in most, if not all, outcomes of interest.
3. **Individual characteristics played an important role in influencing outcomes** – Several individual characteristics such as number of training goals and pre-training level of non-cognitive skills played a role in explaining the outcomes results. Having the opportunity to apply new skills mattered as well. Those who reported being better able to apply what they learned had significantly higher gains in several non-cognitive outcomes as well as higher levels of improvement in job performance. There is also a link between gains in non-cognitive skills and performance. Learners who realized higher gains in motivation and engagement and future orientation reported higher levels of improvement in job performance.
4. **All institutions successfully delivered the program** – Institutional differences were much less important. While the profile of learners at some institutions varied, and a few struggled to meet their recruitment targets, all institutions were successful in delivering the program. Where an employee received their training had little impact on the magnitude of gains they enjoyed.
5. **Positive outcomes for employers** – The majority of employers who were interviewed one month after the training were satisfied and indicated that the training met or exceeded expectations. Sixty-four per cent of employers surveyed reported a perceived value of at least \$200. About three-quarters of these expressed a perceived value of more than \$500.

Overall summary of results – EMPLOYEES

Outcomes		Data source	Results
Satisfaction and utility		Employee responses to survey questions: <ul style="list-style-type: none"> • I would recommend training • I am strongly motivated to apply new skills • Believe training will /has enhanced my job performance • Overall quality of training 	<ul style="list-style-type: none"> • Over 90% agreed or strongly agreed with all of the first three statements • 87% rated training quality as excellent or very good
Essential skills	Document use	TOWES scores related to document use	<ul style="list-style-type: none"> • Average gain of 19 points
	Numeracy	TOWES scores related to numeracy	<ul style="list-style-type: none"> • Average gain of 17 points
Non-cognitive skills	Attitudes towards learning	<ul style="list-style-type: none"> • Learner responses to 3 items drawn from a standardized scale 	<ul style="list-style-type: none"> • Statistically significant gains on 2 of the 3 items
	Future orientation	<ul style="list-style-type: none"> • Responses to 5 items drawn from a standardized scale 	<ul style="list-style-type: none"> • Statistically significant gains on all items
	Motivation and engagement	<ul style="list-style-type: none"> • Responses to 10 items drawn from a standardized scale 	<ul style="list-style-type: none"> • Statistically significant gains on all items
	Self-esteem	<ul style="list-style-type: none"> • Responses to 1 item drawn from a standardized scale 	<ul style="list-style-type: none"> • Statistically significant gains on the 1 item
Performance		Learner self reports on surveys in 4 key areas: <ul style="list-style-type: none"> • Customer engagement/basic service (F&B) • Actively listening/exceeding expectations (F&B) • Sales strategies • Attitudes of excellence 	<ul style="list-style-type: none"> • 68% of employees reported improvements in all 4 areas

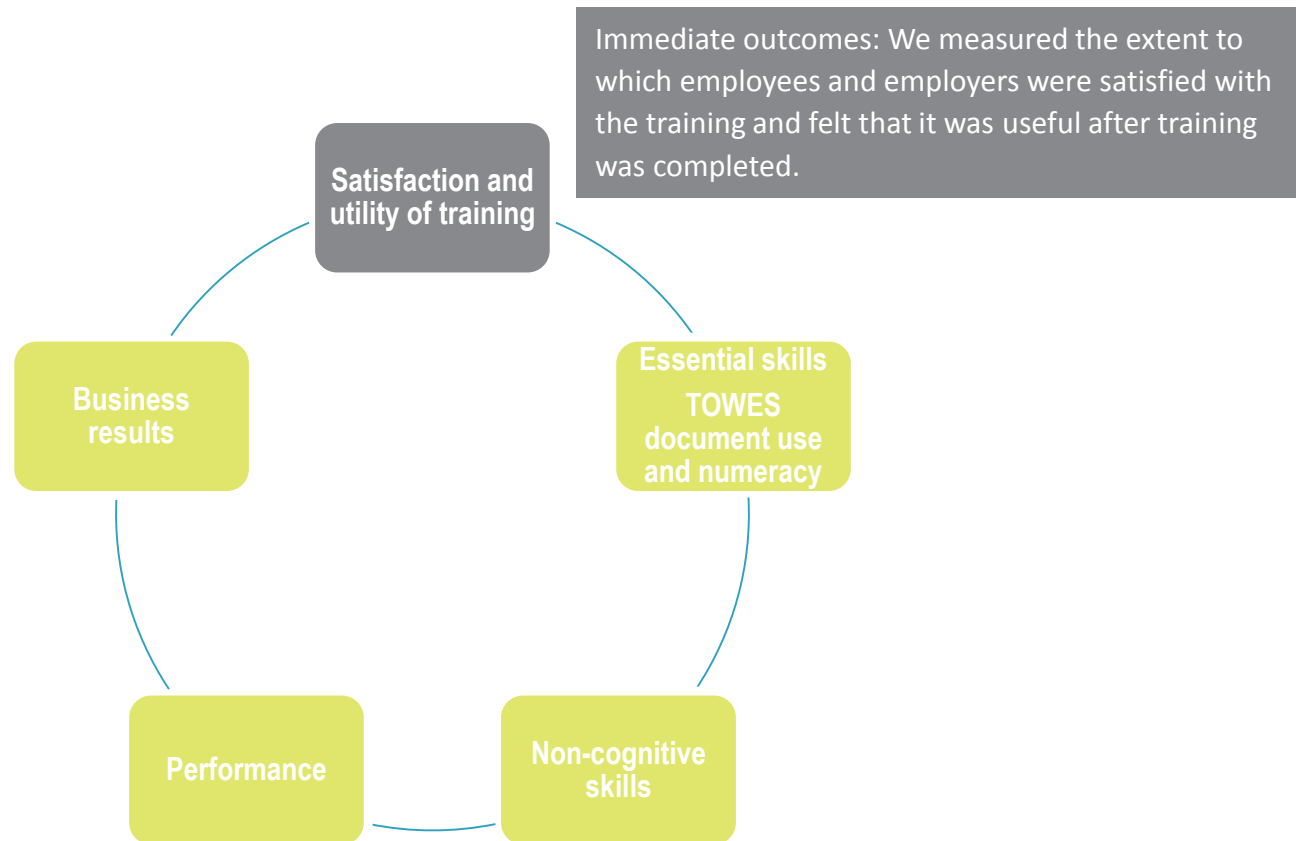
Overall summary of results – EMPLOYERS

Outcomes	Data source	Results
Satisfaction and utility	As part of the interview, employers were: i) asked whether they would recommend the training to new hires; ii) Asked whether training enhanced employee performance; iii) asked to rate the overall quality of the training; and iv) reminded of the expectations they had reported in the Training Action Plan before training began, and asked to rate the extent to which they felt the training met those expectations.	<ul style="list-style-type: none"> 88% of employers (40% strongly/49% agreed) said that they would recommend the training to all new hires. 89% (17% strongly/71% agreed) said that training enhanced employee performance. 77% of employers rated the overall quality of the training as excellent or very good. 69% said that the training had completely or almost completely met their expectations.
Performance ratings	Employers were also asked the extent to which they felt their trainees had improved in each of four key performance areas: i) basic service/customer engagement ii) exceeding expectations/active listening iii) sales strategies, and iv) attitude of professionalism.	<ul style="list-style-type: none"> 64% of interviewed employers said that all or most of their trainees had improved in all four performance areas. This result matched up well with employee self-reported performance – in 70% of the interviewed businesses, more than half of employees reported improvement in all four performance areas.
Business results	Employer perceived value (revealed preference)	<ul style="list-style-type: none"> 64% of employers chose training over \$200 for their business; about three-quarters of these chose training over \$500 or more for their business. See more details about this exercise on page 67.

6. OUTCOMES RESULTS

- A. Satisfaction and utility of training
- B. Essential skills outcomes
- C. Non-cognitive skills outcomes
- D. Performance outcomes
- E. Business results

Outcomes of interest



High levels of satisfaction and utility with training among employees

Overall, learners were highly satisfied with the training. Almost all learners rated the overall quality of the training as high (87% rated excellent/very good), and said they would recommend the training to their peers (93% agreed). Almost all learners also reported that they were strongly motivated to apply their new skills, and that what they learned in the training would enhance their job performance. While there was a slight decrease in learners' perceptions one month after completing the program (we compare the mean score for each measure immediately post-training and at the one month follow-up), overall scores still remained high. Particularly noteworthy is that one month after training, a large proportion of learners reported that what they learned in training did indeed enhance their job performance. The mean score on this measure is 4.3.

Rating of WTP post-training on 5-point scales. Employees n=820

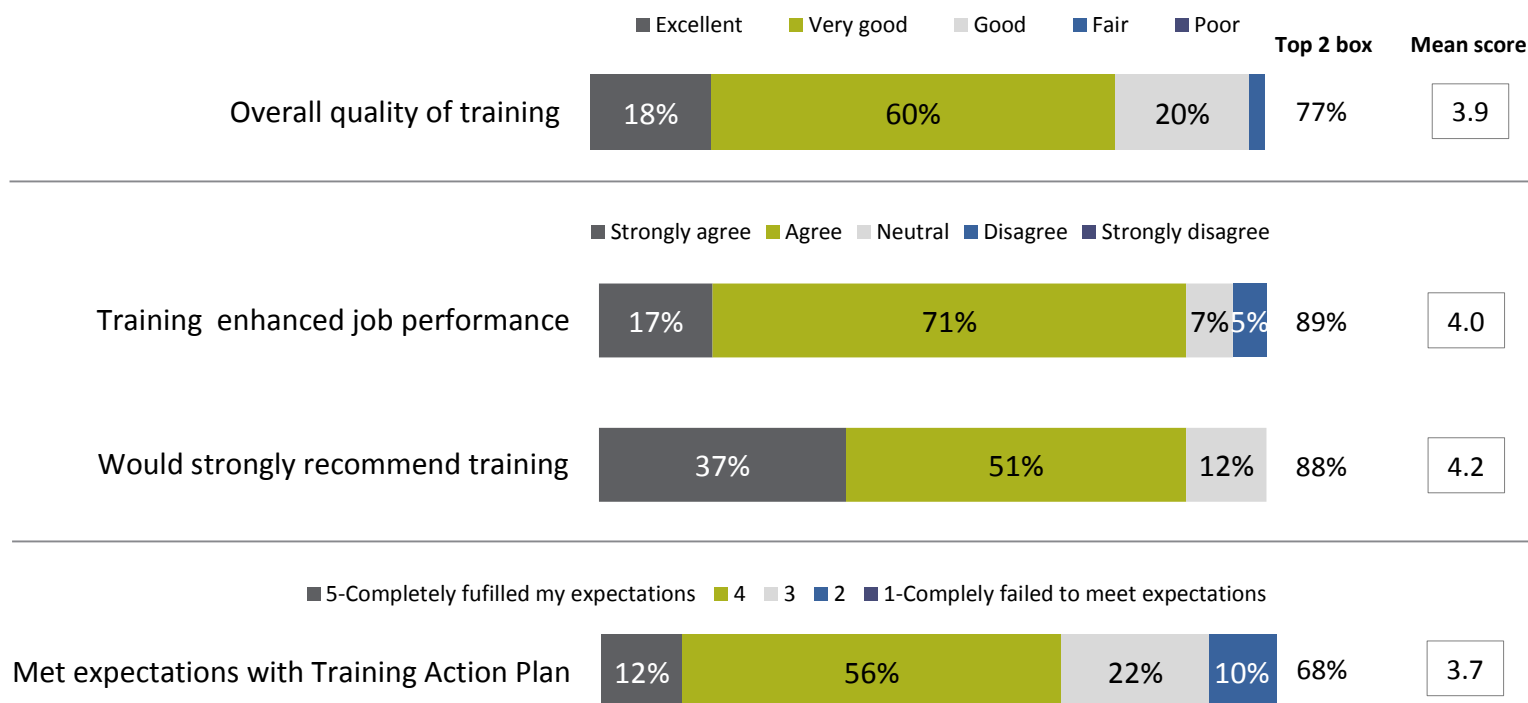


All red boxes indicate statistically significant change, $p \leq .10$.

Employers also very satisfied with training

A small sample of employers (n=45) participated in a follow-up interview that took place at least one month after their employees had completed training. As part of the interview, employers were asked to rate the training on the same dimensions as their employees. Overall, 77% of employers rated the overall quality of the training as excellent or very good. Almost all also agreed that the training enhanced employee job performance (89%), and said they would strongly recommend the training to all their new hires (88%). And lastly, 68% said that the training had completely or almost completely met their expectations.

Rating of WTP post-training on 5-point scales. Employers n=45 (note small base size)



What employers said...

A large number of employers provided glowing reviews of the training program, noting positive changes in the attitudes, skills, and performance of their staff, specifically increased levels of confidence and engagement.

The feedback I got from the staff who took the training said it was excellent. I think the training fulfilled my expectations completely. The employees gained a wide range of retail knowledge and skill...

Gained confidence in approaching the customers and closing sales.

The training has met my expectations because I noticed my employee who took the training has improved the way of selling. The number of sales on the day she works has proven this training was very successful.

My staff came back enthused, informed, engaged, and ready to be challenged and perform.

The training was great in the fact that it solidified the idea that retail is a possible career choice and shouldn't be looked at as simply a stepping stone or "in between" job.

I think that the program gave our staff the skills to practice better customer service skills and work better as a team.

I found that the server's attitude improved and confidence increased after taking this course.

I think the training program is excellent for our business. I think it's something we have to continue. I would like our company to commit to a training program like this. I see definite benefit to it. With this type of training, not just product knowledge. It's very hard to teach the correct way to go through a sale on the floor ... They got this in training. I think it would be hugely beneficial and more bang for the buck with new employees, instead of the watch and learn like we do now.

What employers said...

While some employers recognized that the curriculum was standardized to reach employees across an industry, several noted there were limitations due in part to the length and depth of the training. Many suggested improvements could be focused on providing more in-depth discussions and/or follow-up training that included more case studies and real life situations.

In addition, a few employers commented on how the training had different impacts on different employees. Specifically, they mentioned that more tenured employees were less engaged than employees who were newer in the industry and thus benefited less.

The training met my expectations in regards to customer service and how we can go above and beyond to help our customers. I would recommend a follow-up class maybe six weeks after the finish of the course to keep the staff motivated.

Very good progress with one employee... The training seemed to have different impacts on different employees. I only had two. One has been here for 5+ years and one has been here for 2 years – I think the one that had been here for 2 years was more impressionable. We got good progress out of that one, not so much the other one.

I was told by the trainer that any level of employee would find the training useful. In actuality, after speaking with the staff that went through the course I came to realize that this course is best suited for younger hires with little previous job experience.

The training met my expectations in regards to customer service and how we can go above and beyond to help our customers. I would recommend a follow-up class maybe six weeks after the finish of the course to keep the staff motivated.

The training is limited in that it is a small window for training to be able to 100% fulfill my high expectation. Some sort of follow-up training would have facilitated that.

We feel that the training program adequately met our expectations for success. We feel that there is an improvement in the quality of customer service provided by our staff who have completed the training program. Possible improvements to the program may include greater emphasis on specific job tasks but with the variance in staff who participated in this program, we understand the difficulty with this.

What employers said...

It is important to note that some employers expressed frustration at the strict eligibility requirements of the program. While some employers understood how the program targeted the most vulnerable groups, they also stated that a broader cross-section of employees could have benefited from such a training program, in particular those who had had minimal post-secondary education but were particularly motivated.

All employees were not able to participate due to being overqualified due to prior training or education. However, that prior training or education really has nothing to do with customer service, so they would have benefited greatly but could not participate. There were lots of projects for communicating while in the training that were helpful and would like to see done in our own environment. Would be nice to be able to bring in someone to train our staff all as a group, in the customer service areas.

The stringent eligibility rules limited the number of participants. We could have had over 60 participants but I believe only had around 20. Many excited employees were deemed not eligible due to possibly taking one or two course in university.

We would have had a lot more people that would have taken the course, but the eligibility issues were so stifling that it really limited who could take the course. We had some people with one university course who couldn't take the training. It's a bit of a catch 22 – we understand that the goal of this is to provide training to people who haven't had anything before, but on the other side to increase the effectiveness and efficiency in the workplace, people who should take the training can't because they've taken the odd course, and they're the ones who really want to move up the ladder and they couldn't take the course. And I'm talking people at all levels so that's part of the problem. To put it in perspective we could have had about 60 or 70 people who could have attended this course, and it would have been really beneficial to all of them at all different levels.

6. OUTCOMES RESULTS

- A. Satisfaction and utility of training
- B. Essential skills outcomes
- C. Non-cognitive skills outcomes
- D. Performance outcomes
- E. Business results

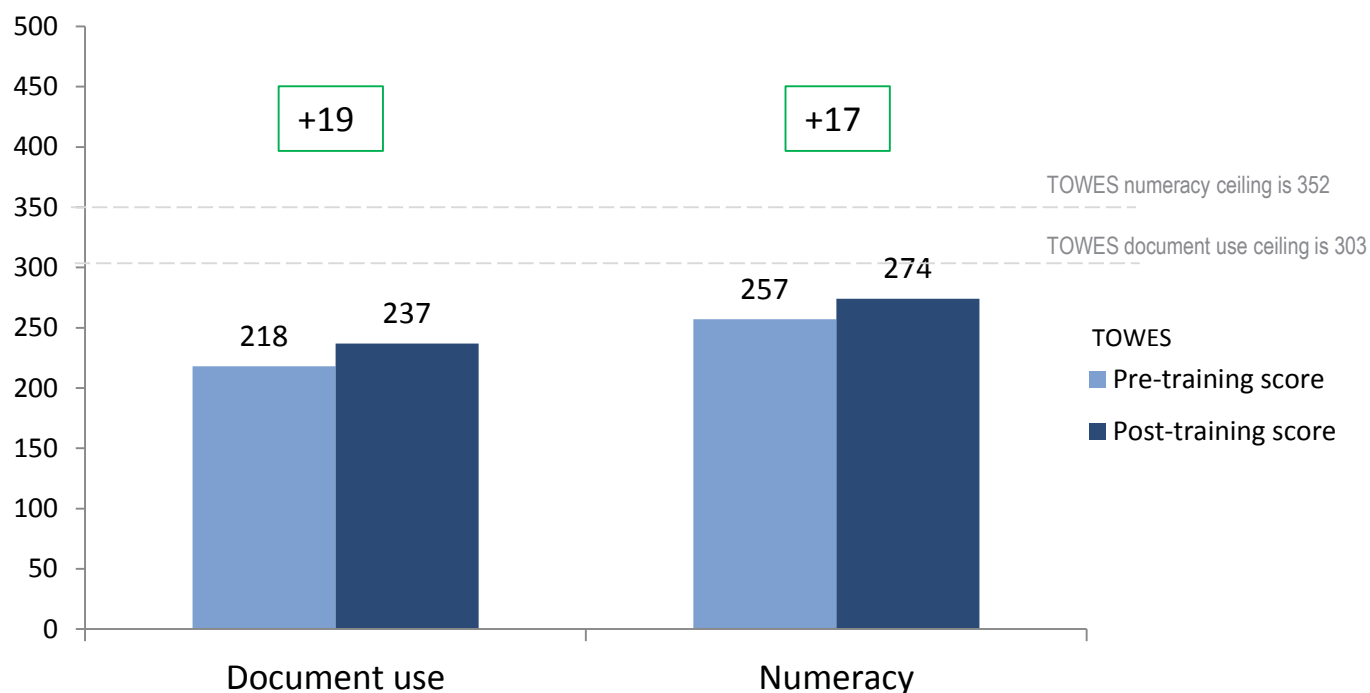
Outcomes of interest



Intermediate outcomes: We measured changes in the skill levels of participating employees for document use and numeracy using a customized version of the Test of Workplace Essential Skills (TOWES), a standardized test developed by Bow Valley College.

TOWES – overall gains in document use and numeracy scores

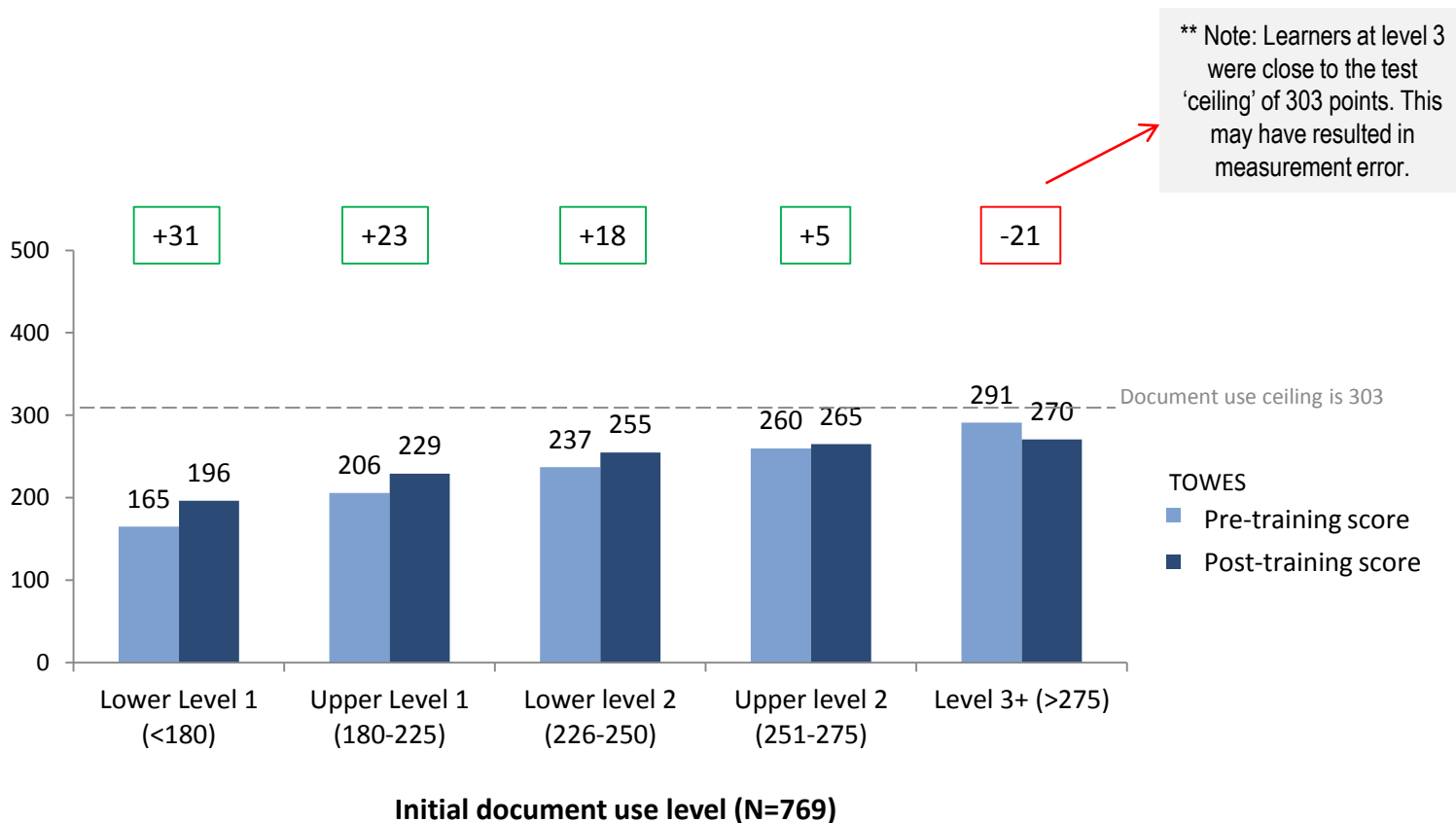
Employees achieved significant score gains in both document use and numeracy, an average of 19 points and 17 points, respectively, immediately after the training was completed.



Can these gains be attributed to the training? To determine whether these gains can be fully attributed to WTP, we would need to be able to compare how TOWES scores might have changed for employees even in the absence of training (e.g., as a result of familiarity with the test or self-study). Evidence from another SRDC study (UPSKILL), can provide some information. This study included a 'control' group that did not participate in training. TOWES scores for this group showed test-retest movement in the range of +/- 5 points. Extrapolating these findings to the current study, a conservative estimate of true gains due to WTP impact would likely be 14 to 24 points on document use and 12 to 22 points on numeracy. Thus, we can say with a high degree of confidence that employees who participated in WTP have on average statistically significant gains in Essential Skills and that these gains are unlikely to be attributable to other factors than the program.

Changes in average TOWES document use scores, by initial document use skill level

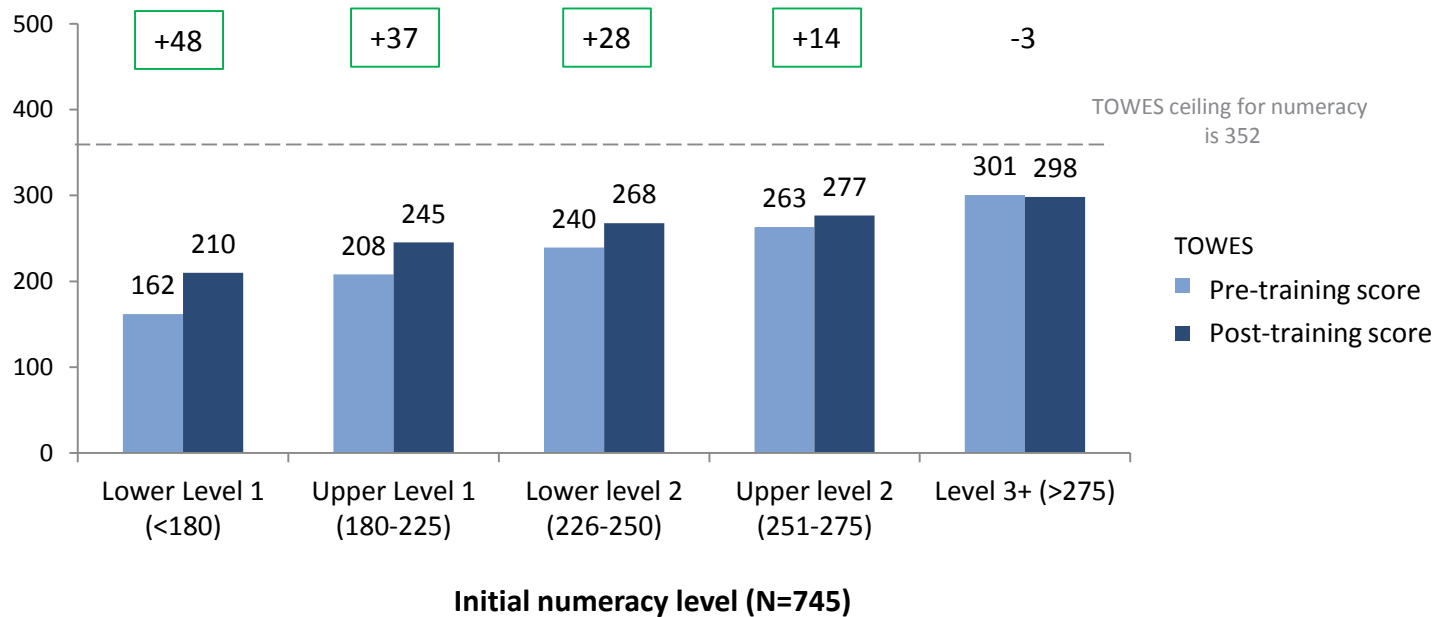
Average document use score gains varied considerably depending on learners' initial pre-training skill levels in document use. The largest gains were seen at the lowest initial skill levels; learners who started the training at Lower Level 1 in document use gained 31 points, Upper Level 1 earners gained 23 points, while learners at Lower Level 2 gained 18 points on average. We also observed a decrease in average scores among Level 3 learners but this is almost certainly due to measurement error, as individuals who were already at Level 3 before training were close to the test ceiling of 303 points in document use. It is possible that with a full version of the TOWES test, which removes the ceiling, we would see gains among learners who started at higher document use levels.



All boxes indicate statistically significant change, $p < .10$.

Changes in average TOWES numeracy scores, by initial numeracy skill level

Similarly, learners who started the training at lower levels in numeracy gained: Lower Level 1 gained by 48 points and at Upper Level 1 gained 37 points, while learners at Lower Level 2 gained 28 points on average. Learners already at Level 3 did not show any gains.



All boxes indicate statistically significant change, $p \leq .10$.

Notes about measurement error

In analyzing the results of the TOWES scores, it is important to note that there may be a number of factors that influence test scores and contribute to measurement error.

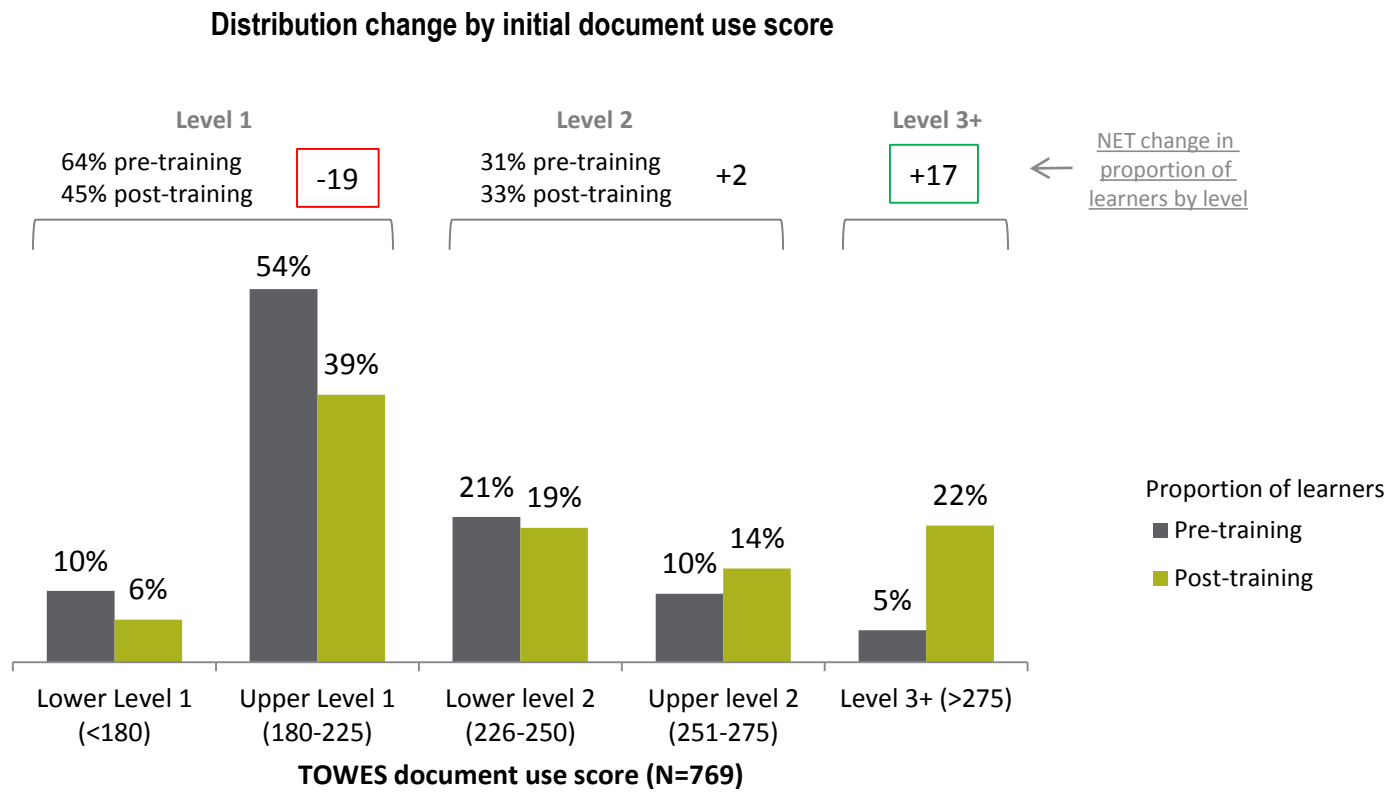
1. **Normal measurement error** – Even the best-designed test will have at least some measurement error. No instrument, however well-designed, can capture an individual’s ability with 100% accuracy.
2. **Test environment** – There is considerable evidence to suggest that the test taking environment will influence results. Although all TOWES administrators were trained and certified, slight variations in how the test was administered may have had an impact on test results.
3. **Perceived relevance** – Although TOWES administrators were trained to explain the purpose of the test, our implementation research suggests that employees did not always understand why they were writing the TOWES. As one employer commented: *“Many of the employees found the TOWES testing not valuable. Pretty much they didn’t think it was relevant.”*
4. **Limitations specific to the customized TOWES** – The version of the TOWES used in this study had the strong advantage of being considerably shorter than the full TOWES. However, a significant disadvantage of the customized TOWES is that, compared to the full TOWES, it is less sensitive to change at the very lowest and highest ends of the scale. As discussed on the previous page, because the version of TOWES used in the current study had a ceiling of 303 in document use and 352 in numeracy, those who were already close to the ceiling at before training began, were constrained in the magnitude of post-training gains they could show. In contrast, the magnitude of losses due to measurement error was relatively unconstrained. As a result, our ability to detect changes in true ability among learners with relatively high initial skill levels is compromised.

Similarly, learners who are close to the lower limit of test scores at baseline (i.e., lower level 1) are more likely to record gains rather than losses because they were already close to the test floor. This is also likely to result in an overestimate of the effectiveness of training for this group.

With this customized version of the TOWES, measurement error is most likely to be random – and therefore least likely to bias estimates of change in ability – in the middle of the distribution of initial learner skill levels, namely upper level 1 and lower level 2 (which together comprise almost three-quarters of the sample). Thus, the version of TOWES used in the current study is most effective at detecting changes in ability among upper level 1 and lower level 2 learners.

TOWES document use – distribution change in proportion of learners

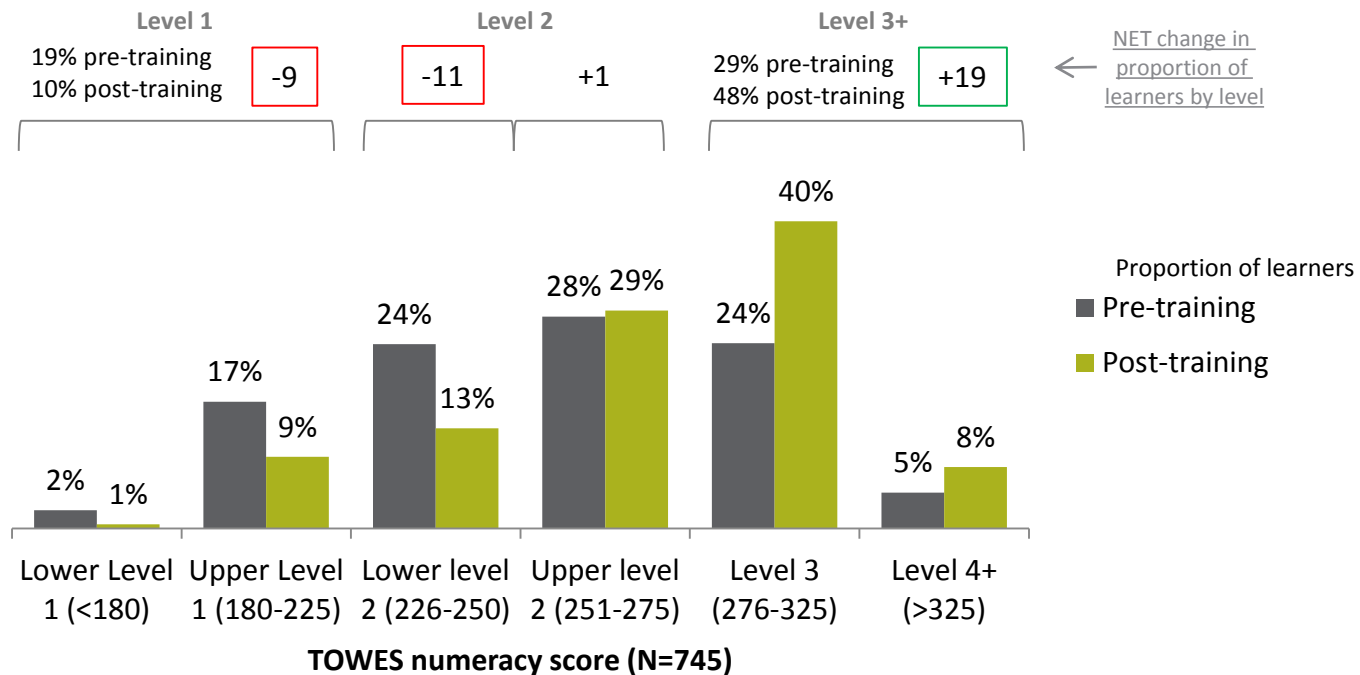
Another way of analyzing the data is by looking at the distribution of change among learners from pre-training to post-training. The figure below shows that the distribution of document use improved immediately after the training was completed. The proportion of learners who were at Level 1 dropped by 19 percentage points (64% to 45%), while the proportion of learners who were at Level 3 + increased by 17 percentage points (5% to 22%).



TOWES numeracy – distribution change in proportion of learners

As with document use, the distribution of numeracy learners improved immediately after the training was completed. The proportion of learners at level 1 dropped by 9 percentage points (19% to 10%) and the proportion of learners at lower level 2 dropped by 11 percentage points (24% to 13%). There was a substantial corresponding increase in the proportion of learners at or above level 3 (an increase of 19 percentage points – 29% to 48%).

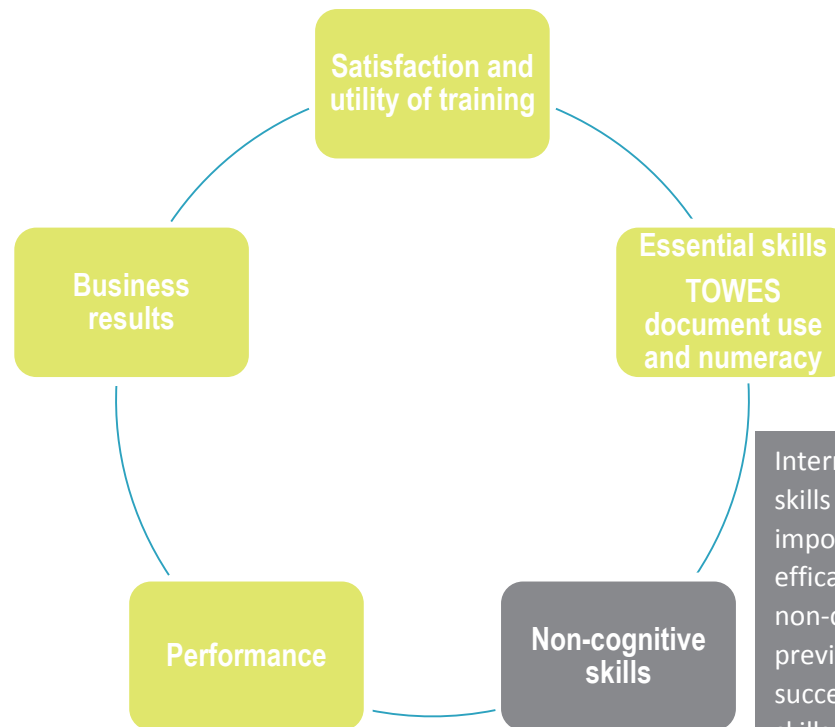
Distribution change by initial numeracy score



6. OUTCOMES RESULTS

- A. Satisfaction and utility of training
- B. Essential skills outcomes
- C. Non-cognitive skills outcomes
- D. Performance outcomes
- E. Business results

Outcomes of interest



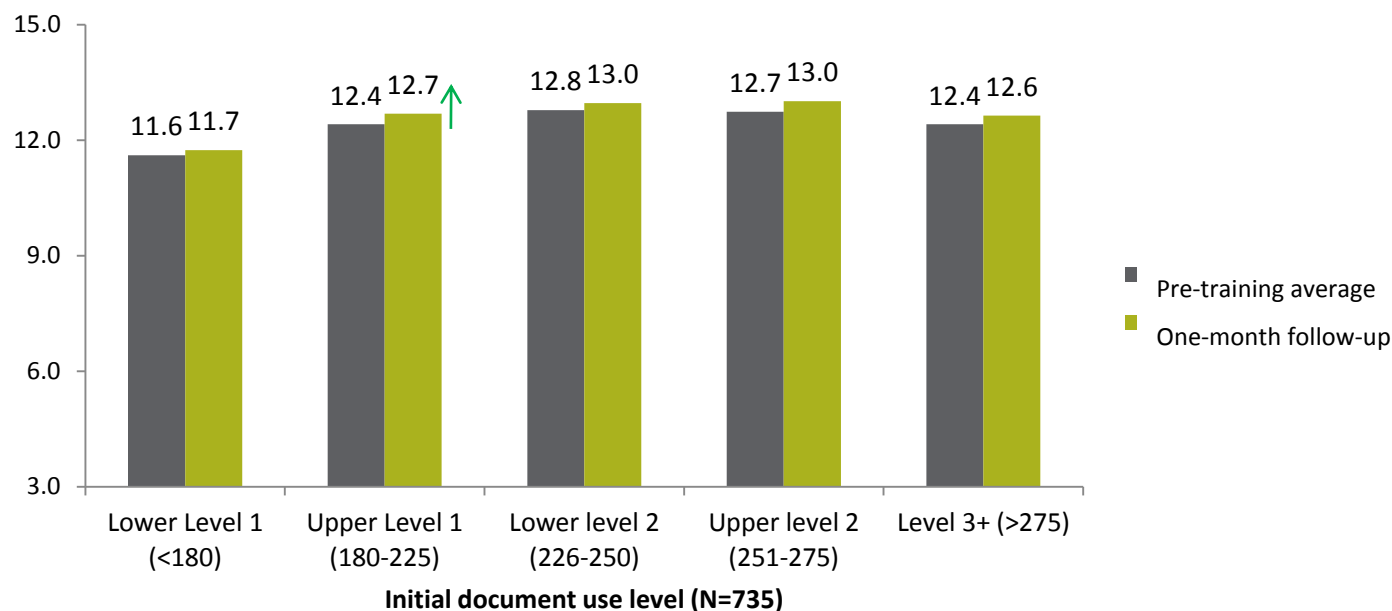
Intermediate outcomes: We also measured other skills that were identified by employers to be important to workplace performance such as self-efficacy, problem solving, and perseverance. These non-cognitive skills have been demonstrated in previous research to be linked to labour market success. We track four types of non-cognitive skills:

- Attitudes towards learning;
- Motivation and engagement;
- Future orientation;
- Self-esteem.

We measured changes in these four areas by asking employees questions using items drawn from standardized scales.

Change in 'attitudes towards learning' scale score, by initial document use level

Attitudes towards learning refers to the extent to which the learner values learning itself. We measured this skill by drawing on 3 items that were included in the evaluation of the Skills for Life program, a long-standing program introduced by the UK government to improve literacy, numeracy, and communication. On average there were significant positive gains in attitudes towards learning after training was completed. This figure shows changes in attitudes towards learning by initial level of document use. As this figure indicates, average gains were driven largely by large gains realized by learners who started the training at Upper Level 1 in document use.

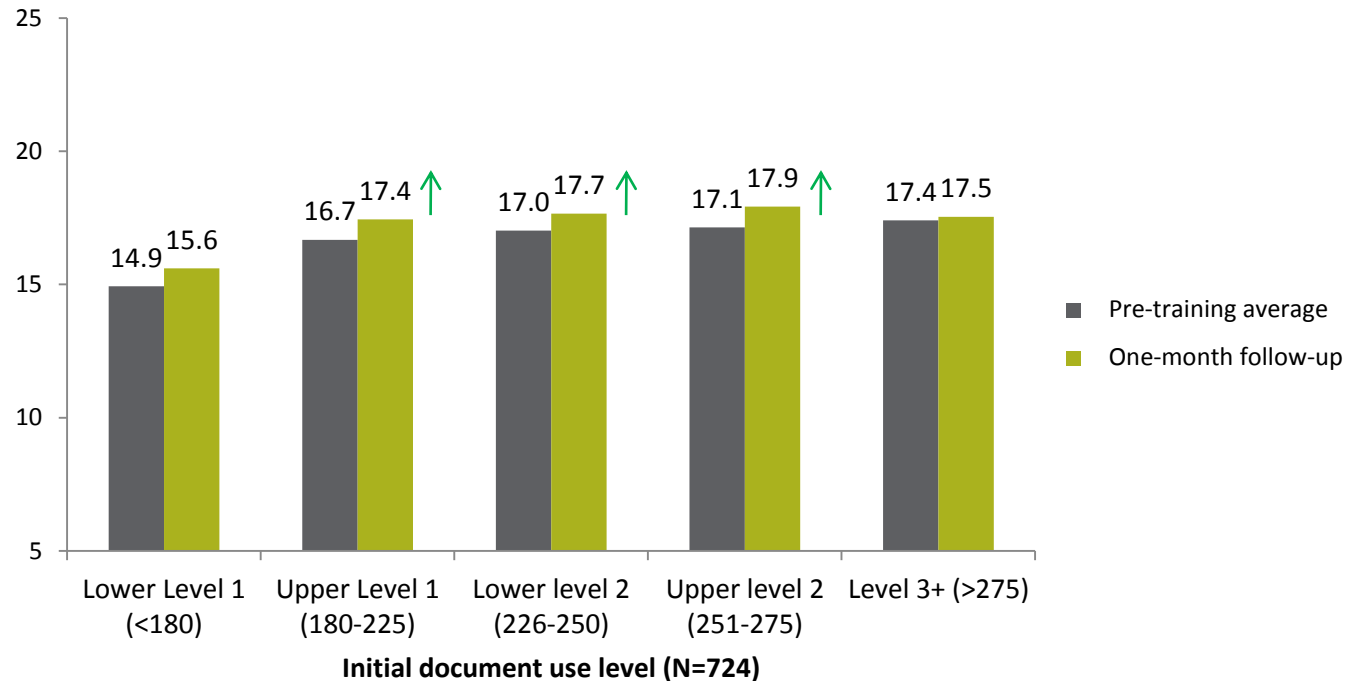


*'Attitudes towards learning' score is based on a 3 item (5-point) scale score with a maximum of 15 points.

↑ Indicates statistically significant gain, $p < .10$.

Change in 'future orientation' scale score, by initial document use level

Future orientation refers to the willingness to defer immediate benefits in order to receive additional rewards down the road. Future orientation has been linked to conscientiousness, which in turn is strongly linked to many positive work outcomes. We measured this skill by drawing on five items from the *Adapted Zimbardo Time Preference Inventory*. On average there were significant positive gains in future orientation after training was completed. This figure shows changes in future orientation by initial level of document use. As this figure indicates, average gains were driven by large gains experienced by learners who were at Upper Level 1 and Level 2 at the beginning of the training.

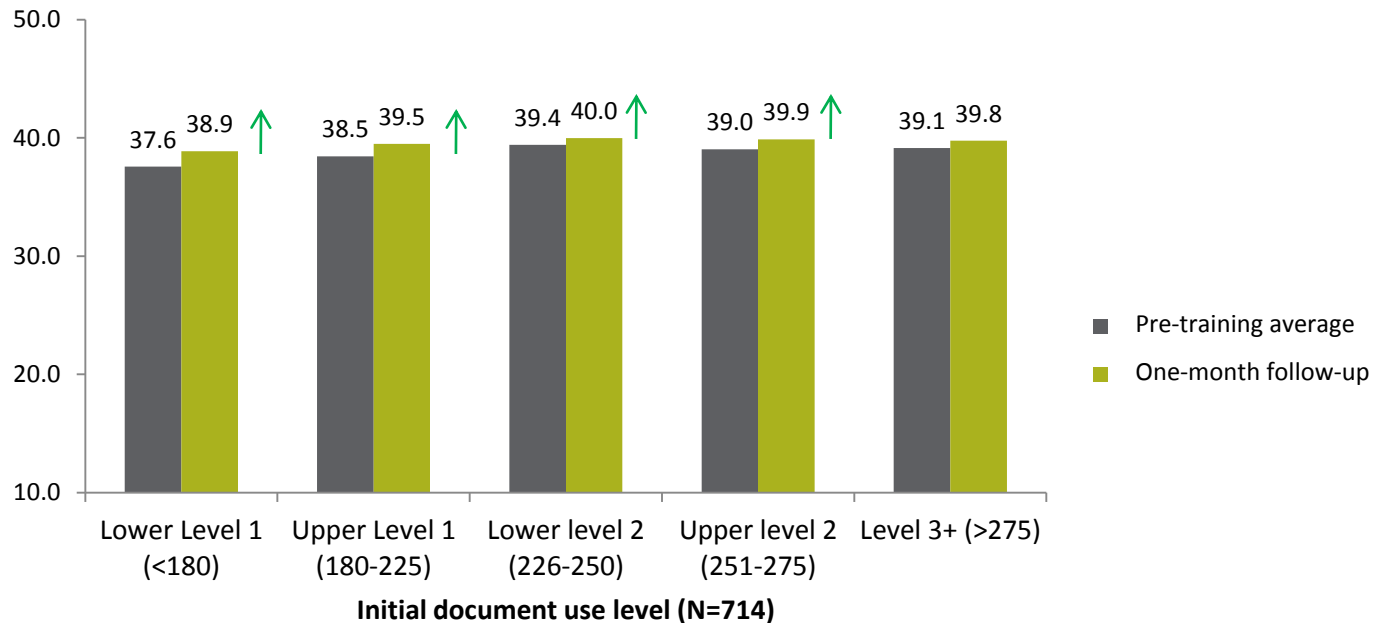


*'Future orientation' is based on a 5 item (5-point) scale score with a maximum of 25 points.

↑ Indicates statistically significant gain, $p \leq .10$.

Change in 'motivation & engagement' in work scale score, by initial document use level

Motivation and engagement refers to the extent to which the learner feels motivated on the job and feels engaged in their work. We measured this skill by drawing on 10 items from the *Motivation and Engagement in Work Scale*. On average employees experienced statistically significant gains in this non-cognitive area. As this figure shows, this change was experienced by learners at almost every initial document use skill level. As with other outcome areas, individuals with lower initial document use scores showed the greatest gains.

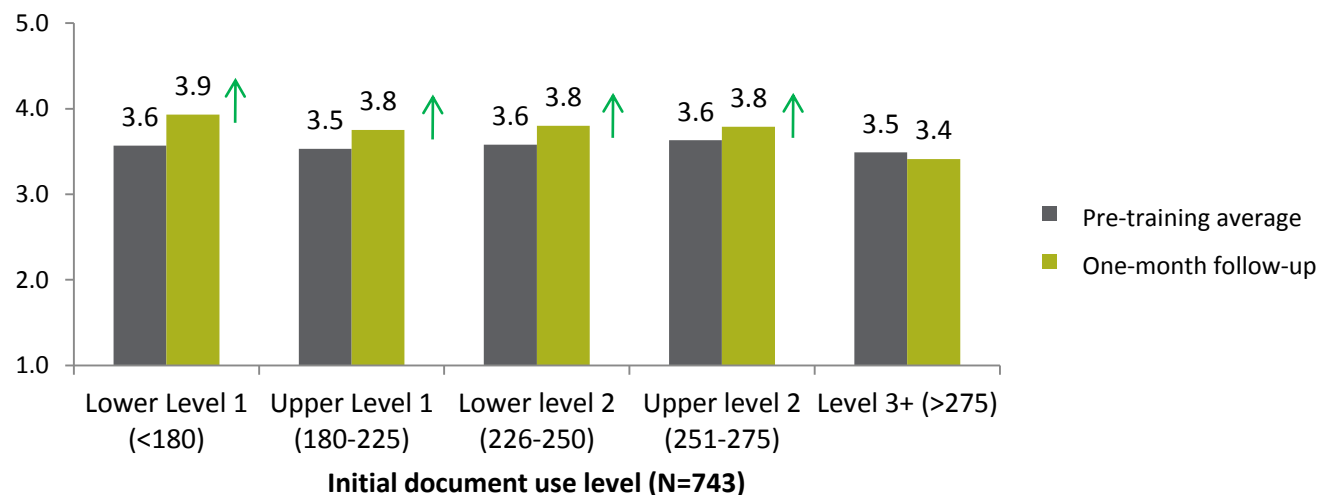


*'Motivation and engagement in work' score is based on a 10 item (5-point) scale score with a maximum of 50 points.

↑ Indicates statistically significant gain, $p \leq .10$.

‘Self-esteem’ score, by initial document use level

Self-esteem refers to the extent to which the learner feels confident. We measured this skill by drawing on the single item from the *Single-item Self-Esteem Scale*. On average employees experienced statistically significant gains in this non-cognitive area. As this figure shows, learners at almost all initial document use skill levels showed higher levels of self-esteem after training with learners at lower skills levels making larger gains.



*Note that ‘Self-esteem’ is based on 1 item (5-point) scale score.

↑ Indicates statistically significant gain, $p \leq .10$.

Overall gains in ‘attitudes towards learning’ and ‘future orientation’

The following two tables (slides 59 and 60) show the mean scores of all non-cognitive skills questions for employees before training, immediately after training, and at the one month follow-up. This table shows on average employees improved their scores on *attitudes towards learning* and *future orientation* immediately after training (for all but one sub-scale item) and that these improvements were either maintained or even increased one month later. This suggests that non-cognitive outcomes may continue to grow as employees apply their new skills and knowledge on the job.

Ratings for all items based on a 5-point scale of agreement	Mean scores by data collection point			Overall gains from T1 to T3
	Pre-training	Post training	1 month follow-up	
Attitudes towards learning (average scale score out of 15)	12.43	12.67	12.67	↑
Learning new things makes me more confident	4.49	4.65	4.60	↑
I am more likely to get a better job if I do some learning	4.31	4.47	4.43	↑
Getting qualifications takes too much effort <i>*reverse scored</i>	3.61	3.52	3.63	→
Future orientation (average scale score out of 25)	16.60	16.95	17.28	↑
Since whatever will be, will be, it doesn't really matter what I do (i.e., I can't affect the future) <i>*reverse scored</i>	3.88	4.02	4.02	↑
Meeting tomorrow's deadlines and doing other necessary work comes before tonight's play (e.g., before recreation or relaxation)	3.82	3.90	3.90	↑
You can't really plan for the future because things change so much <i>*reverse scored</i>	3.40	3.54	3.58	↑
I make decisions on the spur of the moment (i.e., with little thought) <i>*reverse scored</i>	2.97	2.99	3.20	↑
Generally, I am more focused on what is going on now than on what will happen in the future <i>*reverse scored</i>	2.51	2.50	2.59	↑

Green font = average score is statistically significantly higher than average at previous data collection point.

Red font = average score is statistically significantly lower than average at previous data collection point.

Grey font = average score is not statistically significant from average score at previous data collection point.

*Note reversed scale denotes that the mean score was calculated inversely in order to indicate overall gain in each scale/item.

Overall gains in ‘motivation and engagement’ and ‘self-esteem’

This table shows that employees realized significant gains in both *motivation and engagement* and *self-esteem* immediately after training was completed. Also similar to the other non-cognitive skills, for many sub-scale items, these gains were even larger at the one-month follow-up after training. As noted later in this report, for all four non-cognitive skills areas, post-training gains turn out to be direct predictors of improved on-the-job performance.

Ratings for all questions based on a 5-point scale of agreement	Mean scores by data collection point			Overall gains from T1 to T3
	T1	T2	T3	
Motivation and engagement (average scale score out of 50)	38.60	38.99	39.62	↑
In my job, I use my time well and arrange my work area so that I can work under the best conditions	4.23	4.31	4.32	↑
On the whole, I believe I do a good job	4.21	4.25	4.29	↑
I persist in my job even when it is challenging or difficult	4.20	4.23	4.29	↑
I believe that what I do at work is important and useful	4.17	4.24	4.26	↑
I try to plan out the things I have to do in my job	4.11	4.19	4.24	↑
In my job I'm focused on learning and improving more than I am on competing and being the best	4.10	4.10	4.18	↑
I don't think I have much control over how well I do in my job <i>*reverse scored</i>	3.83	3.90	3.98	↑
I find I sometimes reduce my chances of doing well in my job (e.g., waste time, not try hard, procrastinate) <i>*reverse scored</i>	3.70	3.70	3.86	↑
I get quite anxious in my job <i>*reverse scored</i>	3.15	3.20	3.23	↑
If I work hard in my job it's usually to avoid failing or disapproval from my boss or colleagues <i>*reverse scored</i>	2.80	2.80	2.96	↑
Self-esteem (average scale score out of 5)	3.54	3.62	3.75	↑

Green font = average score is statistically significantly higher than average at previous data collection point.

Red font = average score is statistically significantly lower than average at previous data collection point.

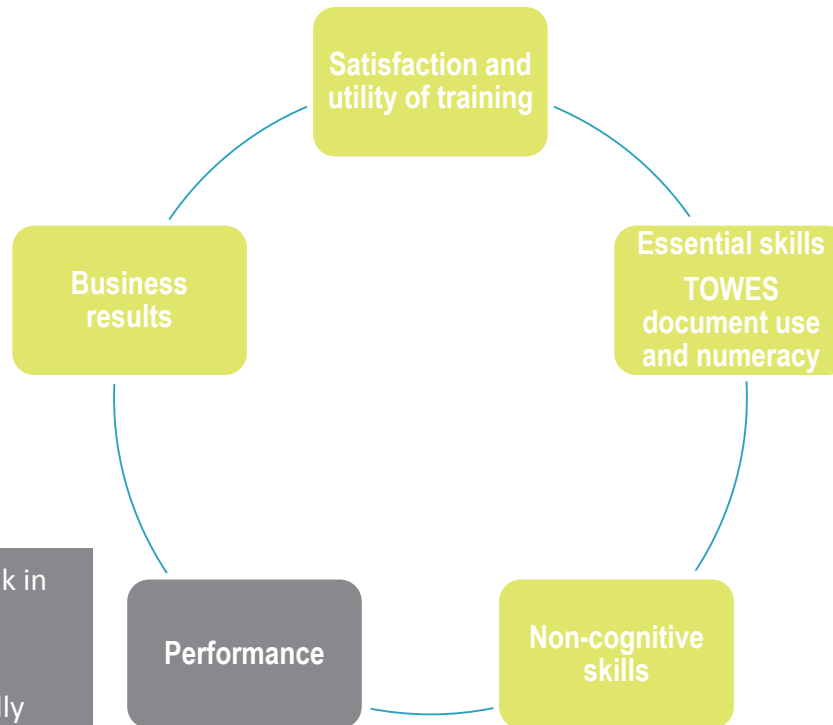
Grey font = average score is not statistically significant from average score at previous data collection point.

*Note reversed scale denotes that the mean score was calculated inversely in order to indicate overall gain in each scale/item.

6. OUTCOMES RESULTS

- A. Satisfaction and utility of training
- B. Essential skills outcomes
- C. Non-cognitive skills outcomes
- D. Performance outcomes
- E. Business results

Outcomes of interest

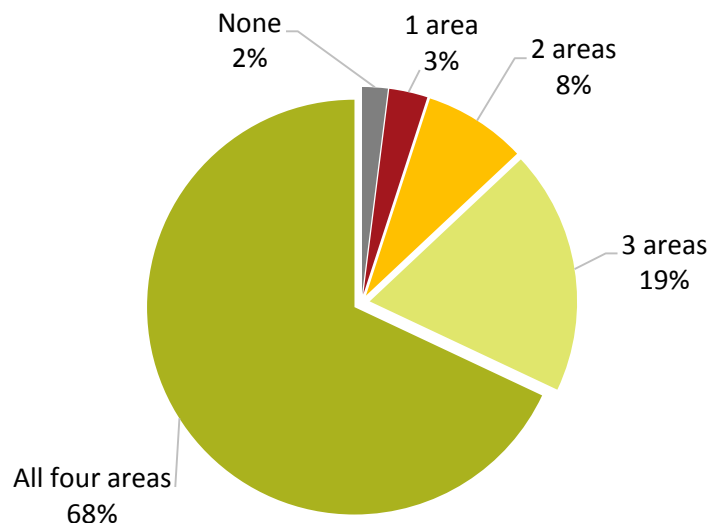


Intermediate outcomes: A key link in the causal chain to establish a business case for essential skills training is that the training actually changes on-the-job performance. For this outcome, we based results on employee self-reports, and a small subset of employer reports.

Employees self-reported ratings on 'on-the-job performance' (one month follow-up)

As the pie chart below shows, sixty-eight per cent of employees reported that their performance improved in all four measured performance areas. Results for each individual performance area are much higher and are reported here for each of the three sectors: retail, grocery, and food and beverage.

Number of areas that improvement was made



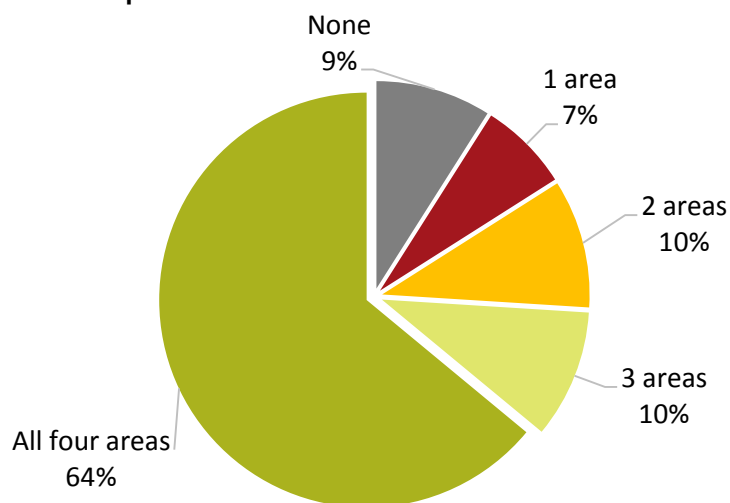
By Sector	Improved %	Stayed the same %
Retail		
Attitudes of excellence	91%	9%
Sales strategies	90%	10%
Actively listening to customers	94%	6%
Customer engagement	94%	6%
Grocery		
Sales strategies/assisting customer	89%	11%
Actively listening to customers	91%	8%
Attitudes of excellence	92%	8%
Customer engagement	96%	3%
Food & Beverage		
Sales strategies	86%	14%
Exceeding guest expectations	93%	7%
Attitudes of excellence	95%	5%
Basic service	95%	5%

Employer reported ratings on 'on-the-job performance' (follow-up survey)

Employers were also asked directly about the extent to which they felt their trainees had improved in each of four key performance areas. As this figure shows, 64% of interviewed employers said that all or most of their trainees had improved in all four performance areas and 19% said that their employees improved in three out of the four areas.

Although we don't have employer responses for the full set of employees, our analysis suggests at least for the 193 employees whose employer participated in the follow-up survey and provided complete performance data*, there is a close match between employee and employer reports. In other words, where the majority of employees reported improvement in most performance areas, employers were likely to report that most of their trainees had improved; where fewer employees reported improvement, employers were less likely to report that most of their trainees had improved in most areas. Perhaps most significantly, as discussed later in this report, employee self-rated performance is linked with employer perceived monetary value of the training. Employers who had employees who were more likely to report performance improvements were more likely to express a perceived value of the training of \$200 or more. In other words, based on the results of our employer follow-up survey, to a large extent, employers recognized improvements reported by employees, and indicated their value through their preference to to receive further training over cash for their business.

Number of performance areas for which employers reported improvement in more than half of their trainees



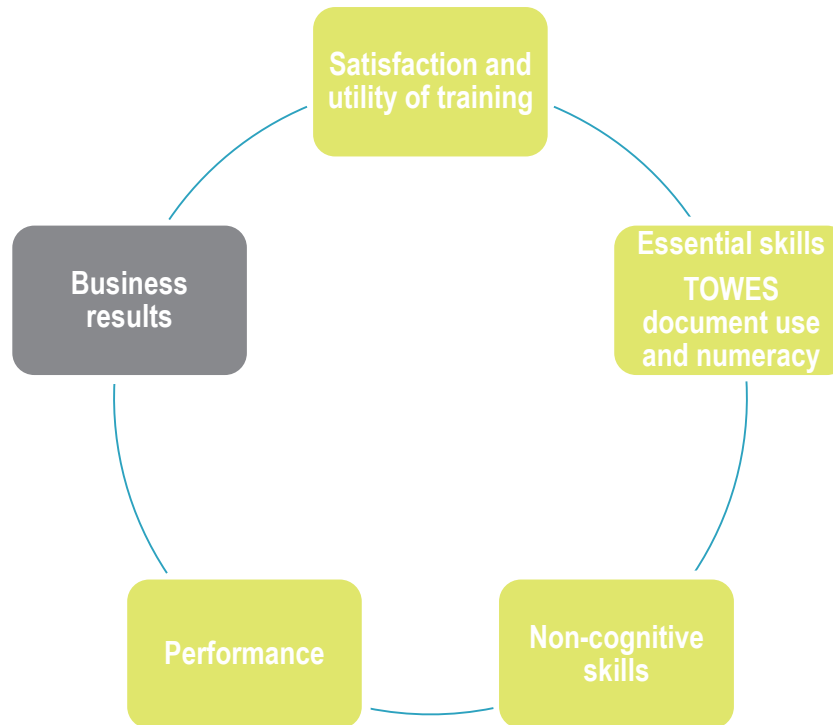
*Responses about performance were collected from 42 employers. Two employers were not questioned in early interviews and one employer was not included because their employee did not complete all three surveys.

6. OUTCOMES RESULTS

- A. Satisfaction and utility of training
- B. Essential skills outcomes
- C. Non-cognitive skills outcomes
- D. Performance outcomes
- E. Business results

Outcomes of interest

Final outcomes: The employer is the ultimate customer and thus weight should be given to whether training meets their expectations. Employers were asked to reveal the value they attached to the training, using a 'Revealed Preferences Design.'



Using a revealed preferences design to assess value of training

As part of the follow-up interview, a **'revealed preferences design'** experiment was used to assess the dollar value that employers attached to the training. This approach involved asking employers to make a series of decisions which included choices between progressively larger amounts of money for their businesses (in the form of a cheque) versus the opportunity to have an additional employee participate in training at no additional cost after the pilot program window had closed.

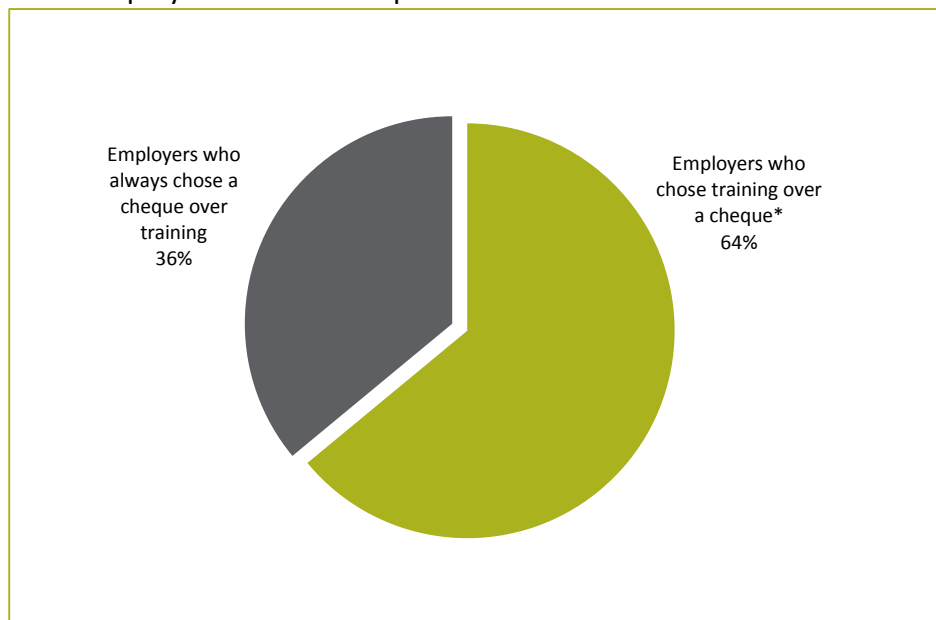
Before making their decisions, employers were told that at the end of the interview they would have a 1 in 10 chance of one of their choices being selected at random and honoured. Not knowing which choice might be selected meant that all of the choices involved **potentially real stakes**, providing employers with a strong **incentive to reveal their true preference** for each choice.

Choosing future training over money is a strong indicator of demand for training while choosing money over training indicates a lack of demand. Also by progressively varying the amount of money offered in each decision, and noting the maximum amount at which employers chose training, we were able to gauge the perceived monetary value that employers placed on the training their employees had received.

Immediate vs. delayed payment: For some choices, the cheques offered as an alternative to training were to be delivered quickly (i.e., within a week), but for others the cheques were delayed (i.e., to be delivered in three months). This was done to capture a potential tendency among some employers to recognize the value of training in the long term, but to discount this value when there was an immediate cost to be paid. This kind of discounting would be indicated by inconsistent choices at a given dollar value, for example preferring training when the cheque alternative was delayed, but preferring a quick cheque to training.

Dollar value placed on training by employers

Employers were asked whether they would rather have training for one more employee or varying amounts of cash to invest in their business. In general, most employers indicated a preference for more training for an additional employee over receiving money for their business. Almost two-thirds (64%) preferred more training to receiving \$200, half (52%) preferred more training to receiving more than \$500, and about one in five (18%) preferred training over receiving \$1000 or more (if paid in one week). Note that most employers showed consistent preferences across time, i.e., there was little change in the proportions of those who chose training over a cheque if paid in 3 months, reinforcing the case that employers valued the training regardless of when the cheque was paid. A total 44 employers participated in this interview.* Together the employees of these 44 employers represented approximately one-quarter of the employee research sample.



I thought at the \$1000 amount we could maybe look at some other types of training in-house towards the staff... it would not necessarily be preferable to the training but it would give me the option.

The training would be much more valuable to us than the money.

I saw a lot of positives – the whole ownership and eagerness when they came back from the course. I think overall it's more worth it to the organization to have that training and come back here with that attitude... I think the possibility is there. [But] once we hit the \$1000 barrier I know the owner would be happy if I could say hey, I just got \$1000 for the company.

\$ Amount offered	% of employers who chose training over offered \$ amount	
	If paid in 1 week	If paid in 3 months
\$200	64%	64%
\$300	61%	64%
\$400	59%	60%
\$500	52%	59%
\$600	45%	50%
\$700	42%	45%
\$800	35%	36%
\$900	33%	34%
\$1000	18%	23%
\$1100	14%	18%
\$1200	11%	14%

*Note (N=44) : one employer's responses were excluded from the analysis due to an inconsistent pattern of responding (preferred cheque at \$200, training at \$300 & \$400, cheque at \$500 & \$600, training at \$700 & \$800 etc.)

Dollar value placed on training by employer characteristics

Most indicators of training utility and satisfaction were strongly linked with employers' perceived value of the training. For example, 72% of employers who strongly agreed that they would recommend the training to new hires indicated a perceived training value of more than \$500, compared to only 32% of those who agreed, and 20% of those who were neutral. Similarly, 55% of employers who rated the training as excellent or very good indicated a perceived training value of more than \$500, compared to only 20% of those who rated it good or fair.

Employers from medium and large firms indicated higher perceived training value (\$717 average) than those from small firms (\$433).

	Number of firms (%)	Perceived monetary value of training (mean)	% who selected training over money for their business	% who selected training over \$500 or more for their business
TOTAL	45 (100%)	\$502	64%	47%
Survey answered by...				
Manager	36 (80%)	\$544	67%	50%
Owner	9 (20%)	\$333	56%	33%
Would strongly recommend training to new hires				
Strongly Agree	18 (40%)	\$656	72%	72%
Agree	22 (49%)	\$418	64%	32%
Neutral	5 (11%)	\$320	40%	20%
Overall quality rating of training				
Very good/Excellent	33 (77%)	\$567	70%	55%
Fair/Good	10 (23%)	\$300	50%	20%
Firm Size				
Medium & Large (50+ employees)	12 (40%)	\$717	83%	67%
Small (<50 employees)	18 (60%)	\$433	56%	44%

Dollar value placed on training by employee performance

In terms of performance, 59% of employers who said that all or most of their trainees had improved in all four performance areas expressed a perceived training value of more than \$500 for further training compared to only 27% of employers who said their trainees had improved in three or fewer performance areas.

Perhaps most interestingly, employee self-rated performance was linked with employer perceived value of the training. Among employers for whom more than half of their trainees reported improvement in all four performance areas, 58% indicated a perceived value of more than \$500 for further training, compared to only 23% of employers for whom half or fewer of their trainees reported improvement in all four areas.

This result establishes a chain of evidence from skill gains (especially non-cognitive skill gains) to employee-reported gains in job performance to employer perceived monetary value of the training.

	Number of firms (%)	Perceived monetary value of training (mean)	% who selected training over money for their business	% who selected training over \$500 or more for their business
TOTAL	45 (100%)	\$502	64%	48%
Employer rated all or most of the trainees as improved in all 4 performance areas	27 (64%)	\$604	78%	59%
Employer rated all or most of the trainees as improved in 3 or fewer performance areas	15 (36%)	\$360	47%	27%
More than half of employees reported improving in ALL 4 performance areas	31 (70%)	\$587	71%	58%
Half or fewer of employees reported improving in all 4 performance areas	13 (30%)	\$323	46%	23%

7. IN-DEPTH ANALYSES – EMPLOYEES

- A. subgroup analysis
- B. Individual and work-related factors analysis
- C. Institutional analysis

How we conducted the subgroup analysis

In the previous section, we reported statistically significant positive outcomes for all of our outcomes of interest. This raises the question of whether these positive outcomes were realized by potentially vulnerable learners such as learners without a high school diploma. In this section, we analyze the results for six subgroups: Men, individuals without a high school diploma, younger learners (under 25 years old), individuals in low income households, immigrants, and Aboriginals.

As we analyzed outcomes for each of these subgroups, we used a technique called multivariate regression to take into account a range of factors that may have impacted their outcomes. This allows us to consider whether results for particular subgroups were in fact driven by a third factor. For example, while we initially found that younger learners were less likely to gain in motivation and engagement, it turned out this relationship was driven by younger workers being more likely to be in retail and retail workers being less likely to gain in this area. Once we accounted for a higher proportion of younger workers being in retail, we found that younger workers were just as likely to gain in motivation and engagement as older workers.

Variables or third factors we tried to control for...

Learner motivation, satisfaction, utility	Cognitive and non-cognitive resources	Employer engagement in training	Work-related factors	Training delivery factors
<ul style="list-style-type: none"> Reasons for taking training (0 - 2 goals including money, 0-2 no money, 3+ with money, 3+ without money) Training satisfaction Training utility 	<ul style="list-style-type: none"> Initial document use score on TOWES Initial numeracy score on TOWES Initial scores on scales measuring other skills valued in workplace 	<ul style="list-style-type: none"> Number of employees in training (1, 2-3, 4+) Employer participated in research vs. did not participate Supervisor support for training 	<ul style="list-style-type: none"> Job (temp vs. perm) Tenure in company (2 yrs or less vs. 3+ yrs) Sector (retail vs. food & beverage vs. grocery) Firm size (micro, small, medium, large) 	<ul style="list-style-type: none"> Institution Training start date relative to when institution started training delivery Single vs. multi-employer cohorts (1, 2-4, 5+)

Key findings of the subgroup analysis

A major finding of this study is significant gains were realized in all, or almost all, of the outcome areas by a wide range of subgroups. There were minor variations in the magnitude of gains and some subgroups had one area where they did not gain, but overall outcomes were strikingly positive, even for subgroups that are often considered to be comprised of potentially vulnerable learners.

- **Without high school** - Learners without high school diplomas realized skill gains and performance improvements that were similar in magnitude to those realized by learners with diplomas.
- **Younger learners** - Younger learners (under 25) also had similar or higher gains than other age groups across all areas of skill and job performance.
- **Immigrants** - Learners who commonly use languages other than English at home had similar gains in numeracy but slightly smaller (still statistically significant) gains in document use than native English speakers, and had no gains in attitudes towards learning. However, they were also more likely than native English speakers to report performance improvements.
- **Aboriginals** - Aboriginal learners realized similar gains in document use but slightly smaller (still statistically significant) gains in numeracy than other learners. They also reported significantly higher levels of training satisfaction and utility, as well as significantly higher gains in attitudes towards continuous learning.
- **Low income** - Learners from low income households realized similar gains to those from higher-income households in all areas except document use and attitudes towards learning. Gains were slightly smaller (but still statistically significant) in document use. There were no gains in attitudes towards learning.
- **Males** - Male learners realized no gains in motivation and engagement at work, but otherwise had similar magnitudes of gain as female learners in all other areas.

Slide 63 shows a table that visually illustrates the relative gains in outcomes of interest for each subgroup. Slide 64 provides a closer look at how subgroups differed in terms of the starting levels for each outcome of interest. This gives the reader a sense of how initial cognitive and non-cognitive resources differed by subgroup. The following slides take a closer look at each of the six subgroups.

This table provides a visual summary of subgroup results for each outcome

Outcome	Relative gains on outcomes of interest (after controlling for a wide range of factors)					
	Male	Without HS	Under 25	Low HHLD income <\$40k	English as other language (EOL) learners	Aboriginal
	N=178	N=191	N=265	N=515	N=250	N=59
1. Satisfaction and utility	Similar	Similar	Similar	Similar	Similar	Larger
2. Document use	Similar	Similar	Larger than 55+ but similar to other age groups	Smaller	Smaller	Similar
3. Numeracy	Similar	Similar	Larger than 55+ but similar to other age groups	Similar	Similar	Smaller
4. Attitudes towards learning	Similar	Similar	Similar	None	None	Larger
5. Motivation & engagement	None	Similar	Similar	Similar	Similar	Similar
6. Future orientation	Similar	Similar	Larger than 25 to 34 but similar to other age groups	Similar	Similar	Similar
7. Self-esteem	Similar	Similar	Similar	Similar	Similar	Similar
8. Performance	Similar	Similar	Similar	Similar	Larger	Similar

■ Larger significant gains than other groups within subgroup
 ■ Smaller significant gains than other groups within subgroup
 ■ No gains

A closer look at how different subgroups differ in their initial pre-training level of skills (starting scores)

Initial skill level	Males	Without HS	Under 25	Low household income (<40k)	English as other language (EOL) learners	Aboriginals	ALL LEARNERS
Document use (0-500)	217	213 (vs. 219 for those with HS)	223 (vs. 216 for those 25+)	215 (vs. 224 for those with 40k+ household income)	205 (vs. 222 for non-EOL)	218	217
Numeracy (0-500)	255	253	262 (vs. 255 for those 25+)	253 (vs. 268 for those with 40k+ household income)	238 vs. (264 for non-EOL)	252	256
Attitudes towards learning (3-15 points)	12.1 (vs. 12.5 for females)	12.4	12.7 (vs. 12.3 for those 25+)	12.4	11.6 (vs. 12.8 for non-EOL)	12.8 (vs. 12.4 for non-Aboriginals)	12.4
Motivation & engagement in work (10-50 points)	37.9	38.3	39.0 (vs. 38.4 for those 25+)	38.4	37.1 (vs. 39.2 for non-EOL)	38.7	38.6
Future orientation (5-25 points)	16.1	16.3 (vs. 16.7 for those with HS)	17.3 (vs. 16.3 for those 25+)	16.3 (vs. 17.1 for those with 40k+ household income)	15.3 (vs. 17.2 for non-EOL)	17.0	16.6
Self-esteem (1-5 points)	3.7 (vs. 3.5 for females)	3.4 (vs. 3.6 for those with HS)	3.5	3.6	3.6 (vs. 3.5 for non-EOL)	3.6	3.5



Significantly higher than other groups within subgroup



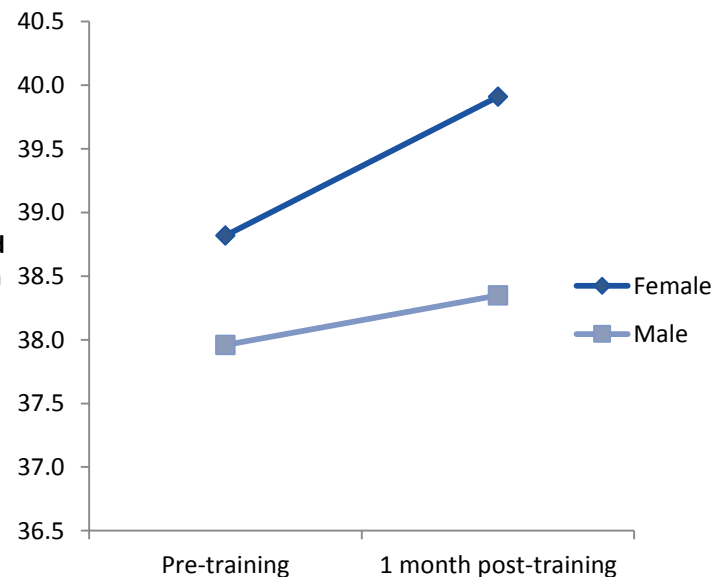
Significantly lower than other groups within subgroup

Male learners – relative gains in outcomes of interest

Unlike female learners, male learners do not show statistically significant gains in motivation and engagement in work. Males show similar gains to female learners on all other outcomes of interest. (As discussed on slide 72, our analysis controls for a wide range of factors that may have influenced outcomes for male learners).

Outcomes	Relative gains
1. Satisfaction & utility	Similar
2. Document use	Similar
3. Numeracy	Similar
4 . Attitudes towards learning	Similar
5. Motivation & engagement	None <i>Lower starting level</i>
6. Future orientation	Similar
7. Self-esteem	Similar
8. Performance	Similar

Motivation and engagement in work score



Learners without a high school diploma

Learners without a high school diploma started at lower starting levels than learners with a high school diploma on document use, future orientation and self-esteem, but experienced similar gains in all outcomes of interest (after controlling for a wide range of factors).

Outcomes	Relative gains
1. Satisfaction & utility	Similar
2. Document use	Similar <i>Lower starting level</i>
3. Numeracy	Similar
4. Attitudes towards learning	Similar
5. Motivation & engagement	Similar
6. Future orientation	Similar <i>Lower starting level</i>
7. Self-esteem	Similar <i>Lower starting level</i>
8. Performance	Similar

Learners under age 25

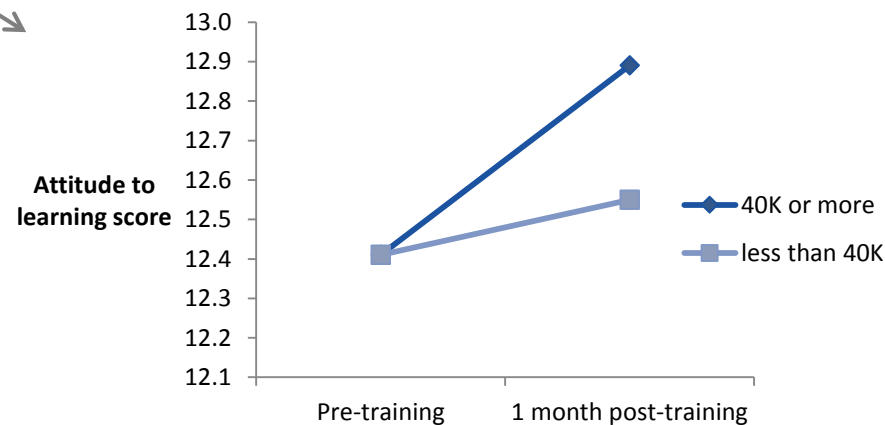
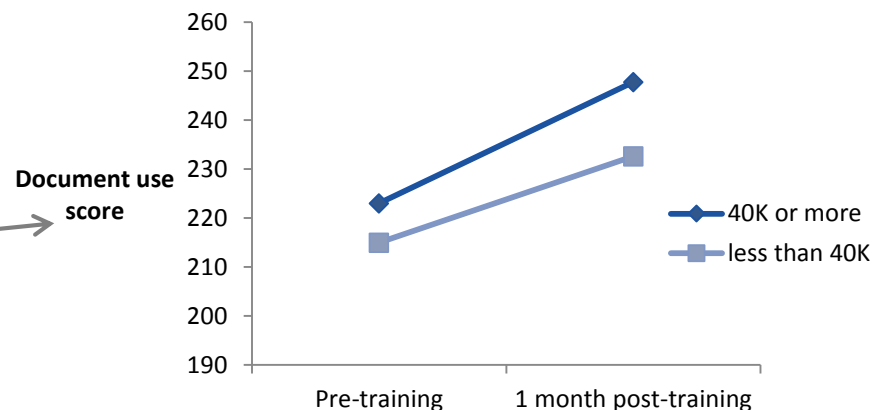
Learners under age 25 started at higher levels on all skills except self-esteem, and show similar gains to learners age 25+ in all outcomes of interest (after controlling for a wide range of factors).

Outcomes	Relative gains
1. Satisfaction & utility	Similar
2. Document use	Larger than 55+ but similar to other age groups <i>Higher starting level</i>
3. Numeracy	Larger than 55+ but similar to other age groups <i>Higher starting level</i>
4. Attitudes towards learning	Similar <i>Higher starting level</i>
5. Motivation & engagement	Similar <i>Higher starting level</i>
6. Future orientation	Larger than 25 to 34 but similar to other age groups <i>Higher starting level</i>
7. Self-esteem	Similar
8. Performance	Similar

Low household income (<40k) learners – relative gains in outcomes of interest

Learners with low household income (<40k) start at lower levels of document use, numeracy, and future orientation. They experience smaller gains in document use than learners with household income of 40k+, and they show no gains in attitudes toward learning. On all other outcomes of interest, learners with low household income show similar gains to learners of higher incomes.

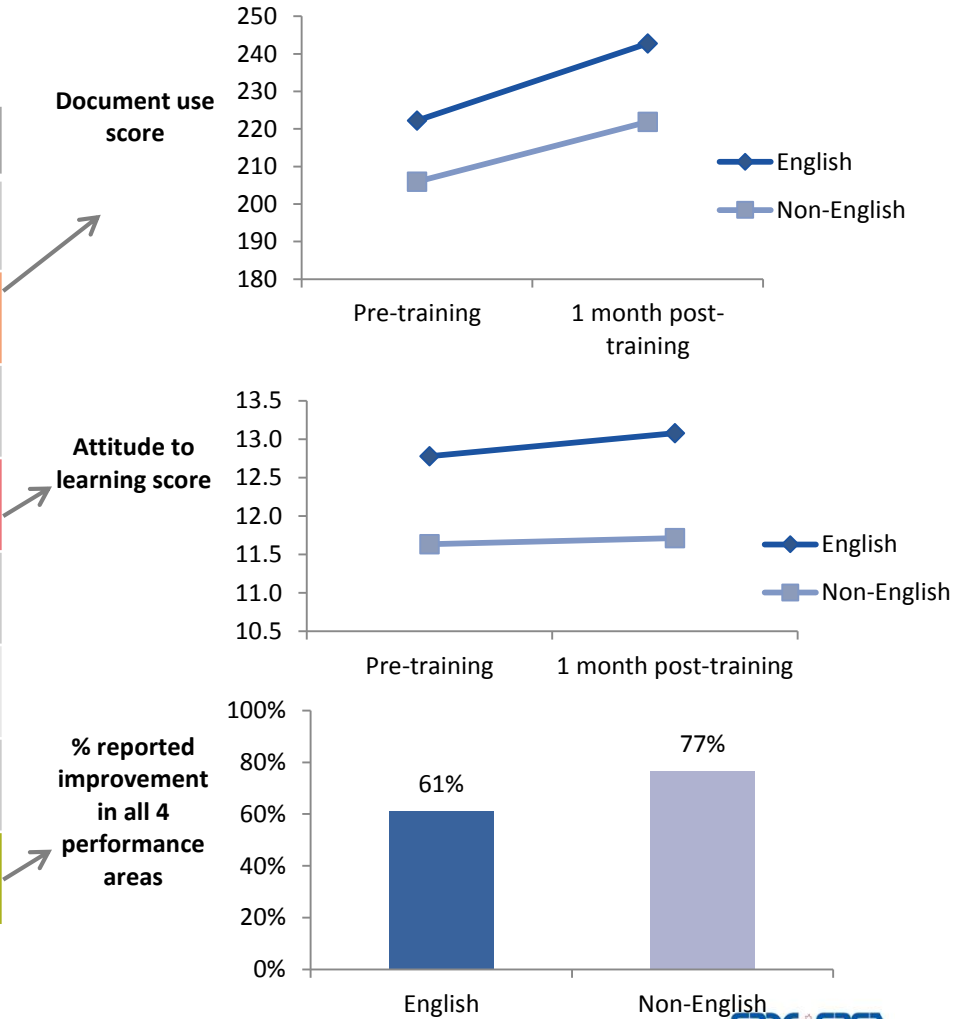
Outcomes	Relative gains
1. Satisfaction & utility	Similar
2. Document use	Smaller <i>Lower starting level</i>
3. Numeracy	Similar <i>Lower starting level</i>
4. Attitudes towards learning	None
5. Motivation & engagement	Similar
6. Future orientation	Similar <i>Lower starting level</i>
7. Self-esteem	Similar
8. Performance	Similar



English as other language (EOL) learners – relative gains in outcomes of interest

EOL learners start at lower levels on all skills, show smaller gains in document use skills than non-EOL learners, and show no gains in attitudes toward learning. However, EOL learners report larger gains in on-the-job performance than non-EOL learners, and show similar gains to non-EOL learners in all other outcomes of interest.

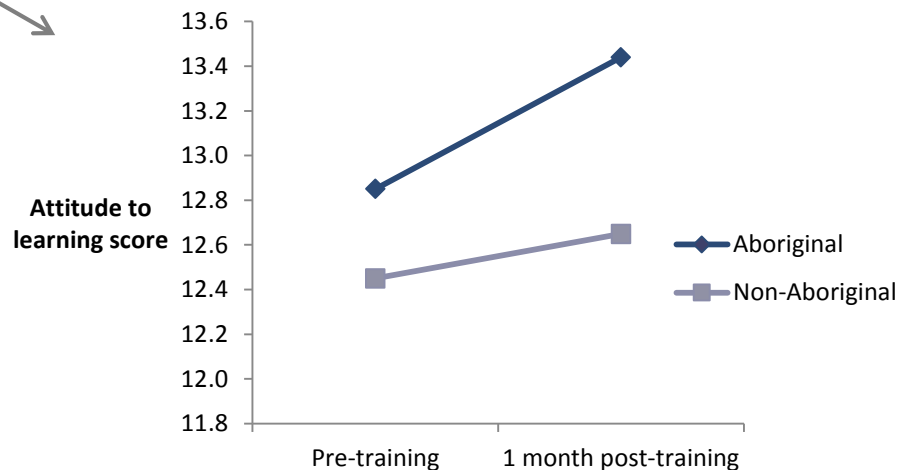
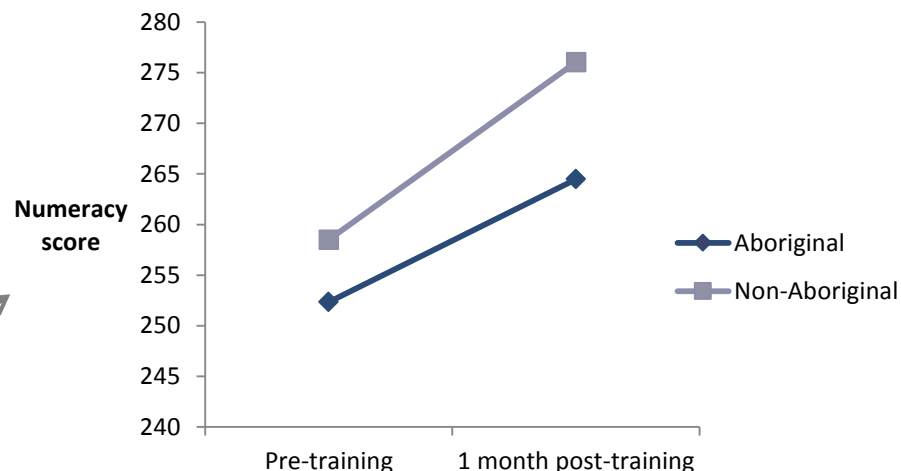
Outcomes	Relative gains
1. Satisfaction & utility	Similar
2. Document use	Smaller <i>Lower starting level</i>
3. Numeracy	Similar <i>Lower starting level</i>
4. Attitudes towards learning	None <i>Lower starting level</i>
5. Motivation & engagement	Similar <i>Lower starting level</i>
6. Future orientation	Similar <i>Lower starting level</i>
7. Self-esteem	Similar <i>Lower starting level</i>
8. Performance	Larger



Aboriginal learners – relative gains in outcomes of interest

Aboriginal learners report higher levels of satisfaction and utility of the training. They also show smaller gains in numeracy skills but start higher and show larger gains in attitudes toward learning than non-Aboriginals. Aboriginal and non-Aboriginal learners show similar gains on all other outcomes of interest.

Outcomes	Relative gains
1. Satisfaction & utility	Larger
2. Document use	Similar
3. Numeracy	Smaller gains
4. Attitudes towards learning	Larger gains <i>Higher starting level</i>
5. Motivation & engagement	Similar
6. Future orientation	Similar
7. Self-esteem	Similar
8. Performance	Similar



7. IN-DEPTH ANALYSES – EMPLOYEES

- A. subgroup analysis
- B. Individual and work-related factors analysis
- C. Institutional analysis

How individual and workplace characteristics influenced outcomes

We also used multivariate regression analysis to take into account a range of individual and work related factors that may have impacted learner outcomes. Several learner characteristics were important in explaining a variety of outcomes.

Learners who had a *higher number of training goals*, and those *who were better able to apply what they learned to their job*, realized a wider array of gains. Those with more goals reported significantly higher levels of training satisfaction and utility, gains in attitudes towards continuous learning, and higher levels of improvement in job performance. Those who were better able to apply what they learned reported significantly higher gains in self-esteem, attitudes towards continuous learning, and motivation and engagement at work, and higher levels of improvement in job performance.

In addition, a wider variety of gains were realized by learners with *higher pre-training levels of motivation and engagement at work* and *higher pre-training levels of future orientation*. Those with higher initial levels of motivation/engagement reported significantly higher levels of training satisfaction and utility, realized significantly higher gains in numeracy, attitudes towards continuous learning, and future orientation. Similarly, those with higher initial levels of future orientation realized significantly higher gains in numeracy, attitudes towards continuous learning, motivation/engagement, and self-esteem.

Learners who *realized higher gains in motivation/engagement* and *gains in future orientation* reported significantly higher levels of improvement in job performance. Motivation/engagement and future orientation are especially key factors, not only because their presence pre-training facilitates training success, but also because they are responsive to training and thus can act as post-training enabling factors for further skill application and performance gains.

How individual and workplace characteristics influenced outcomes

Other factors linked with attainment of successful outcomes include *composition of the training cohort*, *supervisor support*, and *worker tenure/job status*. Those who trained only with other learners from the same employer realized significantly higher gains in document use and numeracy as well as significantly higher levels of improvement in job performance than those who trained with learners from multiple employers. In addition, workers with higher levels of pre-training and post-training supervisor support reported significantly higher levels of training satisfaction and utility as well as significantly higher gains in self-esteem; however, it is important to note that supervisor support did not have an effect on gains in essential skills and most non-cognitive skills including motivation and engagement and future orientation.

Finally, workers who had held their job for two years or less realized significantly higher gains in attitudes towards learning and self-esteem than their longer-tenure counterparts (note: tenure in job, not industry), and workers with temporary jobs reported significantly higher levels of improvement in job performance than workers with permanent jobs.

The tables on the next two slides provide a high-level overview of these findings.

Summary of results – INDIVIDUAL FACTORS

Outcomes	Learner motivation, satisfaction, & utility			Cognitive & non-cognitive resources
	Motivated to take training	Training goals	Training satisfaction/ utility	Starting level on outcomes of interest
1. Satisfaction & utility	Associated with higher satisfaction	More goals and non-money goals associated with higher satisfaction	Not applicable	Higher initial motivation/engagement at work and more positive initial attitude towards learning associated with higher satisfaction
2. Document use	No effect	No effect	No effect	Lower initial level of document use and self-esteem associated with larger gains
3. Numeracy	No effect	No effect	Lower training satisfaction associated with larger gains	Lower initial level of numeracy associated with larger gains Higher initial motivation/engagement at work and future orientation a/w larger gains
4. Attitudes to learning	No effect	More goals and money goals associated with greater gains	Higher training satisfaction and utility associated with larger gains	Lower initial level of learning attitudes associated with larger gains Higher initial document use, numeracy, future orientation, and motivation/engagement at work associated with larger gains
5. Future orientation	No effect	Money goals associated with higher gains	No effect	Lower initial level of future orientation associated with larger gains. Higher initial motivation/engagement at work associated with larger gains
6. Motivation & engagement	No effect	No effect	Higher training utility associated with larger gains	Lower initial level of motivation/engagement associated with larger gains. Higher initial numeracy, future orientation, and self-esteem associated with larger gains
7. Self-esteem	No effect	No effect	Higher training utility associated with larger gains	Lower initial level of self-esteem associated with larger gains. Lower initial document use and higher future orientation associated with greater gains
8. Performance	No effect	More goals and non-money goals a/w more improvement	Higher training satisfaction and utility a/w more improvement	Higher gains in motivation and engagement at work, and future orientation, higher starting levels and gains in self-esteem associated with more improvement

This table reports on statistically significant gains.

Summary of results – WORK AND TRAINING RELATED FACTORS

Outcomes	Employer engagement		Work-related factors		Training delivery factors
	Supervisor support (combined results from input survey and one month follow-up)	Employer participating in business needs assessment*	Tenure with company, temporary vs. permanent status	Sector	Composition of training cohort
1. Satisfaction & utility	Associated with higher satisfaction	No effect	No effect	No effect	No effect
2. Document use	No effect	Associated with larger gains	No effect	No effect	Single and 2-4 employer cohorts have larger gains than 5+ employer cohorts
3. Numeracy	No effect	No effect	No effect	No effect	Single employer cohorts have larger gains than 5+ employer cohorts
4. Attitudes to learning	No effect	No effect	Shorter tenure associated with greater gains	Retail had greater gains than grocery	No effect
5. Future orientation	No effect	No effect	No effect	Retail had greater gains than grocery	No effect
6. Motivation & engagement	No effect	No effect	No effect	F&B had greater gains than retail	No effect
7. Self-esteem	Higher support associated with larger gains	No effect	Shorter tenure associated with greater gains	No effect	No effect
8. Performance	No effect	No effect	Temporary workers report greater improvement	No effect	Single employer cohorts report more improvement than 2-4 employer cohorts

7. IN-DEPTH ANALYSES – EMPLOYEES

- A. Subgroup analysis
- B. Individual and work-related factors analysis
- C. Analysis per institutions

PSE delivery model combined with ongoing coaching leads to consistent outcomes

In addition to examining the role that individual and workplace factors played in influencing results, we also examined whether employee outcomes differed depending on the institution where they received their training. Overall, the results indicated that outcomes varied little by institution. Although participating institutions may have had different levels of experience and capacity in delivering workplace essential skills training, and engaged employees with varying demographic characteristics, all institutions were successful in delivering the program. Where an employee received their training had little impact on the magnitude of gains they enjoyed. This may be a testament to the role that a carefully designed core curriculum can play in ensuring high standards across the province (colleges were asked to deliver the curriculum exactly as it was designed), as well as the role that Douglas College played in providing support and coaching to other institutions throughout the program.

8. DISCUSSION AND CONCLUSIONS

Discussion and Conclusions

The Workplace Training Program (WTP) is an innovative essential skills training program that has provided training opportunities to over 1000 lower skilled individuals working in the retail and food and beverage sectors across the province. WTP aimed to provide a high-quality, cost-effective solution to as many employers and employees as possible by leveraging design and delivery efficiencies in five distinct ways:

1. **Industry partnerships** – WTP takes a sectoral partnership approach with deep industry engagement, involving industry associations and employers from the retail and tourism sector in all program phases.
2. **Sectoral curriculum** – Resources are invested in the design of one high-quality curriculum for each target occupation that can be rolled out to many employers. In this way, each employer does not need to re-invent the wheel. A carefully conducted analysis of industry needs ensures the curriculum meets the performance needs of employers in each sector.
3. **Integrated Essential Skills** – Essential skills training is integrated seamlessly with technical content to help maximize job-relevance, and to help ensure that further technical training sticks. The training also targets non-cognitive skills to foster other skills employers value such as task perseverance and increased motivation and engagement in work.
4. **PSE delivery** – WTP uses the existing delivery infrastructure of the post-secondary system so that the curriculum can be rolled out across the entire province, including often under-served regions like the Interior. To ensure quality and consistency, Douglas College provided on-going coaching and support to other participating post-secondary institutions.
5. **Attractive incentives** – The program is offered at no direct cost to employers. A flexible delivery schedule allows employees to take training outside their regular shifts. Employees receive a stipend for completing the program.

This is the first workplace essential skills program that we are aware of to use this particular approach to design and delivery. Our outcomes research demonstrates that this project was highly successful on all counts. This section highlights five key findings.

1. Positive outcomes for employees

The main objective of the research study was to determine whether there is a 'business case' for delivering sectorally-designed essential skills training to frontline employees in the retail and restaurant sectors. There were three broad research questions: Does participating in WTP improve the essential skills of employees in the service sector? Does participation lead to direct improvements in on-the-job performance? Do employers perceive that essential skills training is a good investment?

Our research shows that the answer to all three questions is a resounding 'yes.' Outcomes for employees are especially positive. Employees experienced statistically significant gains on all outcomes of interest, including document use and numeracy, all non-cognitive skills, and all on-the-job performance areas. In addition, employees reported high utility and satisfaction ratings for the training. This is a major finding and provides strong evidence for the effectiveness of this innovative sectoral partnership approach.

While this research focused on short-term gains in skills and performance, further research should be conducted to establish the extent to which these gains are sustained over the long term and the extent to which they lead to longer-term outcomes of interest such as increased earnings, career progression, and overall improved well-being.

2. Positive outcomes for all subgroups

In general, subgroups of potentially vulnerable learners realized significant gains in all or most of the outcomes. There were few systematic differences among subgroups and the program was particularly effective for individuals whose pre-training essential skills levels were low. These individuals gained more than their higher skilled counterparts. In addition, individuals without a high school diploma, a particularly vulnerable group, fared equally well as individuals with diplomas.

Immigrants also experienced gains, although these gains were slightly smaller than gains experienced by non-immigrants in document use. However, they were also more likely than native English speakers to report performance improvements. Similarly, Aboriginal learners realized smaller (but still statistically significant) gains in numeracy than other learners, but also reported significantly higher levels of training satisfaction and utility, as well as significantly higher gains in attitudes towards continuous learning.

Learners from low income households realized smaller (but still statistically significant) gains in document use than those from higher income households, and had no gains in attitudes towards learning – however, they realized similar gains as those from higher-income households in all other areas. Similarly, male learners realized no gains in motivation and engagement at work, but otherwise had similar magnitudes of gain as female learners in all other areas. Younger (under 25) learners had similar or higher gains than other age groups across all areas of skill and job performance.

These overall positive results for all subgroups of interest challenge the conventional wisdom that individuals with low skills need intensive interventions over a long period of time before they can realize significant gains. These results also challenge the conventional wisdom that various subgroups require a curriculum that is highly contextualized to their nuanced learning needs. While more intensive and contextualized interventions may bring additional value, this research suggests that a well-designed curriculum combined with ongoing coaching and support for well-trained instructors may generate gains in a relatively short period to time, even for educationally vulnerable learners.

3. Individual characteristics played an important role in influencing outcomes

While all subgroups of interest made gains, individual and workplace characteristics played an important role in shaping outcomes. Several individual learner characteristics such as number of training goals prior to training played a role in several outcomes. While experienced instructors may already recognize this intuitively, these findings suggest that more formally understanding learners' initial mindsets can be useful as an early indicator of the extent to which they are likely to benefit and may point to the importance of ensuring learners understand the purpose of the training and have clear personal objectives that are aligned with course objectives.

Interestingly, those with higher initial levels of future orientation realized significantly higher gains in numeracy, attitudes towards continuous learning, motivation/engagement, and self-esteem. This finding is particularly noteworthy as it highlights the important role that non-cognitive factors play in generating gains in essential skills and in performance.

Having the opportunity to apply new skills is particularly important. Those who were reported being better able to apply what they learned reported significantly higher gains in several non-cognitive outcomes as well as significantly higher levels of improvement in job performance. Similarly workers with higher levels of pre-training and post-training supervisor support reported significantly higher levels of training satisfaction and utility as well as significantly higher gains in self-esteem. These two findings are consistent with the training and development literature and together highlight the important role that supervisors can play in ensuring skills gains are transferred to the workplace. That said, it is important to note that supervisor support had no effect on gains in non-cognitive skills related to motivation and engagement and future orientation.

There is also a link between gains in non-cognitive skills and performance. Learners who realized higher gains in motivation/engagement and gains in future orientation reported significantly higher levels of improvement in job performance.

Thus these non-cognitive skills are especially key factors, not only because their pre-training presence facilitates training success, but also because they are responsive to training and thus can act as enabling factors for further skill application and performance gains.

3. Individual characteristics played an important role in influencing outcomes cont'd

Workplace factors are also important. Those who trained only with other learners from the same employer realized higher gains in document use and numeracy as well as significantly higher levels of improvement in job performance than those who trained with learners from multiple employers. This finding has significant implications for the design and delivery of future programs. Finally, workers who had held their job for two years or less realized significantly higher gains in attitudes towards learning and self-esteem than their longer-tenure counterparts, and workers with temporary jobs reported significantly higher levels of improvement in job performance than workers with permanent jobs. This suggests this program was particularly effective for newer and less established employees.

4. All institutions successfully delivered the program

In contrast to individual and workplace characteristics, institutional differences were much less important. Broadly speaking, the data suggests that there was very little difference in the quality of the training provided by the 14 post-secondary institutions. All participating institutions were successful in delivering the program – where an employee received their training had little impact on the magnitude of gains they experienced. This finding is somewhat surprising given that institutions had very different levels of experience in delivering workplace essential skills training and had different profiles of learners. This may be a testament to institutions' capacity to deliver this type of programming but it also suggests the important role that a carefully designed core curriculum can play in ensuring high standards across the province. It is worth noting that institutions were asked to deliver the curriculum exactly as it was designed and our implementation research suggests that for the most part institutions respected this directive. These results may also indicate the importance of having a lead institution to ensure the consistent delivery of the program across the province. Our implementation research suggests that Douglas College provided considerable coaching and on-going support to the participating institutions throughout the program. Overall, the results suggest that this type of model has the potential to be a cost-effective approach to reaching larger numbers of lower skilled workers. The role of the curriculum in ensuring high-quality delivery is further discussed in the Implementation Report.

5. Positive outcomes for employers

Follow-up interviews were conducted with 45 employers. Together these employers had 201 employees who participated in the training. The majority of employers that were interviewed six to eight weeks after the training was highly satisfied and indicated that the training met or exceeded expectations.

Employers were asked whether they would rather have training for one more employee or varying amounts of cash to invest in their business. In general, most employers indicated a preference for training an additional employee over receiving significant amounts of money for their business. Almost two-thirds preferred training over receiving at least \$200, half preferred training over receiving more than \$500, and about one in five preferred training over receiving \$1000 or more for their business.

Interestingly, employers' perceived utility and satisfaction with the training were strongly linked with their perceived monetary value of the training. For example, 72% of employers who strongly agreed that they would recommend the training to new hires preferred training over receiving more than \$500, compared to only 32% of those who agreed and 20% of those who were neutral. Similarly, 55% of employers who rated the training as excellent or very good preferred to have an additional employee trained than receive more than \$500, compared to only 20% of those who rated it good or fair.

In terms of performance, almost 60% of employers who said that all or most of their trainees had improved in all four performance areas reported a preference for training for an additional employee over receiving more than \$500 for their business, compared to only 27% of employers who said their trainees had improved in three or fewer performance areas.

There was a tendency for employers from medium and large firms to place a higher monetary value on the training than those from small firms.

Most impressively, employee self-rated performance was linked with employer perceived training value. Among employers for whom more than half of their trainees reported improvement in all four performance areas, 58% preferred training an additional employee over receiving more than \$500, compared to only 23% of employers for whom half or fewer of their trainees reported improvement in all four areas.

This result establishes a chain of evidence from skill gains (especially non-cognitive skill gains) to employee-reported gains in job performance to employer perceived monetary value of the training.

APPENDIX A – MEASURING OUTCOMES OF INTEREST

How employee immediate and intermediate essential skills outcomes were measured

Outcome	Outcome indicator	Source
Immediate outcome (responses from feedback and follow-up surveys)		
Satisfaction and utility	<p>The extent to which the learner is satisfied with the training and found it useful. Learner responses indicating level of agreement with feedback and one month follow-up survey items:</p> <ul style="list-style-type: none"> • I would recommend training (feedback and follow-up) • I am strongly motivated to apply new skills (feedback) • Believe training will /has enhanced my job performance (feedback and follow-up) • Overall quality of training (feedback and follow-up) <p>Each item is rated on a likert scale from 1 (strongly disagree) to 5 (strongly agree)</p>	<ul style="list-style-type: none"> • Adapted from satisfaction and utility items commonly used in the private sector workplace training literature
Intermediate outcomes – Essential Skills (TOWES test scores)		
Document use	<p>Document use subscale scores on the Test of Workplace Essential Skills (TOWES) both pre- and post-training</p> <p>The document use subscale score ranges from 0 (bottom of level 1) to 500 (top of level 5)</p>	<ul style="list-style-type: none"> • TOWES Snapshot from Bow Valley College
Numeracy	<p>Numeracy subscale scores on the TOWES both pre- and post-training</p> <p>The document use subscale score ranges from 0 (bottom of level 1) to 500 (top of level 5)</p>	<ul style="list-style-type: none"> • TOWES Snapshot from Bow Valley College
Intermediate outcomes – Non-cognitive skills (responses from input, feedback, and follow-up surveys)		
Attitudes towards learning	<p>The extent to which the learner values learning itself. Learner responses indicating level of agreement with survey items:</p> <ul style="list-style-type: none"> • Learning new things makes me more confident • Getting qualifications takes too much effort • I am more likely to get a better job if I do some learning <p>Each item is rated on a likert scale from 1 (strongly disagree) to 5 (strongly agree)</p>	<ul style="list-style-type: none"> • The evaluation battery of the Skills for Life program, a long-term program introduced by the UK government to improve literacy, numeracy, and communication

How employee intermediate work related skill outcomes were measured

Outcome	Outcome indicator	Source
Intermediate outcomes – Non-cognitive skills (responses from input, feedback, and follow-up surveys) (continued)		
Future orientation	<p>The extent to which the learner is willing to defer immediate benefits in order to receive additional rewards down the road. Future orientation has been linked to conscientiousness which in turn is strongly linked to many positive work outcomes. We measured this skill by drawing on five items from the Adapted Zimbardo Time Preference Inventory. Learner responses indicating level of agreement with survey items:</p> <ul style="list-style-type: none"> • Meeting tomorrow's deadlines and doing other necessary work comes before tonight's play (e.g., before recreation or relaxation) • Since whatever will be, will be, it doesn't really matter what I do (i.e., I can't affect the future) • You can't really plan for the future because things change so much • I make decisions on the spur of the moment (i.e., with little thought) • Generally, I am more focused on what is going on now than on what will happen in the future <p>Each item is rated on a likert scale from 1 (strongly disagree) to 5 (strongly agree)</p>	<ul style="list-style-type: none"> • Zimbardo, P. (1990). Stanford Time Perspective Inventory. Department of Psychology, Stanford University, Stanford, California.
Motivation and engagement in work	<p>The extent to which the learner feels motivated on the job and feels engaged in their work. Learner responses indicating level of agreement with survey items:</p> <ul style="list-style-type: none"> • On the whole, I believe I do a good job • I believe that what I do at work is important and useful • In my job I'm focused on learning and improving more than I am on competing and being the best • I try to plan out the things I have to do in my job • In my job, I use my time well and arrange my work area so that I can work under the best conditions • I persist in my job even when it is challenging or difficult • I get quite anxious in my job • I don't think I have much control over how well I do in my job • If I work hard in my job it's usually to avoid failing or disapproval from my boss or colleagues • I find I sometimes reduce my chances of doing well in my job (e.g., waste time, not try hard, procrastinate) <p>Each item is rated on a likert scale from 1 (strongly disagree) to 5 (strongly agree)</p>	<ul style="list-style-type: none"> • Martin, A. J. (2009). Motivation and engagement in the workplace: Examining a multidimensional framework from a measurement and evaluation perspective. <i>Measurement and Evaluation in Counseling and Development</i>, 41, 223-243.
Self-esteem	<p>The extent to which the learner feels they are confident. We measured this skill by drawing on a single item from the Single-item Self-Esteem Scale. Learner responses indicating level of agreement with item:</p> <ul style="list-style-type: none"> • I see myself as someone who has high self-esteem (i.e., self-confidence) <p>This item is rated on a likert scale from 1 (strongly disagree) to 5 (strongly agree)</p>	<ul style="list-style-type: none"> • Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single item measure and the Rosenberg Self-Esteem scale. <i>Personality and Social Psychology Bulletin</i>, 27, 151–161.

How employee intermediate performance outcomes were measured

Outcome	Outcome indicator	Source
Intermediate outcomes – Performance (responses from feedback survey)		
Performance	<p>The extent to which the learner reports improvement in 4 key performance areas related to their sector on the feedback survey.</p> <p>Retail: Customer engagement Actively listening to customers Matching products to customer needs and suggesting the complete solution Attitude of excellence (including sense of ownership, service, initiative, professionalism, and commitment)</p> <p>Food and Beverage: Basic service elements Sales strategies Exceeding guest expectations Attitude of excellence</p> <p>Grocery: Customer engagement Actively listening to customers Assisting the customer Attitude of excellence</p> <p>Learners indicate whether they feel they have improved in each area. The performance indicator reflected the number of performance areas that learners reported having improved in.</p>	<ul style="list-style-type: none"> Industry experts identified key performance areas by sector. Appropriate items were constructed by SRDC to measure learner reported performance improvement in these areas.

How employer outcomes were measured

Outcome	Outcome indicator (responses from employer interview)	Source
Satisfaction and utility	<p>Employers/managers responses indicating level of agreement with the following interview items:</p> <ul style="list-style-type: none"> • What employees have learned from the training has enhanced their job performance • I would strongly recommend the training to all my new hires • Overall quality of the training rating <p>The first two items are rated on a likert scale from 1 (strongly disagree) to 5 (strongly agree). The quality item is rated on a likert scale from 1 (poor) to 5 (excellent).</p>	<ul style="list-style-type: none"> • Adapted from satisfaction and utility items commonly used in the private sector workplace training literature
Performance	<p>Employers indicate whether they feel they have improved in each area (areas align with performance areas that employees were asked about – see previous slide). An employer reported performance indicator reflected two groups of employers: those who reported their staff had improved on all four key areas versus those who did not.</p>	<ul style="list-style-type: none"> • Industry experts identified key performance areas by sector. Appropriate items were constructed by SRDC to measure employer reported performance improvement in these areas.
Perceived value of training	<p>The dollar value that employers attached to the training. A ‘revealed preferences’ approach was taken asking employers to make a series of decisions which included choices between progressively larger amounts of money for their businesses (in the form of a cheque) versus the opportunity to have an additional employee participate in training at no additional cost after the pilot program window had closed. Before making their decisions, employers were told that at the end of the interview they would have a 1 in 10 chance of one of their choices being selected at random and honoured. Not knowing whether and which choice might be selected meant that all of the choices involved potentially real stakes, providing employers with a strong incentive to reveal their true preference for each choice. By progressively varying the amount of money offered in each decision, and noting the maximum amount at which employers chose training, we were able to gauge the dollar value employers placed on the training their employees had received. Employers were offered monetary options starting from \$200 and increasing in \$100 amounts up to \$1200, or training for one additional employee that included a \$500 stipend to be paid to that employee.</p>	<ul style="list-style-type: none"> • SRDC constructed these items using the revealed preference approach, an innovative approach that has been used by behavioural economists to compare the influence of policies on consumer behaviour.

APPENDIX B – CUSTOMER SERVICE OBSERVATIONS

Developing an observational approach to measuring on-the-job performance

A key link in the causal chain to establishing a business case for essential skills training is that the training actually changes on-the-job performance. It is often challenging to measure changes in actual business results, however, for a number of reasons including lack of performance tracking data at the employee level, as well as other factors that can affect results such as economy and seasonality. In the main study itself, we used employee self-reports of performance improvement, as well as employer ratings of employee performance. In this outcomes evaluation, we also wanted to explore another way to measure performance improvement of employees that would potentially be more objective and rigorous than employee and employer (self-) reports. Working closely with Douglas College, we piloted an observational methodology, in which an employee's performance was assessed on-the-job in a real world setting by a third-party assessor using a standardized observation process and measurement tool. This is a particularly innovative approach in the context of workplace skills training and we aimed to explore its feasibility through a test pilot study.

As this was a pilot, Douglas College used members of its own staff (who were not directly involved with the WTP) as observers or assessors, and targeted learners within their own institution as a convenience sample. Douglas College requested participation and consent from select employers who participated in the program to observe their employees in their workplace. In total, Douglas College assessors observed 27 employees at both points pre- and post-training. This provides a good case study to understand implementation processes but the sample is not large enough for its results to be reliable. Note that the number of employees, who had been observed in pre-training had initially been n=66. The decrease in the sample was due to scheduling conflicts and employer attrition in the study.

After the observations, SRDC conducted a mini-group session among 3 assessors to provide feedback on the approach and overall process.

This section outlines the observational methodology in greater detail and provides a discussion of its strengths and weaknesses and whether it is a viable option to consider for future workplace training research studies.

Developing an observational approach to measuring on-the-job performance

Observational approach

At the beginning of the research study, Douglas College asked SRDC to test the feasibility of using a pre- and post-design to observe changes in the on-the-job performance of employees who participated in the training.

SRDC advised Douglas College that designing a valid observation tool would require a number of steps to ensuring that the tool measured what it was intended to measure and that it was sensitive enough to detect small changes in performance before and after the training. Given that Douglas College had a number of more practical concerns about whether it was even feasible to use such an approach, it was decided that for this project the focus would be on testing the feasibility of this approach. If the approach turned out to be feasible, further research could focus on validating the tool.

Douglas College also decided that given the experimental nature of this approach, that observational tool would only be piloted at workplaces associated with Douglas College. The other partnering institutions would not be asked to participate. Douglas College created a team of individuals pulled from existing staff who were trained by SRDC to use the tool.

Designing an observational measurement tool

SRDC started the design process by working in collaboration with Douglas College's instructional design team to create standardized scenarios for each sector that would allow employees to demonstrate their skills. For instance, the observation process for a retail store was as follows:

1. Pick up item and proceed to target employee
2. Greet employee and ask for help
3. Allow opportunity for employee to ask questions
4. Ask question ambiguous enough to require employee to clarify/confirm what was said
5. Complete the observation form immediately after the observation has occurred in a location removed from the establishment

Developing an observational approach to measuring on-the-job performance

SRDC ensured that the tool used the same key performance categories that were measured through the survey research and were taught in the curriculum (see Section 6D – Business results). Next, SRDC worked with Douglas College to develop behavioural criteria for each category that was aligned with specific strategies that were taught in the training curriculum. For instance, as seen below, customer engagement was identified as a key performance area targeted in the curriculum for retail employees. In this category, the key behavioural criteria for effective customer engagement included: made eye contact, smiled, and greeted you; allowed you to take the lead in the interaction; and, asked one or more open-ended questions to identify need. The employee was then rated on a 5-point scale to determine the extent to which the employee used each behavioural strategy they learned in training.

The form was designed to be clear and easy-to-use taking into account the observational method. Feedback from a few of the assessors indicated the tool was effective in meeting these design objectives.

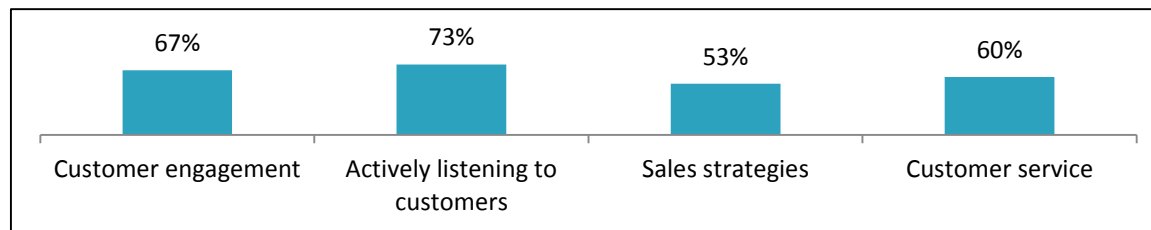
	Behavioral Criteria	Did this occur?		Scoring Criteria	How well did the employee meet the criteria: circle the appropriate score
		Yes	No		
Engaged you	a. Made eye contact, smiled, and greeted you* b. Allowed you to take the lead in the interaction (did not pressure you before you were ready) c. Asked one or more open-ended questions to identify need	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	1 = Did NOT engage you at all 2 = Engagement occurred and/or questions asked, but met NONE of criteria 3 = Met only 1 of the 3 criteria 4 = Met only 2 of the 3 criteria 5 = Met all 3 criteria	1 2 3 4 5

Developing an observational approach to measuring on-the-job performance

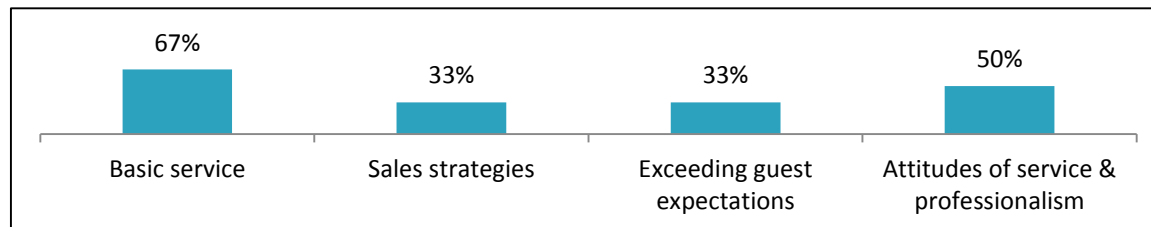
Analytical approach and sample results

Employee pre-training scores were compared to their post-training scores to see if they had made observable improvement in customer service by using the strategies they had been taught in training. Results from the small subsample of employees (27) who were observed both before and after training suggest that more than half of retail employees and more than a third of food and beverage employees improved on all key performance areas. The majority of grocery employees improved in customer service. Given the small sample and uncertainty about the validity and reliability of the tool, results are presented for illustrative purposes only.

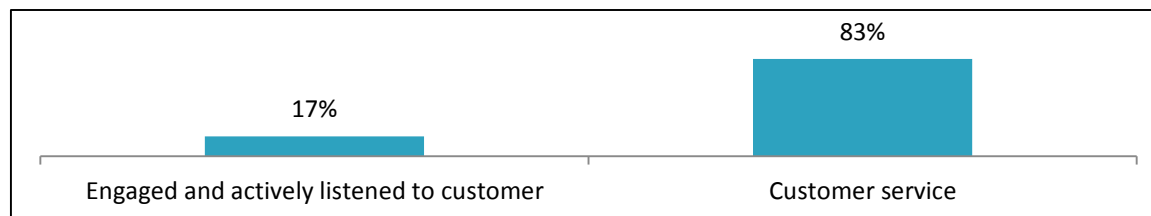
RETAIL (N=16)
Percentage of
observed employees
that improved in
customer service



FOOD AND BEVERAGE (N=4)
Percentage of
observed employees
that improved in
customer service



GROCERY (N=7)
Percentage of
observed employees
that improved in
customer service



Discussion on the feasibility of the observational approach

There are a number of inherent benefits to using an observational approach to measuring job performance. As the observation is natural and the employer and employee are unaware of when it is occurring, there is no additional response burden. Observing employees in their natural environment has the potential to have good external validity because it is taking place in a real-world work situation and thus reflects an employee's actual performance. And the use of assessors provides a level of objectivity that cannot be obtained by research participants in their own ratings. There are also clear advantages to using a tool with performance categories that are used in the surveys among employers and employees, as the results can be a strong validation point in the triangulation of research findings. Indeed, there is an indication that the results of the small pilot sample of $n=27$ reflects the same positive changes from pre-training to post-training in job performance that were reported by employees and their employers. The greatest added value to the observational approach is the level of depth of measurement in using behavioural criteria within each of the categories that align with specific strategies that were taught in the training curriculum. This can be a very effective approach in measuring the impact of actual classroom teaching on performance on-the-job in real life situations. Assessor bias should be noted as a key inherent issue with an observational method. However, in a well-designed research study, this can be mitigated to a great extent by the use of third-party assessors who are well-trained and use well-designed standardized scenarios. It is also critical to conduct thorough inter-coder reliability tests before going fully into field to ensure consistency of measurement.

The pilot study provides a good reference point to support the argument that an observational approach is a viable research method that can add great value to a mixed method research program. However, the pilot also indicates there can be a number of resource and logistical factors that come into play that can affect the quality of the research execution when assessing the feasibility of this approach. A study of this nature is quite labour and therefore, cost intensive, requiring dedicated personnel for communications, scheduling, and logistics throughout the phase of the study. There are also costs associated with the hiring and training of a team of assessors, and for conducting inter-coding reliability tests to ensure quality control and consistency.

Discussion on the feasibility of the observational approach

Other miscellaneous costs may also include providing for meals when observing employees in restaurant settings, and travel and accommodation for assessors, depending on the geographical range of the study.

Assessors from the pilot study also noted a number of other logistical factors, and in some cases provided feedback and suggestions that should be taken into consideration in the set-up and design of an observational study including:

- Employer attrition – assessors noted scheduling issues but also that employers were difficult to reach. Attrition can be an issue – incentives as tokens of appreciation for employers or other strategies could be considered to increase response levels.
- Timing issues – there was a tight window between when target employees took pre-training TOWES and were identified as being eligible, and the start of the training. The employer also had to pass on employee schedules in timely manner before pre-observations could be conducted. These factors resulted in the inability to schedule certain pre-training observations resulting in a reduced sample.
- Difficulties identifying employees – identification of employees targeted for observations is a constant challenge that required the assessor to think on their feet.
- Difficulties ensuring the assessor was served by the target employee – Even when an employee was correctly identified, there were cases when the observer was served by a different employee so the observation could not be conducted thoroughly. This was a particularly significant issue in the restaurant sector.
- Scheduling larger number of observations at one location – to save costs and time sometimes raised suspicion among employees and may have ‘blown the cover’ of the assessors.

This discussion highlights the benefits of using observational research in workplace training studies – the approach provides data at a level of depth and objectivity that cannot be attained from simple surveys among employees and employers alone. However, key concerns such as logistical and resource issues and resulting cost implications pose challenges to proper and full implementation of such a methodology. As noted, however, there is considerable value in using observations as one method within a mixed-method research program. The pilot study indicates that this approach has the potential to be a worthwhile investment to help inform the overall research and to provide a deeper level of nuance to research findings.

Customer Service and Sales Observation Form – Retail

	Behavioral Criteria	Did this occur?		Scoring Criteria	How well did the employee meet the criteria: circle the appropriate score
		Yes	No		
Engaged you	a. Made eye contact, smiled, and greeted you* b. Allowed you to take the lead in the interaction (did not pressure you before you were ready) c. Asked one or more open-ended questions to identify need	<input type="checkbox"/>	<input type="checkbox"/>	1 = Did NOT engage you at all 2 = Engagement occurred and/or questions asked, but met NONE of criteria 3 = Met only 1 of the 3 criteria 4 = Met only 2 of the 3 criteria 5 = Met all 3 criteria	1 2 3 4 5
Actively listened to you	a. Used eye contact and appropriate facial expressions and gestures* b. Communicated understanding of your need by clarifying, confirming, or summarizing what you said c. Responded to your question either by answering or finding someone else to answer	<input type="checkbox"/>	<input type="checkbox"/>	1 = Did NOT indicate that they heard you 2 = Indicated they heard you but met NONE of criteria 3 = Met only 1 of the 3 criteria 4 = Met only 2 of the 3 criteria 5 = Met all 3 criteria	1 2 3 4 5
Matched product to need Suggested complete solution	a. Presented option that matched need b. Explained how product matched need by describing features and benefits c. Suggested other item(s) that complement the product	<input type="checkbox"/>	<input type="checkbox"/>	1 = Suggestion was NOT made 2 = Made suggestion but met NONE of criteria 3 = Met only 1 of the 3 criteria 4 = Met only 2 of the 3 criteria 5 = Met all 3 criteria	1 2 3 4 5
Provided excellent customer service	a. Communicated in a professional way (i.e. used appropriate language and tone)* b. Appeared to take a genuine interest in helping you/providing information or advice c. Matched their service to your personality style	<input type="checkbox"/>	<input type="checkbox"/>	1 = Was NOT professional or helpful at all 2 = Was somewhat professional/helpful, but met NONE of criteria 3 = Met only 1 of the 3 criteria 4 = Met only 2 of the 3 criteria 5 = Met all 3 criteria	1 2 3 4 5

* All elements have to occur in order to check the "yes" box acknowledging that this criterion was met.

Customer Service and Sales Observation Form – Food and Beverage

	Behavioral Criteria	Did this occur?		Scoring Criteria	How well did the employee meet the criteria: circle the appropriate score
		Yes	No		
Basic Service Elements	a. Made eye contact, smiled and greeted you on initial contact* b. Asked open-ended & close-ended questions to identify desire/need c. Demonstrated strong product knowledge when answering questions regarding specials and menu items	<input type="checkbox"/>	<input type="checkbox"/>	1 = Did not provide basic service at all 2 = Provided some elements of service, but met NONE of the criteria 3 = Met only 1 of the 3 criteria 4 = Met only 2 of the 3 criteria 5 = Met all 3 criteria	1 2 3 4 5
Sales Strategies	a. Took your order correctly (i.e. 1. repeated your order back to you; 2. reiterated details of order as it was being delivered; 3. returned to perform a quality check – e.g. “is everything alright with your meal”)* b. Used appealing, descriptive language to describe menu items c. Tried to <u>upsell</u> and/or suggestive sell products (e.g. suggested gravy for fries, appetizers & desserts etc.)	<input type="checkbox"/>	<input type="checkbox"/>	1 = Used no sales strategies at all and/or did not get your order right 2 = Provided some elements of sales and got your order right, but met NONE of the criteria 3 = Met only 1 of the 3 criteria 4 = Met only 2 of the 3 criteria 5 = Met all 3 criteria	1 2 3 4 5
E² Strategies	a. Anticipated guest needs – provided service or products before the guest had to ask (e.g. refills, dessert menu) b. Engaged guest by discussing 1 or more subjects that were not related to the menu, other than the weather (e.g. what plans the guest had for the rest of the day) c. Guests were thanked and invited back at the conclusion of their dining experience*	<input type="checkbox"/>	<input type="checkbox"/>	1 = Did not exceed your expectations in any way 2 = Exceeded your expectations in at least one way, but met NONE of the criteria 3 = Met only 1 of the 3 criteria 4 = Met only 2 of the 3 criteria 5 = Met all 3 of the criteria	1 2 3 4 5
	Bonus: Did something special for the guest	<input type="checkbox"/>	<input type="checkbox"/>	Examples of bonus behavior include: wrote a special note on back of bill about topic of conversation (“Hope you enjoy your stay in Vancouver”); brought product samples for guest to try, gave guest free appetizer card, etc. If bonus behavior occurred, describe the behavior in the comments box.	
Attitudes of Service & Professionalism	a. Had a neat and tidy appearance b. Communicated in a professional way (i.e. used appropriate language and tone)* c. Appeared to take a genuine interest in helping you/providing information or advice	<input type="checkbox"/>	<input type="checkbox"/>	1 = Was NOT professional or helpful at all 2 = Was somewhat professional/helpful, but met NONE of the criteria 3 = Met only 1 of the 3 criteria 4 = Met only 2 of the 3 criteria 5 = Met all 3 criteria	1 2 3 4 5

* All elements have to occur in order to check the “yes” box acknowledging that this criterion was met.

Customer Service Observation Forms – Grocery

	Behavioral Criteria	Did this occur?		Scoring Criteria	How well did the employee meet the criteria: circle the appropriate score
		Yes	No		
Engaged you	a. Made eye contact, smiled, and greeted you* b. Allowed you to take the lead in the interaction c. Stopped other tasks and attended to you in a timely manner	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	1 = Did NOT engage you at all 2 = Engagement occurred and/or questions asked, but met NONE of criteria 3 = Met only 1 of the 3 criteria 4 = Met only 2 of the 3 criteria 5 = Met all 3 criteria	1 2 3 4 5
Actively listened to you	a. Used eye contact and appropriate facial expressions and gestures* b. Communicated understanding of your need by clarifying, confirming, or summarizing what you said c. Responded to your question either by answering or finding someone else to answer	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	1 = Did NOT indicate that they heard you 2 = Indicated they heard you but met NONE of criteria 3 = Met only 1 of the 3 criteria 4 = Met only 2 of the 3 criteria 5 = Met all 3 criteria	1 2 3 4 5
Matched product to need	a. Presented options that matched needs b. Explained how product matched need by describing features and benefits c. Suggested other item(s) that complement the product	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	1 = Suggestion was NOT made 2 = Made suggestion but met NONE of criteria 3 = Met only 1 of the 3 criteria 4 = Met only 2 of the 3 criteria 5 = Met all 3 criteria	1 2 3 4 5
Provided excellent customer service	a. Communicated in a professional way (i.e. used appropriate language and tone)* b. Appeared to take a genuine interest in helping you/providing information or advice c. Matched their service to your shopper style	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	1 = Was NOT professional or helpful at all 2 = Was somewhat professional/helpful, but met NONE of criteria 3 = Met only 1 of the 3 criteria 4 = Met only 2 of the 3 criteria 5 = Met all 3 criteria	1 2 3 4 5

* All elements have to occur in order to check the "yes" box acknowledging that this criterion was met.

	Behavioral Criteria	Did this occur?		Scoring Criteria	How well did the employee meet the criteria: circle the appropriate score
		Yes	No		
Engaged and Actively listened to you	a. Made eye contact, smiled, and greeted you* b. Stopped doing their other tasks in order to respond to your question c. Responded to your question either by answering or finding someone else to answer	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	1 = Did NOT engage you at all 2 = Indicated they heard you but met NONE of criteria 3 = Met only 1 of the 3 criteria 4 = Met only 2 of the 3 criteria 5 = Met all 3 criteria	1 2 3 4 5
Provided excellent customer service	a. Communicated in a professional way (i.e. used appropriate language and tone)* b. Appeared to take a genuine interest in helping you/providing information or advice c. Asked if you needed any other assistance	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	1 = Was NOT professional or helpful at all 2 = Was somewhat professional/helpful, but met NONE of criteria 3 = Met only 1 of the 3 criteria 4 = Met 2 of the 3 criteria 5 = Met all 3 criteria	1 2 3 4 5

Two separate forms were developed for different categories of grocery employees:

1. Grocery service
2. Cashiers and shelf stockers

Retail Grocery Service Observation Form

Retail Grocery Cashier or Shelf Stocker Observation Form



DOUGLAS COLLEGE

OUTCOMES REPORT FOR THE WORKPLACE TRAINING PROGRAM, BRITISH COLUMBIA



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