



Canadian Apprenticeship Forum
Forum canadien sur l'apprentissage

IT PAYS TO HIRE AN APPRENTICE:

*Calculating the Return on
Training Investment for
Skilled Trades Employers
in Canada*

A Study of 16 Trades
Phase II

EXECUTIVE SUMMARY

June 2009

Acknowledgements

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The opinions expressed in this research document do not necessarily represent the views or official policies of the CAF-FCA or other agencies or organizations that may have provided support, financial or otherwise for this project.

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A Study of 16 Trades Phase II FINAL REPORT

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Forum canadien sur l'apprentissage (CAF-FCA)

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Executive Summary

Introduction

What are the benefits of apprenticeship training for an employer? Can a financial return be calculated? Does the investment support an employer's bottom line? These are the main research questions that prompted the Canadian Apprenticeship Forum–Forum canadien sur l'apprentissage (CAF-FCA) to complete this study. To answer these questions CAF-FCA asked almost 1,000 employers in 16 different trades in a variety of sectors to fill in a survey on the costs and benefits of apprenticeship training. The results show that there is a positive return for those employers that invest in apprenticeship training.

This report will be of interest to industry. Trade-specific data is provided with a detailed breakdown of the costs and benefits of apprenticeship training as well as the average benefit for each trade. Employers, employer associations, and Sector Councils supported the collection of this additional data. Employers did say that they would consider this data when making a decision about whether or not to hire an apprentice.

Apprenticeship stakeholders who talk to employers about the value of investing in apprentices will also be interested in this report's findings. This information dispels myths that apprenticeship training has little or no financial benefit. This study confirms that the benefits of apprenticeship training outweigh the costs, especially when one considers the gains to overall business performance.

Research Highlights

The main findings from this study reveal there is a strong business case for apprenticeship.

- Data from almost 1000 employers across Canada was obtained as a part of the research. This data set surpasses any previous study of this type in Canada.
- Employers receive a return when they invest in apprentices. For every \$1 spent on apprenticeship training, an employer receives a benefit, on average, of \$1.47 or a net return of \$0.47.
- Analysis over the four-year apprenticeship indicates a net benefit ranging from \$39,524 (Cook) to \$245,264 (Heavy Duty Equipment Mechanic)
- The largest monetary net benefits accrue to employers who train an apprentice in trades such as heavy-duty equipment mechanics (\$245,264); automotive service technicians (\$173,122); and construction millwright and industrial mechanics (\$148,985). In these trades, the revenue generated by an apprentice far exceeds the total training costs.
- Detailed analysis for 3 trades shows there is a return for all regions across the country and for all sizes of business.
- The net benefit of apprenticeship training increases in each year over the course of the apprenticeship period.

- The revenue generated by apprentices increases throughout the apprenticeship.
- Employers noted their journeypersons benefit from having an apprentice.
- The majority of employers believe a “home-grown” journeyperson who they trained as an apprentice is more productive. Employers estimated that a “homegrown” journeyperson is 29% more productive.
- Additional benefits to hiring apprentices include having employees which are a better fit with the organization and reduced risk of skills shortages.
- Employers were evenly split in terms of whether they view a poaching risk from other employers to be a very serious issue
- 14% of employers who hired journeypersons in one of the sixteen trades, but did not hire apprentices, indicated that they would be willing to hire an apprentice, except that there were few or no apprentices applying to their organization.
- When asked if anything would motivate them to hire apprentices, about half of the employers without apprentices said yes there was something that would motivate them. 30% indicated that they would hire apprentices if they could find them, suggesting that perhaps a number of employers are having difficulty getting access to apprentices.

Employers receive a benefit, on average, of \$1.47 for every \$1 invested in apprenticeship training. This is up 9 cents since the 2006 pilot study!

Industry supported the completion of this additional return on training investment research. After the 2006 pilot was complete, employers said they wanted to see more trade-specific results. Others were interested in gathering data for new trades. Employers noted they would use this information when making a decision about whether or not to hire an apprentice.

Background

Given the anticipated shortages of skilled workers, reducing the barriers to apprenticeship and increasing investment in apprenticeship are critical. The findings of a 2004 study commissioned by the Canadian Apprenticeship Forum – Forum canadien sur l’apprentissage (CAF-FCA) indicated that employers perceive the cost of apprenticeship as a major barrier to apprenticeship training.¹ In order to more fully explore the extent to which apprenticeship represented a cost to employers, the CAF-FCA commissioned R.A. Malatest & Associates Ltd. and the Conference Board of Canada in 2006 to complete a landmark study, “Apprenticeship Building a Skilled Workforce for a Strong Bottom Line, Return on Apprenticeship Training Investment for Employers, A Study of 15 Trades, June 2006.” The results of this study indicated there was a positive net return of apprenticeship training. In fact, employers from all trades, except three, showed a positive net return in the first year of the apprenticeship.

¹ Canadian Labour and Business Centre (2004), Accessing and Completing Apprenticeship Training in Canada: Perceptions of Barriers.

Objectives and Scope of Study

To gain a more comprehensive understanding of the return on apprenticeship training investment to employers, CAF-FCA commissioned R.A. Malatest & Associates Ltd. to assess the costs and benefits of apprenticeship training. The overall objectives of this research were:

- to determine the overall costs incurred by employers in hiring and training apprentices using the same methodology used in 2006 for ten trades included in the 2006 pilot study as well as six additional trades,
- to build on the dataset developed in 2006 by surveying a sample of employers who participated in the 2006 pilot study to update their data and,
- to examine reasons why employers do not employ apprentices by surveying employers who employ journeypersons in the sixteen trades of interest for the current study, but who have not hired an apprentice in the past three years.

Data was collected through a national survey of employers across sixteen trade areas, which was administered by R.A. Malatest & Associates Ltd. from June to November 2008. The survey instrument was initially developed by Prism Economics and Analysis and subsequently modified by R.A. Malatest & Associates Ltd. in 2006, in consultation with CAF-FCA, to ensure that it would capture the information required to conduct a detailed cost-benefit analysis.

The 2008 research builds on the results of the pilot study completed in 2006 by R.A. Malatest & Associates Ltd., and is intended to deepen

the results from the original study for ten trades areas:

- Automotive Service Technician,
- Bricklayer,
- Construction Electrician,
- Construction Millwright and Industrial Mechanic,
- Cook,
- Heavy-Duty Equipment Technician,
- Machinist,
- Motor Vehicle Body Repairer,
- Refrigeration and Air Conditioning Mechanic, and
- Sheet Metal Worker.

In addition, information was collected for six new trades not covered in the pilot. This information was collected to broaden the business case for apprenticeship. These six new trades included:

- Boilermaker,
- Cabinetmaker,
- Electrical Power Line and Cable Worker,
- Hairstylist,
- Plumber, and
- Partsperson.

Data from over 784 employers across Canada was obtained as a part of the new research. This data set surpasses any previous study of this type in Canada. This additional data confirms once again there is a strong business case for apprenticeship!

The information was provided by:

- 784 new employers who participated in Phase II of the project,
- 106 employers who completed a survey in the 2006 who updated their information in 2008, and
- 1,163 employers with journeypersons in one of the sixteen trades of interest who do not employ apprentices.

Research Considerations

Here are some things to keep in mind when reviewing the results:

- The results are based on averages across all employers and may not necessarily reflect the costs and benefits of apprenticeship training on an employer-by-employer basis.
- While the data at the national level can be viewed with confidence given the participation of over 700 employers, the limited number of employer completions for some trades suggests that, in these cases, trade-specific data should be interpreted with caution. During the sample selection process, it was difficult to identify employers who hire apprentices in trades with a relatively small workforce. For example, the number of workers employed in the Boilermaker (3,830) and Power Line Technician (11,700) trades is significantly lower than the combined average employment of 63,601 of the fourteen remaining trades.² In addition, there were significant difficulties identifying Partsperson apprentices,

even with the 21,020 employers that were contacted. As a result, the sample sizes for the Boilermaker and Partsperson trades are below the minimum target of twenty employers. Caution should therefore be exercised when looking at these results.

- Although the costs associated with apprenticeship training are generally quantifiable, the benefits are more difficult to measure. A part of the survey given to employers was designed to capture qualitative benefits derived from apprenticeship training. Keep in mind employers provided their subjective assessments when they were filling in that part of the survey.
- The economic climate in which the survey was undertaken differs considerably from the current economic climate. For example, the bulk of the data collection occurred in the spring and summer of 2008 at a time when Canadian unemployment was very low, world oil prices were at record levels, and there was a general shortage of journeypersons across Canada. Since that time, there has been considerable decline in economic activity, higher unemployment, and increased competition in the market place. At this point, it is unclear as to whether or not the economic downturn will have an impact on the economic returns associ-

² National Occupational Classification for Statistics 2006 (720), Provinces, Territories, Census Metropolitan Areas and Census Agglomerations, 2006 Census - 20% Sample Data.

ated with apprenticeship. While employers have cited a decline in charge-out rates, other employers contacted as part of recent validation sessions noted that they had also witnessed a slight decline in wage rates, but, more importantly, increased quality in the caliber of individuals who were now pursuing apprenticeship training. This could imply that returns could be higher in periods of slower economic growth due to the increased quality of individuals available for apprentice positions.

- It is also important to keep in mind that even though Canada is experiencing an economic downturn during the present time, analysts still predict that Canada will not have enough skilled journeypersons to meet future shortages when the baby boomers retire. The importance of investing in apprenticeship is still a message that needs to be communicated.

Validation Roundtables

R.A. Malatest & Associates Ltd. and CAF-FCA facilitated a series of roundtables across Canada in early 2009 with employers to determine if any significant costs and benefits of apprenticeship training had been excluded from the methodology.³ One roundtable was held with employers representing Automotive Service Technicians and another session was held with employers representing Construction Electricians. A third session was conducted with Cabinetmakers. For each of the employer roundtable sessions, R.A. Malatest

³ Roundtables were held in Edmonton Alberta (construction electricians) and Vancouver BC (automotive service technicians) and Calgary Alberta (Cabinetmakers).

Promising Practices in the Economic Downturn

Many employers are trying to keep their apprentices during the economic downturn. They know from experience that when the economy picks up again they will need skilled workers. Some promising employer practices include:

- Cross-training apprentices so they have the capacity to work on a wider range of projects.
- Working with stakeholders including clients, managers, journeypersons, and unions to ensure, if possible, apprentices continue to be trained, even though the number of projects may be decreasing.
- Communicating with apprentices about their training options. Using the downturn, for example, to complete technical training is one option.

& Associates Ltd. presented the trade-specific cost-benefit results. Employers for the most part said that the costs and benefits were accurately captured in the study. Employers generally agreed that there was a positive net return associated with the training of apprentices.

Cost-Benefit Model

The cost-benefit model is based on a standard cost-benefit analysis for a single firm that hires apprentices. Net benefits and costs are calculated on a per apprentice, per year of apprenticeship basis. The cost and benefit components are detailed in the following sections.

Cost Components

Wages and Benefits

Wages and Benefits includes base pay and non-compulsory and compulsory benefits such as Workers Compensation, Employment Insurance, and Canada Pension Plan.

Opportunity Costs

Opportunity costs include costs related to the resources that apprentices draw from the organization as part of their training process. Opportunity costs associated with journey-person time and wastage were included in the model. Wastage was defined as the material costs associated with any mistakes made by the apprentices. The time required to correct the mistake was also included. The costs were estimated on a per apprentice, per year basis. In each situation, an attempt was made to price these factors and to determine the scale of their usage by apprentices.

Disbursements

Disbursements refer to costs incurred by the employer related to the ongoing training and development of apprentices, such as registration fees and wages during in-school training.

Administration

An estimate of the costs associated with the administering of apprenticeships was made. These costs included filling in the appropriate paperwork. These costs were allocated on a per apprentice basis.

Benefit Components

Revenue Generated by Apprentice

Using employer-supplied data on charge-out or mark-up rates and the total annual chargeable hours of work, an estimate was made of the average revenue associated with each apprentice.

It should be noted however, that while many employers could easily compute a “charge-out” rate for their apprentices and, hence, develop an estimate of the revenue that would be derived from the apprentice, some employers had more difficulty in estimating a charge-out rate. For example, among employers of Cooks and Partspersons, employers were unable to provide an estimate of the charge-out rates of the apprentices. For these trades, the consultant utilized a “mark-up” rate based on the journey-person wage rate. As a result, caution should be exercised in the interpretation of results for these two trades.

The cost-benefit model used tried to accurately capture the variety of costs and benefits associated with apprenticeship training. The methodology used has generated interest in Switzerland, New Zealand, Australia, and the United States.

Cost-Benefit Results

Summary of Cost-Benefit Results by Trade

The following observations can be made regarding the findings of the cost-benefit analysis for each of the sixteen trades:

- The net benefit of apprenticeship training increases in each year over the course of the apprenticeship period.
- The revenue generated by an apprentice increases throughout the apprenticeship.
- Wages and benefits paid to apprentices increase commensurately with training and experience.
- The cost in terms of journeyman time declines through each year of the apprenticeship.

The overall results of the cost-benefit analysis indicate that the benefits of apprenticeship training exceed the costs for the majority of trades. All but two⁴ of the trades, showed a positive net return. The net benefit ranged from \$39,524 (Cook) to \$245,264 (Heavy Duty Equipment Mechanic). In addition, the results indicate that for every \$1 spent on apprenticeship training, an employer receives a benefit, on average, of \$1.47 or a net return of \$0.47. Notwithstanding other qualitative benefits, these findings suggest that apprenticeship training is a worthwhile investment for employers.

There are particular circumstances that may contribute to a negative return for selected trades. The specific circumstances and characteristics for each trade are discussed below:

- **Electrical Power Line and Cable Worker apprentices** incurred a negative return primarily due to the high wage rates paid to apprentices in this trade and the considerable use of journeyman time required to supervise the apprentice. This could reflect the safety aspects of the job, which may require more “hands on” supervision by journeymen. For example, in contrast to construction electrician activities, in many instances, Electrical Power Line and Cable Workers have to work in a “hot” environment meaning that they are working in an environment whereby power can not always be turned off while working. Furthermore, the relatively generous benefit provisions provided to apprentices in this trade area also contributed to a higher cost structure for these apprentices relative to apprentices in other trade areas.
- **Hairstylist apprentices** also incurred a negative return, primarily due to the relatively low level of revenue that could be attributed to a first or second year apprentice. As the apprenticeship period for this trade is only two years, it appears that employers have only a limited period to recoup costs. In contrast, for most other trades, which typically involve a four-year apprenticeship period, employers generally observe higher economic returns in the third and fourth years of apprenticeship.

Analysis over the four-year apprenticeship indicates a net benefit ranging from \$39,524 (Cook) to \$245,264 (Heavy Duty Equipment Mechanic)

⁴ The two trades are hairstylist and electrical power line and cable worker.

**Figure 1
Total Per Apprentice Costs and Benefits by Trade**

Trades	Duration ¹ of Apprenticeship (Years)	Costs ² (\$)	Benefits ³ (\$)	Net Benefit ⁴ (\$)	Benefit-Cost Ratio ⁵
Automotive Service Technician	4	250,016	423,138	173,122	1.69
Boilermaker	4	246,889	473,696	226,807	1.92
Bricklayer	4	237,687	316,853	79,166	1.33
Cabinetmaker	4	180,369	247,298	66,929	1.37
Construction Electrician	4	196,811	293,048	96,237	1.49
Construction Millwright and Industrial Mechanic	4	254,287	403,272	148,985	1.59
Cook	4	125,344	164,868	39,524	1.32
Electrical Power Line and Cable Worker	4	336,770	319,759	(17,011)	0.95
Hairstylist	2	77,096	42,620	(34,476)	0.55
Heavy Duty Equipment Mechanic	4	252,371	497,636	245,264	1.97
Machinist	4	204,921	383,877	178,955	1.87
Motor Vehicle Body Repairer	4	210,088	362,237	152,149	1.72
Plumber	4	237,681	329,728	92,047	1.39
Refrigeration and Air Conditioning Mechanic	4	240,060	344,601	104,541	1.44
Sheet Metal Worker	4	258,160	322,022	63,862	1.25
Partsperson	4	215,323	361,276	145,954	1.68
Average	4	220,242	330,371	110,128	1.47

1 Source: Apprenticeship Survey (Q28)

2 Represents the total per apprentice costs incurred over the apprenticeship period.

3 Measured as the revenue generated by an apprentice.

4 Benefits – Costs

5 Benefits / Costs

Detailed in Figure 1 are the net cost and benefits associated with the sixteen trades examined in this study. The benefit/cost ratio represents the total return to the employer

for each dollar invested in an apprentice. A benefit/cost ratio of greater than one implies a positive net return, while a ratio of less than one implies a net cost.

Analysis of Benefit-Cost Returns by Region, Size of Employer

In addition to collecting information at a national level with respect to the net costs/benefits of apprenticeship by trade area, a goal of the research was to ascertain whether or not the net return on apprenticeship varied on the basis of regions, defined as Atlantic, Quebec, Ontario, West, or on the basis of the size of employer in terms of number of employees, defined as less than 10, 10-19, and 20+.

The largest monetary net benefits accrue to employers who train an apprentice in trades such as Heavy-Duty Equipment Mechanics (\$245,264), Automotive Service Technicians (\$173,122), and Construction Millwright and Industrial Mechanics (\$148,985). In these trades, the revenue generated by an apprentice far exceeds the total training costs.

The regional/employer size analysis was completed for those trades in which there were sufficient numbers of employers to allow for robust estimates. These trades included Automotive Service Technicians with 159 employers, Construction Electricians with 166 employers, and Refrigeration and Air Conditioning Mechanics with 118 employers.

On average, employers in all regions witnessed a positive return on their apprenticeship investment. Overall, while results suggest that employers in Western Canada have a greater ability to earn higher revenues from their apprentices, they also incur significant costs in terms of wages and benefits and use of journeyperson time. Relative to the national average, employers in Quebec

Generally, the key costs were the apprentices' wages and benefits and journeyperson time to supervise the apprentice. Other costs such as wastage, other disbursements, or administration, represented only a small proportion of the total cost of an apprentice. This information may bring into question the commonly held perception that the administration costs of apprenticeship are prohibitive.

experienced net benefits that were, on average, 12% to 16% higher than the national average. This return occurs because Quebec employers generally reported a lower cost in terms of average wages and benefits paid to apprentices, lower levels of "other" costs such as disbursements and less use of journeyperson time to supervise such apprentices.⁵ Employers in Ontario generally witnessed net benefits that were slightly below the national average due primarily to lower charge-out revenues attributable to apprentices. Employers in Atlantic Canada generally experienced a net positive return within 5% of the national average.

All employers, no matter what their size, had a return. Larger employers have a higher return for the Automotive Service Technician and Refrigeration and Air Conditioning Mechanic trades. In the Construction Electrician trade, medium-sized employers (10-19) showed the highest return.

⁵ The less use of journeypersons' time could be a result of the way the educational system is structured in Quebec. In that province apprentices typically attend college prior to entering into an apprenticeship so the apprentices may be more experienced.

Figure 2
Analysis of Differences in Net Return on the Basis of Region and Size of Employer
Selected Trades

Characteristic % Difference from National Average	AST	Refrig. & A/C Mechanic	Construction Electrician	Average- Three Trades
Region				
Atlantic	n/a ¹	-2.8%	+3.4%	-0.3%
Quebec	+12.4%	+16.0%	+12.1%	+13.5%
Ontario	-4.7%	-11.8%	-2.0%	-6.2%
West	-7.1%	+9.7%	-0.6%	+0.7%
Size of Employer				
< 10 employees	-7.9%	-13.9%	+1.0%	-10.4%
10-19 employees	+3.69%	+10.0%	+22.5%	+12.0%
20+ employees	+14.1%	+19.6%	-9.0%	+8.2%

1 Insufficient Sample Size

Highlighted in Figure 2 is a summary of the difference in net benefits⁶ for the three trades which analysis could be completed on the basis of region and size of employer.⁷

Summary of Trends Since 2006

The results from the pilot study, “Apprenticeship Building a Skilled Workforce for a Strong Bottom Line, Return on Apprenticeship Training Investment for Employers, A Study of 15 Trades, June 2006,” were compared to the current study. Comparing the results of the two studies suggests that while the cost to hire, train, and supervise an apprentice has increased over the past two years, the ability of employers to generate revenues from

apprentices increased at a higher rate than the costs. This analysis was not only identified through the comparison of overall costs/benefits among the ten trades studied in 2006 and 2008, but was also confirmed through the detailed examination of employer costs/benefits for those 106 employers who provided data in both 2006 and 2008. Examining the cost/benefit data for the employers who participated in both studies suggests that, while apprenticeship wage costs increased for these employers, on average, apprenticeship-related revenues increased at a greater rate.

6 Percentage difference from the national average.

7 Based on number of employees

Figure 3
Summary of Changes in Apprenticeship Costs/Revenues
Selected Categories
Average for Ten Trades¹ Studied in 2006 & 2008

Category	2006	2008	% Change
Average Charge-Out Revenue	\$285,710	\$351,155	+23%
Apprentice Wages/Benefits	\$144,918	\$154,399	+7%
Use of Journeyman Time	\$51,088	\$53,385	+5%
Other Costs ²	\$12,940	\$15,190	+17%
Total Costs	\$208,946	\$222,975	+7%
Benefit/Cost Ratio	1.37	1.57	+15%

1 Trades include AST, Bricklayer, Construction Electrician, Millwright, Cook, Heavy Duty Equipment Technician, Machinist, Motor Vehicle Body Repair, Refrigeration and A/C Mechanic and Sheet Metal Worker.

2 Other costs include wastage, disbursements and administration.

Summarized in Figure 3 are the changes in key cost/revenue components for the ten trades examined in both 2006 and 2008 for all employers. As highlighted in the table, it can be seen that:

- charge-out revenues increased by 23% between 2006 and 2008 for the ten comparable trades,
- with the exception of “other costs,” most cost elements increased between 5% and 7%, and
- the net-benefit cost ratio for the ten trades increased from 1.37 in 2006 to 1.57 in 2008 – an increase of 15%.⁸

⁸ The 1.57 figure refers to the 10 trades included in the Phase I and Phase II studies. It does not include the 6 new trades added for Phase II. The 1.47 figure is based on the data from all 16 trades.

Survey Results

Proportion of Employers with Apprentices

Although the study was not designed to measure the “incidence rate” of apprentices among eligible employers, it does appear that there was a modest increase in the use of apprentices among Canadian employers. For example, relative to the 16.7% of employers who had an apprentice in 2006, the proportion of employers who indicated that they employed an apprentice increased to 19.7% for this 2008 study.

Qualitative Benefits of Apprenticeship Training

When filling in the survey, employers were asked a series of questions designed to measure the importance of the several qualitative benefits of apprenticeship training. Employers were asked about:

- the benefit of apprenticeship training to journeypersons, and
- the advantages of employing a “home-grown” journeyperson.

Benefits of Apprenticeship Training to Journeypersons

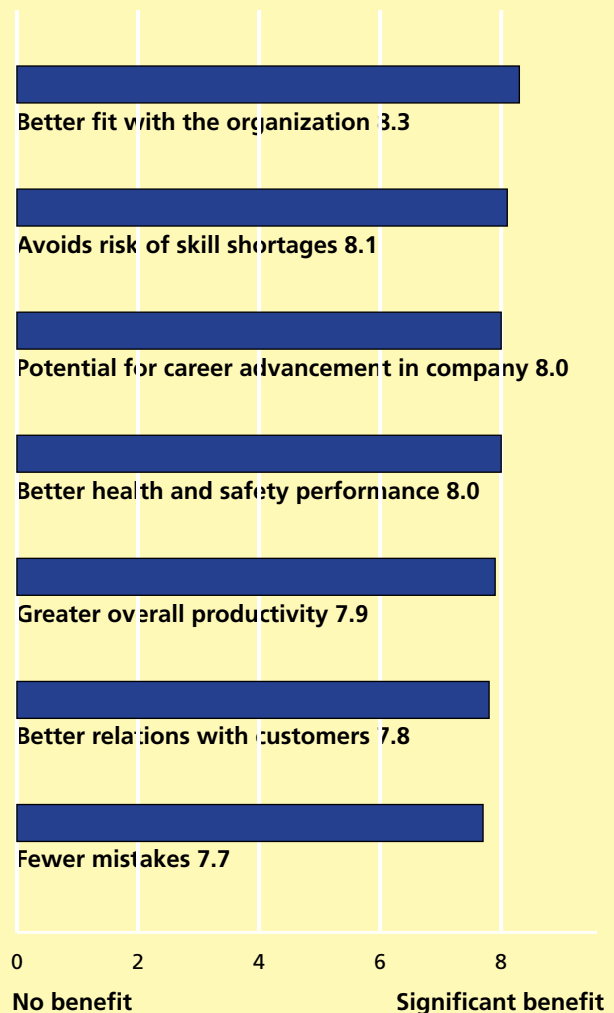
The majority of employers (81.3%) indicated that their journeypersons derive a benefit from training an apprentice.

Advantages of Employing a “Homegrown” Journeyperson

Over sixty percent (61.3%) of employers consider a journeyperson they trained as an apprentice to be more productive relative to an external journeyperson, with only 3.5% indicating that “homegrown” journeypersons are less productive. Approximately, thirty five per cent (35.2%) of employers indicated that there is no difference in the productivity between a “homegrown” journeyperson and an externally hired journeyperson. Overall, employers estimated, based on their experiences, that a “homegrown” journeyperson is, on average, 29.0% more productive.

Employers rated “better fit with the organization” as the most significant benefit of employing a journeyperson who they trained as an apprentice. Employers also indicated

Figure 4
Benefits of Employing a “Homegrown” Journeyperson



Source: Apprenticeship Survey (A11, n=589-602)

that training their own journeyperson results in “reduced risk of skill shortages,” “increased potential for career advancement for the apprentice in the company,” “greater overall productivity,” and “fewer mistakes.”

Perceived Productive Value vs. Training Costs

Employers estimated when an apprentice's productive value to their organization begins to exceed the training costs. More than one-quarter (30.2%) of surveyed employers indicated that the benefit of training the apprentice exceeds the costs by the end of the second year of the apprenticeship. In other words, the employer perceives a net benefit of apprenticeship training at the mid-point of the apprenticeship period, which averages four years. In addition, more than one-third

(32.7%) of employers perceive a net benefit to apprenticeship training by the end of the first year or earlier. Interestingly, the data collected from employers suggests that many trades witness a positive return in the first year of an apprentice's employment in the trade.

Employers were evenly split in terms of whether they view poaching risk from other employers to be a very serious issue

It works!

Hydro Ottawa has found that apprenticeship in their organization led to better business performance through increased productivity and efficient project completion, increased morale, higher retention, and revitalization of workforce.

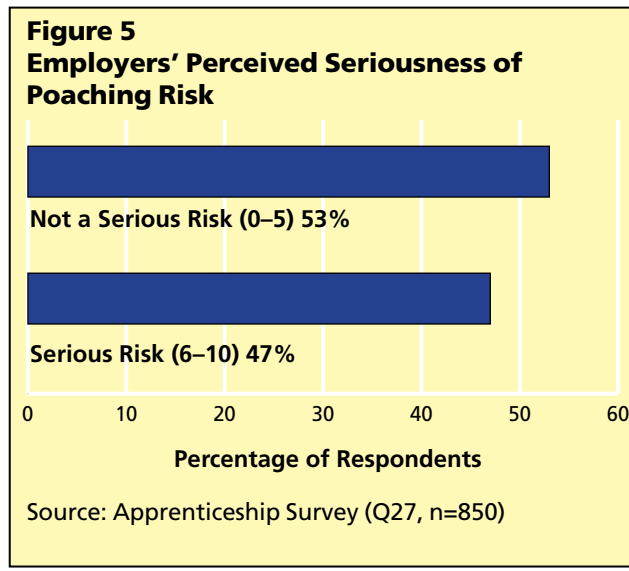
Arcelor-Mittal Dofasco has found that apprenticeship training results in higher productivity and higher completion when compared to employees that receive shorter or more informal training.

United Kingdom employers found apprenticeship training improves their business performance by making them more competitive, enhancing productivity, and reducing staff turnover.

Training in Northern Ireland has led to higher profits, higher labour productivity, growth, creativity, and entrepreneurship.

Poaching Risk

Employers were evenly split in terms of whether they view the poaching risk from other employers to be a very serious issue. Fifty-three per cent of employers gave poaching a risk value of 1 to 5 (not serious). Forty-seven percent gave poaching a risk value of 6 to 10 (very serious). These results indicate that there is some concern among employers with respect to poaching.



As highlighted in Figure 6, there are some regional differences in employers' assessments of the poaching risk. The concern was greatest in the West and least in Atlantic Canada. The issue of poaching did not differ much based on employer size.⁹

Comparison of 2006 and 2008 results

A comparison of the survey results from 2006 to 2008 study yields interesting observations as outlined in Figure 7.

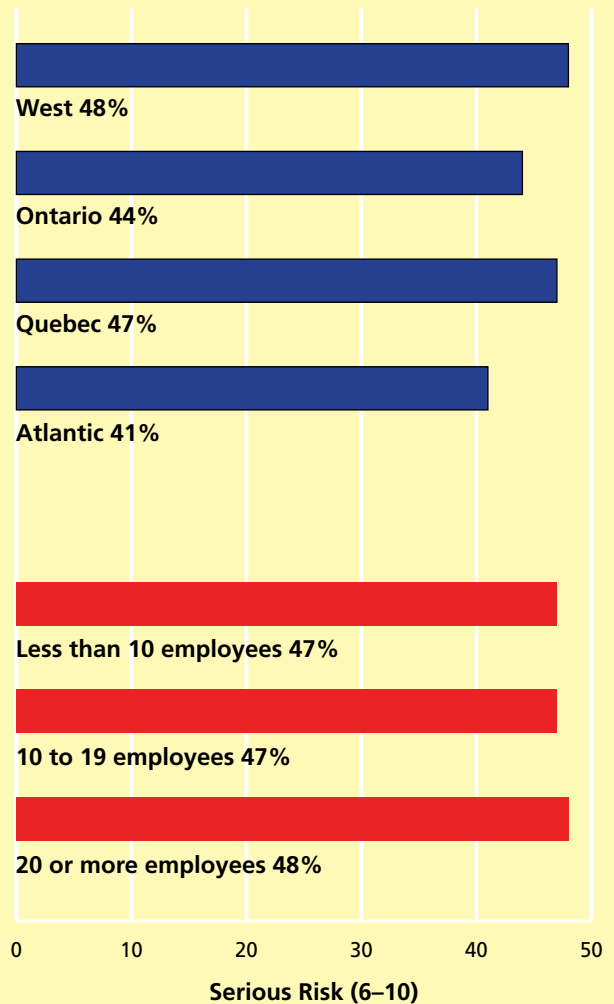
- The proportion of employers who feel that their journeypersons benefit from having apprentices increased from 67.6% in 2006 to 81.3% in 2008.
- A high proportion of employers, more than 60%, feel that a "homegrown" journeyperson is more productive than an externally-trained journeyperson.
- Employers' assessment of the "poaching risk" remained relatively unchanged over the past two years.

Employers with Journeypersons, but no Apprentices

Employers who hired journeypersons in one of the trades included in the study, but did not employ apprentices, were asked to complete a short survey. They were asked about the reasons that they did not invest in apprenticeship. As outlined in Figure 8, the most common reason reported by employers for not hiring an apprentice was that their business did not have enough continuous contracts to support hiring an apprentice (30%). Another common reason for not investing in apprenticeship

⁹ Number of employees

**Figure 6
Employers' Perceived Seriousness of Poaching Risk
(Regional Basis & Basis of Employer Size)**



Source: Apprenticeship Survey (Q27, n=850)

was that the business was too small and there was no reported need for additional workers (25%). Of great interest, however, is the 14% of employers who indicated that they would be willing to hire an apprentice, except that there were few or no apprentices applying to their organization.

As a part of the short survey, employers were also asked if anything would change their minds about hiring apprentices. About half of

**Figure 7
Comparison of Employer Opinion
2006 vs. 2008**

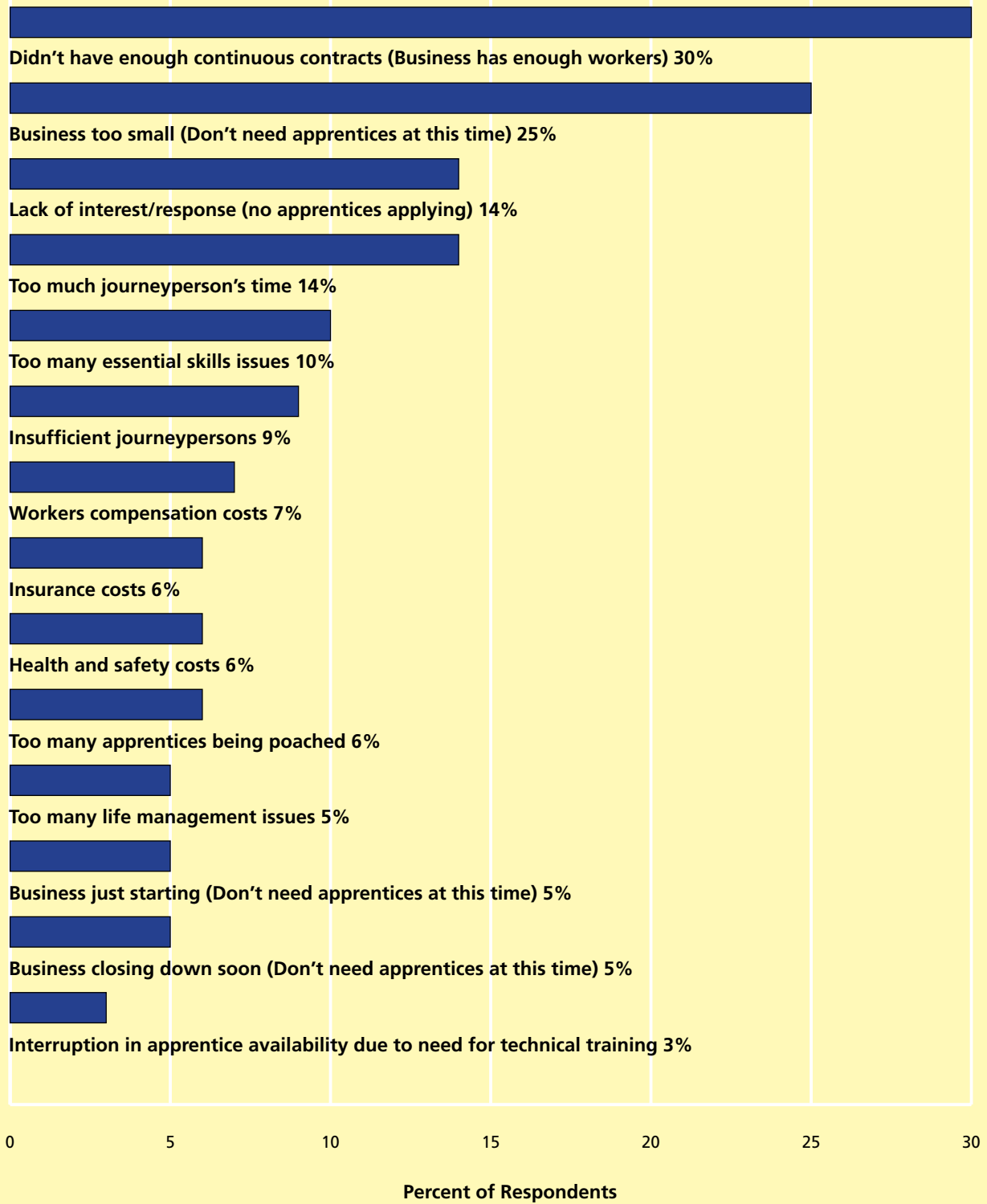
Trends	2006	2008	Conclusion
Benefits of Apprenticeship Training to Journeypersons	67.6%	81.3%	Employers continue to strongly believe that their journeypersons benefit from training apprentices
Advantages of Employing a "homegrown" Journeyperson: More productive	65.3%	61.3%	Persistent perception among employers that "homegrown" journeypersons are more productive
Most Significant benefit	Better fit with the organization (rating 8.5 out of 10)	Better fit with the organization (rating 8.5 out of 10)	Agreement among employers about the most significant benefit of apprenticeship training
Poaching	Average of 5.1 on a scale from 1 (not at all serious) to 10 (very serious)	½ (approx) 1 to 5 ½ (approx) 6 to 10	Some concern over poaching

the employers answered yes to this question. As outlined in Figure 9, this group identified some factors that would change their minds. Over 40% of employers indicated that they would hire apprentices if there were a need for them in their business. Nearly one-third (31%) of respondents indicated that they would hire apprentices if there were more financial support for employers doing so, such as tax credit incentives. Importantly, 30% of employers, without apprentices, indicated that they would hire apprentices if they could find them, suggesting that employers may be having difficulty getting access to apprentices.

14% of employers who hired journeypersons in one of the sixteen trades, but did not hire apprentices indicated that they would be willing to hire an apprentice, except that there were few or no apprentices applying to their organization.

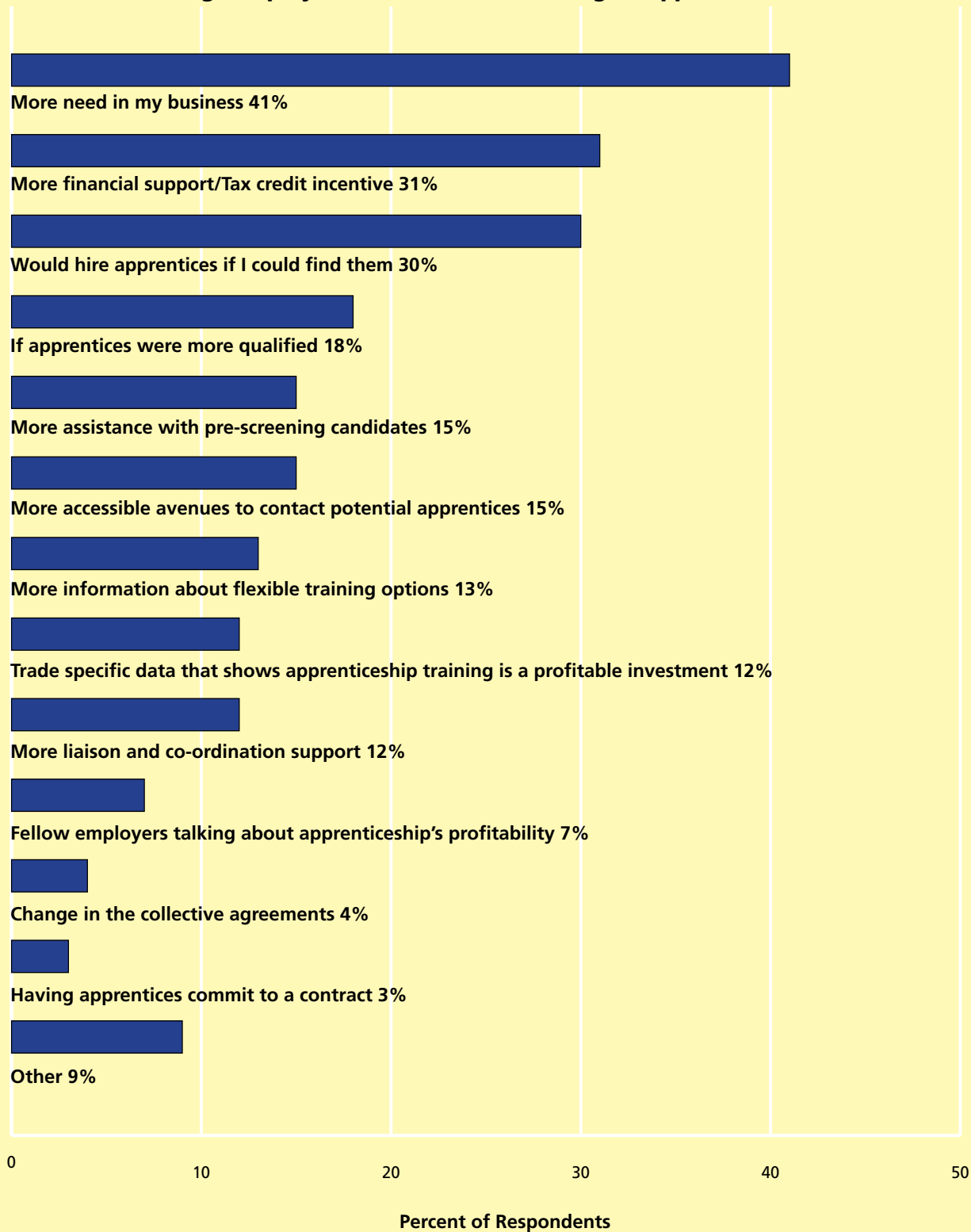
30% of employers without apprentices indicated that they would hire apprentices if they could find them, suggesting that employers may be having difficulty getting access to apprentices.

Figure 8
Reasons that Employers Without Apprentices Did not Hire an Apprentice



Source: Apprenticeship Survey – Survey of Employers without Apprentices (Q2, n=1,163)

Figure 9
What Would Change Employers' Decisions About Hiring an Apprentice



Source: Apprenticeship Survey – Survey of Employers without Apprentices (Q3, n=627)

Conclusion

This study allows industry and other apprenticeship stakeholders to gain a more accurate understanding of the costs and benefits of apprenticeship training for sixteen trades. This information is valuable in dispelling myths that investing in apprentices reaps little financial benefit. According to the data collected from almost 1,000 employers, there are direct financial benefits. For every \$1 invested, employers receive a return, on average, of a \$1.47. This is 9 cents up from the 2006 pilot study. In fourteen of the trades, employers received a return by the end of the second year or earlier. In these tough economic times, Canadian companies can further enhance their business performance through apprenticeship. The majority of employers who filled

in the survey believe “homegrown” journeypersons who they trained as apprentices are more productive. Additional benefits to hiring apprentices include having employees which are a “better fit with the organization.” According to the survey findings with employers who did not hire apprentices, some of them perceived that no apprentices were applying to their companies. This finding indicates there are still opportunities to increase investment in apprenticeship by connecting those interested in apprenticeship with employers. Ongoing dialogue with industry about the value of apprenticeship and continued support for employers will be essential to ensure Canadians have the opportunities to train and to gain skills.