



Canadian Apprenticeship Forum
Forum canadien sur l'apprentissage



Workplace accommodations for persons with disabilities in the skilled trades: *A preliminary investigation*

March 2009

Canada 

Acknowledgements

The Canadian Apprenticeship Forum – Forum canadien sur l'apprentissage (CAF-FCA) gratefully acknowledges the individuals and organizations who contributed their time to this project. The Northern Alberta Institute of Technology was particularly helpful in identifying potential interview and focus-group candidates. CAF-FCA would also like to thank the project's working group for their assistance and the Government of Canada for its financial support of this project. CAF-FCA would especially like to thank each of the employers and apprentices who participated in interviews and focus groups.

Finally, CAF-FCA would like to thank R.A. Malatest & Associates Ltd. and Dr. Aldred Neufeldt for helping to conduct the research for this project.

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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***Workplace Accommodations for Persons with
Disabilities in the Skilled Trades:
A Preliminary Investigation***

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Forum canadien sur l'apprentissage (CAF-FCA)



Funded by the Government of
Canada's Sector Council Program

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Executive Summary

In today's competitive market, employers are increasingly concerned about the recruitment and retention of highly motivated and productive employees. If persons with disabilities receive access to training, have the supports they need, and are appropriately accommodated in the workplace, these individuals can make a valuable contribution to Canada's current and future labour needs.

The purpose of this preliminary research was to gather information on workplace accommodations and to investigate the current situation for persons with disabilities in the skilled trades. The opinions of employers in the skilled trades and apprentices with disabilities were gathered. Very few previous studies have gathered direct feedback from these groups.

The findings of this report will be of interest to policy analysts, college educators, and researchers interested in post-secondary education, apprenticeship, and disability studies. The report is valuable because it contains the following information:

- Statistics from the Participation Activity Limitation Survey and the National Apprenticeship Survey which have previously never been published.
- Perspectives from employers in the skilled trades, journeypersons, and apprentices. Few studies have included the perspectives of these groups.

- Recommendations for further work based on feedback received from employers, journeypersons, and apprentices.

This research indicates that communication and awareness could be enhanced among apprentices, journeypersons, employers, technical training institutes, and disability organizations. To begin to raise awareness, shorter communication materials were created to share the key findings, useful sources of information, and recommendations with employers, apprentices, and policy-makers. These materials are available on the CAF-FCA website.

Sources

The report findings were based on the following sources of information¹:

- Secondary sources produced by the disability and apprenticeship communities.
- Statistical data on education, employment, and workplace accommodations.
- Focus groups and interviews.

¹ All the web links for the sources used in this report were valid as of March 27, 2009.

Structure of Report

- Part 1 provides the background of the project, including its objectives.
- In Part 2, key definitions, relevant information on accommodations, and examples of accommodations applicable to the skilled-trades environment are provided.
- Part 3 contains statistical information
- Parts 4 and 5 present the experiences of those consulted as part of the research.
- Part 6 includes recommendations from employers and apprentices.

Workplace Accommodations

Accommodations are adjustments made in the workplace to ensure persons with disabilities can work efficiently and productively.

There are “hard” and “soft” accommodations. Hard accommodations can include physical modifications to workstations or technical equipment. Soft accommodations can be adjustments to work hours and job duties.

Types of Workplace Accommodations

Information on accommodations focuses on all types of workers or office environments. There is very little information specifically on the skilled trades, although this study did try to identify examples of accommodations that could be applied in a skilled-trades environment. The examples provided are accommodations employers actually used in the workplace. Employers also provided additional examples during the focus groups and interviews that are included in the report.

Manufacturing Examples

For those with visual limitations: enhanced facility access including coloured floor strips, different-colour flooring, tactile strips, and improved lighting to help those with visual impairments safely navigate the facility.²

For those with hearing limitations: set paths of travel for forklifts and pedestrians, strobe lights on equipment, vibrating pagers to notify individuals of emergencies.³

For those with learning limitations: written instructions, whereby each major task was broken down into smaller, sequential parts.⁴

Construction Examples

For those with learning limitations: A building contractor with dyscalculia was inefficient when creating job quotes. The site supervisor purchased the Jobber 6 contractor’s calculator to help the employee calculate the quotes more efficiently.⁵

For those with mobility limitations: A construction worker was undergoing treatment for a back injury during working hours. The individual was transferred to light duty and

2 S. Endicott and S. Haynes, “Assistive Technology in Production Settings,” Workplace Rehabilitation Engineering and Research Center, February 2008. http://www.workerc.org/Presentations/ICAD108/ICAD108_Production_files/textmostly/slide1.html.

3 Job Accommodation Network, SOAR database on accommodation, <http://www.jan.wvu.edu/soar/hearing/hearingex.html> and Rehabilitation Engineering Research Council, Case Study, http://www.workerc.org/case_study/viewCaseStudies.php?casestudy=360.

4 Job Accommodation Network, SOAR database on accommodation, <http://www.jan.wvu.edu/soar/LD/LDex.html>.

5 Job Accommodation Network, SOAR accommodation database, <http://www.jan.wvu.edu/soar/LD/LDex.html>.

provided a flexible schedule in order to attend treatment.⁶

Transportation Examples

For those with mobility limitations: A mechanic with a bending restriction was accommodated with a tire lift, a mechanic's low task chair, and a specialty creeper designed to support the body while accessing engine compartments.⁷

Service Examples

For those with mobility limitations: A sous chef had a standing wheelchair purchased so he could get around the kitchen.⁸

Statistical Data

The National Apprenticeship Survey data revealed that most apprentices with disabilities who either completed their apprenticeship or were long-term continuers were working in the automotive service technician and hairstylist trades.

6 Job Accommodation Network, SOAR accommodation database, <http://www.jan.wvu.edu/soar/hearing/hearingex.html>.

7 Job Accommodation Network, SOAR accommodation database, <http://www.jan.wvu.edu/soar/back/bkex.html>.

8 Rehabilitation Engineering Research Council, Case Study, http://www.workrerc.org/case_study/viewCaseStudies.php?casestudy=630.

Employers' attitudes suggest that the disability and apprenticeship communities need to investigate the business case for hiring and accommodating persons with disabilities in the skilled-trades environment specifically.

Main Findings from Interviews and Focus Groups

Sixty-six employers, fourteen apprentices, four journeypersons, and five organizations were consulted as part of this research.

The employers, apprentices, and journeypersons were from a variety of trades. Apprentices and journeypersons had a range of disabilities.

Some of the key findings have been summarized. These findings only reflect the opinions of those who attended the focus groups and interviews. A survey with skilled trades employers would have to be completed in order to assess whether the opinions and experiences of these employers represent skilled trades employers across the country. The opinions of the participants do not necessarily represent the opinions of CAF-FCA or any of its stakeholders.

Employers and Accommodations:

- For small-business employers, accommodation is generally an informal process and there is no official policy. Larger companies are more likely to have a formalized policy.
- Accommodations typically occur after the employee has worked with the employer for a while and the employer is keen to retain the employee.
- Employers who had hired apprentices with disabilities generally did not have experience hiring apprentices who would need specialized equipment or modified work stations. Employers had more experience hiring apprentices with learning disabilities.

Hard accommodations can include physical modifications to workstations or technical equipment. Soft accommodations can be adjustments to work hours and job duties.

- Workplace accommodations included:
 - Job modification or providing the person with another job in the company.
 - Allowing employees more time to complete tasks involving reading or writing.
 - Providing a laptop and audio module software.
 - Providing a wireless device to enhance communication for an employee with a hearing limitation.
- Employers who had never hired persons with disabilities wondered about issues such as safety, productivity, and cost. Evidence gathered by the disability community suggests that persons with disabilities can be as safe and productive as other employees. The costs of accommodations are not necessarily expensive and employers can often get assistance with more extensive accommodations. The research studies, however, focus on all types of work environments. Employers' opinions suggest that there may be value in the disability and apprenticeship communities investigating the business case for hiring and accommodating persons with disabilities in the skilled-trades environment specifically. If the evidence supports the business case, creating greater awareness among employers may be necessary to clarify certain perceptions.
- The research for this project revealed that information, advice, and workshops on

accommodations are available, but participants were generally not aware of these supports. Enhanced communication about available supports targeted to skilled trades employers may be helpful. Having experts clarify the responsibilities around making accommodations may also help employers.

Apprentices

- Research on post-secondary students with disabilities tends to focus on college or university graduates. Apprentices are generally not mentioned as a specific group. Even though there were a small number of participants, this study is valuable because it provides the perspectives and opinions of apprentices with disabilities.
- Some apprentices with disabilities perceived that employers were not receptive to hiring persons with disabilities.
- Apprentices and journeypersons with disabilities perceived that employers underestimate their skills and abilities.
- Apprentices with disabilities working in the skilled trades may feel isolated due to their disability. Apprentices were reluctant to participate in the focus groups because they did not want others to find out they had a disability. Apprentices that participated in the focus groups said they struggled in some cases to get accommodations and had

Employers and apprentices would like to see more examples of how accommodations can work in the skilled trades context. Examples of success stories should be communicated to employers and apprentices to illustrate promising practices

to manoeuvre through the process largely on their own. Greater awareness about working with persons with disabilities and knowledge about accommodations could help apprentices feel less isolated.

As a part of the research, participants were asked for ideas regarding potential programs and incentives that would help employers and apprentices with disabilities.

Recommendations

Recommendations from Employers

Create special programs for employers in the skilled trades

- Pilot programs with employers in construction to upgrade government buildings or build homes. Give apprentices with disabilities a chance to work with journeypersons on these projects.

Discuss with employers their responsibilities

- Labour ministries and insurance companies could clarify the rules and regulations around hiring persons with disabilities, liability, and making workplace accommodations.

Support employers through incentives

- Provide advice on accommodation, tax credits, and other incentives.

Help apprentices sell themselves to employers

- Train apprentices to articulate their value to employers. Make sure they can explain to employers their skill sets and dispel myths regarding their disabilities.

Recommendations from Apprentices

Inform individuals of the learning supports available prior to apprenticeship technical training

- Dispelling fears about technical training and informing persons with disabilities about how they can be helped is important. Apprentices said they would be willing to speak to students about the supports available.

- Create networking and information-sharing opportunities with technical training institutes and industry. Educate employers and potential apprentices about the resources available for apprentices with disabilities.

Develop a mentoring program for persons with disabilities in the skilled trades

- Connect journeypersons, pre-apprentices, and apprentices in specific trades. Apprentices and journeypersons could share tips with pre-apprentices on how to get accommodations and how to approach employers.

Ensure support for apprentices with disabilities

- Apprenticeship stakeholders may benefit from working together to ensure that apprentices with disabilities have access to a full range of supports to succeed in their apprenticeship programs.

Use tutors that have knowledge of the trades

- Tutors and readers with knowledge of and experience in the trades would be helpful. Retired journeypersons could be an effective pool of tutors because they have extensive knowledge and experience.

Conduct a Communication and Awareness Campaign

- Industry may benefit from more awareness and information on working with persons with disabilities and making workplace accommodations.

Additional Recommendations

Clarify issues through further research

- More trades-specific research is needed to clarify certain perceptions about hiring persons with disabilities.
- Build the business case for workplace accommodations in the skilled trades.

Encourage Partnerships Among Employers, Training Organizations, and Disability Agencies

- According to the research, strong partnerships among training organizations, disability employment agencies, and employers are essential to successfully recruiting and placing persons with disabilities in training.⁹ Given this finding, there may be value in encouraging stakeholders to develop stronger partnerships.

9 Tabatha Griffin and Lisa Nechvoglod, National Centre for Vocational Education Research, "Vocational Education and Training and People with a Disability: A Review of the Research," (Adelaide: Australian Government, 2008), 9, 16. <http://www.ncver.edu.au/research/proj/nr07122.pdf>.

Profile Success Stories

- Employers and apprentices would like to see more examples of how accommodations can work in the skilled trades context. Examples of success stories could be communicated to employers and apprentices to illustrate promising practices.¹⁰

Create User-Friendly Guides

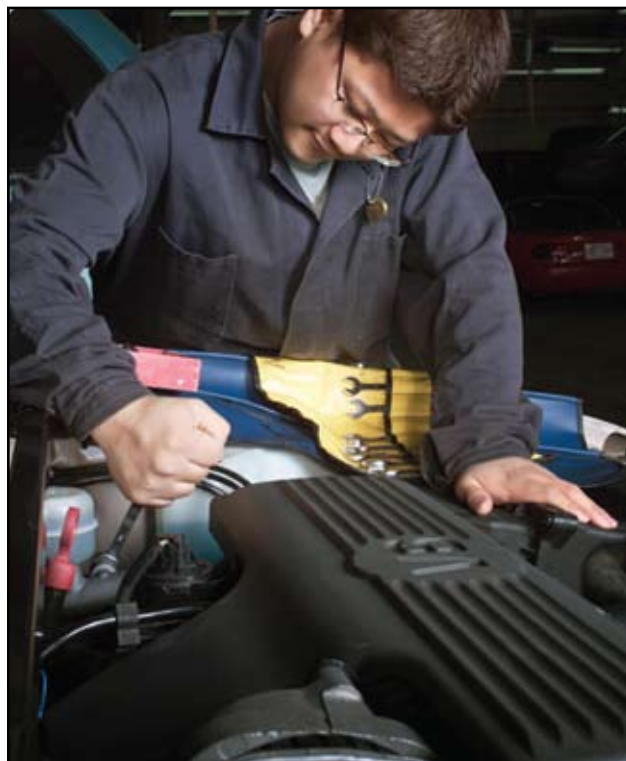
- To raise awareness and to provide employers with access to the appropriate resources and information, online guides could be developed on workplace accommodations in the skilled trades.
- An orientation guide could also be created for potential apprentices with disabilities. The guide could share information on:
 - Interview tips.
 - Tips for finding an employer sponsor.
 - A list of supports available.
 - Information on provincial/territorial accommodation policies.
 - Red Seal accommodations policies.

10 A Canadian Plastics Sector Council made a similar recommendation. See FMP Ltd., for the Canadian Plastics Sector Council, "Profitability in Diversity," (Ottawa: FMP Ltd., July 31, 2005), 13-14. <http://www.cpsc-ccsp.ca/PDFS/CPSC%20TERC%20FINAL%20REPORT-ENGLISH%20FINAL.pdf>.

Accommodations can lead to increased productivity, improved company morale, and higher retention rates.

Conclusion

There is an opportunity to potentially enhance the effectiveness of apprentices at the workplace by making accommodations. Existing research from the disability community indicates accommodations can lead to increased productivity, improved company morale, and higher retention rates. Most accommodations can be implemented at a minimal cost. Although more trades specific evidence supporting the business case for accommodations would be useful, the findings from the secondary research suggest that employers and apprentices have much to gain through accommodations. These potential benefits are crucial at a time when maximizing productivity is critical to a company's bottom line. A lack of awareness, according to the findings of this study, is preventing some employers and apprentices from achieving these benefits at their workplaces. Improved communication about the existing resources would help connect employers and apprentices to supports they need. Hopefully, this preliminary research will fuel further research and dialogue that will lead to increased awareness and enhanced communication among the members of the disability and skilled trades communities.



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Part 1:

Background and Objectives

This section outlines why this work was undertaken, summarizes the research methods used, and describes the focus group and interview participants.

1.1: Project Purpose and Objectives

The Canadian Apprenticeship Forum – Forum canadien sur l'apprentissage (CAF-FCA) is a not-for-profit organization working to promote apprenticeship and to support apprenticeship training across Canada.

In 2004, CAF-FCA released a research report entitled, “Accessing and Completing Apprenticeship Training in Canada, Perceptions of Barriers.” This report highlighted nine barriers to workplace training in Canada. One of these barriers was unwelcoming workplaces and training environments. Specifically, persons with disabilities who participated identified a lack of awareness and information regarding workplace accommodations and supports.

The purpose of this preliminary research was to gather information on workplace accommodations and to investigate the current situation for persons with disabilities in the skilled trades. The information on workplace accommodations is drawn from research done by the disability community. A picture of the current situation for persons with disabilities was formed through statistical data, additional secondary research, and listening to the perspectives of employers, journeypersons, and apprentices in the skilled trades.

CAF-FCA commissioned R.A. Malatest & Associates and Dr. Aldred Neufeldt to complete a literature review and an environmental scan, and to conduct focus groups, and interviews.

The project set out to answer the following questions:

- What accommodations are being made in the skilled-trades environment?
- What is the current situation for persons with disabilities who are apprentices or journeypersons?
- What supports are available for employers and apprentices? Are there issues of awareness or access to these supports?
- For employers in the skilled trades, what are their policies and practices related to hiring persons with disabilities and workplace accommodations?

For this study, a broad definition of “disability” was used. Disabilities included, but were not limited to, hearing, seeing, sensory, mobility, learning, psychological, and developmental.

The findings of this report will be of interest to policy analysts, college educators, and researchers interested in post-secondary education, apprenticeship, and disability studies. To begin to create more awareness, shorter communication materials were also created to share the key findings, useful sources of information, and recommendations with

employers, apprentices, and policy makers. These materials are available on the CAF-FCA website.

Research Highlights

This study contains statistics and feedback from employers, journeypersons, and apprentices.

Statistics from the most recent Participation and Activity and Limitation Survey (PALS) and National Apprenticeship Survey were gathered. This information was especially ordered from Statistics Canada and has not been previously published. This information provides an overview of how many persons with disabilities have trades certificates/diplomas in Canada. Statistics on employment outcomes and industry participation for those with trades certificates/diplomas are outlined. The National Apprenticeship Survey data indicates the trades where apprentices who self-identified as having disabilities are participating.

One of the most valuable elements of the report is that it contains the perspectives of employers. Employers' comments in this report align with the views expressed by employers in other sectors.¹ The insights into employers' attitudes and what barriers they feel may prevent the hiring and accommodating of persons with disabilities in the skilled trades will be valuable to the disability and apprenticeship communities when strategizing about ways to talk to employers about this issue. A lack of awareness about sup-

1 An additional research study has made similar conclusion see: Paul Seccaspina, Daniel Kaltianinen, and Frank Buchan, "Accessibility to Employment by Persons with Disabilities, The City of Greater Sudbury," (Toronto: Absolute Abilities Business Development Centre, The Ministry of Training, Colleges, and Universities, March 31, 2001), 31-32.

ports was another theme identified through the focus groups indicating more could be done to direct employers in the skilled trades to the existing resources available on accommodations.

This project also provides some insight into apprentices' and journeypersons' perspectives within the Canadian context. Very few previous studies have tried to capture apprentices' perspectives. An Australian report, titled "Vocational Education and Training and People With a Disability: A Review of the Research," observed that in the literature on persons with disabilities in vocational education, "the voices of students are largely missing."² This study also noted there is no comprehensive study on students' perceptions of available supports or whether these supports are meeting their needs. Only one other study on apprentices with disabilities was identified through the research. This study is being conducted in the Netherlands.³

To highlight employers', journeypersons', and apprentices' perspectives throughout the report, text boxes are included with direct quotes so readers can get a sense of the participants' opinions in their own words. These quotes were obtained at the interviews and focus groups. When possible, the provincial location and the size of the employers' busi-

2 Tabatha Griffin and Lisa Nechvoglod, National Centre for Vocational Education Research, "Vocational Education and Training and People with a Disability: A Review of the Research," (Adelaide: Australian Government, 2008), 14 <http://www.ncver.edu.au/research/project/nr07122.pdf>.

3 The results of the study are not available at present. This information was obtained from Dr. Aldred Neufeldt, PhD, Department of Community Health Sciences of the Faculty of Medicine at the University of Calgary and Director of the Community Rehabilitation and Disability Studies Program.

nesses were identified. All the names have been changed to protect the identities of the participants. The recommendations in the report came directly from many of the employers, apprentices, and journeypersons who participated in this study.

Structure of the Report

This report is structured as follows:

- Part 1 provides the background of the project, including its objectives.
- In Part 2, key definitions, relevant information on accommodations, and examples of accommodations applicable to the skilled-trades environment are provided.
- Part 3 contains statistical information.
- Parts 4 and 5 present the experiences of those consulted as part of the research.
- Part 6 includes recommendations.

Scope of Work

This project gathered information through a literature review, an environmental scan, focus groups and interviews. Each of the research activities is briefly described in the following sections.

Literature Review and Environmental Scan

The literature review involved a review of the relevant secondary literature. Research from Canada, the United States, the United Kingdom, Australia, and Europe was included in the review. The literature reviewed included academic sources, websites, and the “grey” literature identified through database and web searches.

The environmental scan involved a review of data from Statistics Canada, as well as available information on programs, supports, and resources in Canada.

Focus Groups/Interviews

Eight focus groups were undertaken across Canada. Seven focus groups were undertaken with employers, and one focus group was undertaken with apprentices with disabilities. Focus groups included between four and twelve participants each.

Focus groups were conducted in Halifax, Montreal, Ottawa, Toronto, Winnipeg, Edmonton (two groups, including one with employers and one with apprentices), and Vancouver. Seven of these groups were conducted in English, while the focus group in Montreal was conducted in French.

At the focus groups, the consultant, R.A. Malatest & Associates Ltd spoke to fifty employers, three apprentices, and one journeyperson/apprentice.⁴ Some apprentices had not disclosed their disability to their employers. They were hesitant to participate in a focus group because they wanted to protect their anonymity. As a result, fewer apprentices participated than the consultant had anticipated.

In order to supplement the findings from the focus groups with employers, journeypersons, and apprentices, thirty-two telephone interviews were completed. Interviews were undertaken with sixteen employers, eleven apprentices and journeypersons with disabilities, and five individuals from organizations providing services for persons with disabilities. The organizations included a college, two

⁴ This individual was a journeyperson in one trade and was an apprentice in another trade.

employment-services agencies for persons with disabilities, a workers' compensation board, and an organization that provides a variety of programs and services to those with disabilities.

In total, the consultant talked to sixty-six employers and eighteen apprentices/ journeypersons.

Focus-group and interview participants were recruited through multiple methods. Potential participants for the focus groups with employers were identified by the CAF-FCA working group, directory searches, and suggestions made by other participants in the research, such as other employers, apprentices, or community organizations. Apprentice participants were recruited through the assistance of members of the working group and the Northern Alberta Institute of Technology (NAIT).

Description of Participants

An overview of the main industries, occupations, and disability types for those who participated in the focus groups and interviews has been provided. The terms are the ones that the participants used and may not reflect the official occupational titles or disability names.

Provincial distribution of focus group and interview participants

Province	Employers	Apprentices Journeypersons
Nova Scotia	11	1
Québec	5	0
Ontario	18	0
Manitoba	12	4
Alberta	6	10
British Columbia	14	3
TOTAL	66	18

The provincial distribution of the focus group and interview participants breaks down as shown above.

Employers who participated in the focus groups and interviews

Size of business	Number of employers
5 or fewer employees	19
6 to 10 employees	8
11 to 20 employees	19
20 to 99 employees	15
Over 100 employees	5
TOTAL	66

As the chart above reveals, most of the employers who participated in the focus groups and interviews were small businesses with fewer than 20 employees.

Overview of the main industries, occupations, and disability types for those who participated in the focus groups and interviews.

Industry	Type	Occupation of Apprentice/ Journeyperson Employer Hired	Type of Disability Identified by Employers, Apprentices and Journeypersons
Electrical	Industrial, commercial, and residential	Electrician	<ul style="list-style-type: none"> • Learning disabilities including difficulty reading and writing. • Mobility including chronic back pain.
Construction	Industrial, road, and residential	Drywall finisher, painter, millwright, carpenter, insulator, and scaffolder	<ul style="list-style-type: none"> • Learning disabilities including dyslexia, autism, attention deficit disorder, and difficulty reading and writing. • Hearing impairments • Mobility including chronic back pain and paralysis • Psychological • Depression
Transportation	Trucking/heavy-duty repair, automotive service, body-work shop, machine shop, and metal body shop	Mechanic and welder	<ul style="list-style-type: none"> • Learning disabilities including dyslexia, and difficulties with reading, writing, and math • Mobility including chronic back pain
Mechanical	Commercial and residential	Plumber, gas fitter, HVAC technician, refrigeration, steel fitter, and sheet-metal worker	<ul style="list-style-type: none"> • Learning disabilities including dyslexia, attention deficit disorder, difficulties with reading, writing, math, and text anxiety. Additional learning limitations included needs more time to complete tasks, and needs instructions to be repeated. • Another limitation identified was doesn't deal well with change or new people. • Hearing limitations • Mobility, including chronic back pain • Depression • MS
Manufacturing	Steel fabrication, steel fitting, machining/tool die, and parts	Machinist, welder, and sheet-metal worker	<ul style="list-style-type: none"> • Learning disabilities including dyslexia, attention deficit disorder, and difficulties with reading and writing. Additional learning limitations included needing more time to complete tasks and needing instructions to be repeated. • Hearing impairments • Visual impairment (loss of vision in one eye) • Mobility including chronic back pain • Missing limbs or fingers • Carpal tunnel syndrome

Part 2:

An Overview of Workplace Accommodations

This section of the report will introduce readers to what workplace accommodations are and will give them specific examples of accommodations that employers have used in the manufacturing, construction, transportation, and service industries. Definitions of key terms, typical phases in the accommodation process, and types of accommodations are covered.

What is a disability?

Persons with disabilities, advocacy groups, medical practitioners, employers, and the general public often have different ways of defining “disability.”¹ For the purpose of this project, a broad definition of disability consistent with that provided in the Employment Equity Act was used. The act defines persons with disabilities as “persons who have a long-term or recurring physical, mental, sensory, psychiatric, or learning impairment and who consider themselves to be disadvantaged in employment by reason of that impairment, or believe that an employer or potential employer is likely to consider them to be disadvantaged in employment by reason of that impairment.”²

1 Barbara M. Altman, “Disability Definitions Models Classification Schemes and Applications” in Handbook of Disability Studies. Edited by Gary L. Albrecht, Katherine D. Seelman, and Michael Bury. (Thousand Oaks, CA: Sage Publications, 2001), 97-122.

2 Government of Canada, Department of Justice, Employment Equity Act, Section 3: Definitions. <http://laws.justice.gc.ca/en/showdoc/cs/e-5.401///en?page=1>

What are Workplace Accommodations?

Workplace accommodations ensure employees have the proper tools and environments to be effective workers. It is important to note that accommodation is not the same as accessibility. Accessibility takes proactive measures to ensure persons with disabilities can participate and have the same choices as non-disabled community members in all dimensions of society. It is not tied to a particular person with a disability. Accommodation involves taking individualized action when a particular person with a disability seeks aid, benefits, services, training, or employment.³ The duty for employers to accommodate is outlined in Canadian legislation such as the Canadian Human Rights Act, the Canadian Charter of Rights and Freedoms, and the Employer Equity Act. Every province and territory also has its own legislation.

3 World Bank, “Accessibility.” <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALPROTECTION/EXTDISABILITY/0,,contentMDK:20192134~menuPK:414202~pagePK:148956~piPK:216618~theSitePK:282699,00.html> and HRSDC, “Advancing the Inclusion of People with Disabilities,” (Ottawa: Government of Canada, 2006), 13.

Typical Accommodation Process

According to the Thinking Outside the Box website, the following may be some typical phases in the accommodation process:

Process	Things to Consider
Identified Need	<p>The employee and/or employer identifies a need for accommodation. The workplace culture should try to make persons with disabilities feel welcome so they do not feel afraid to express their need for a workplace accommodation.</p> <p>Accommodations must be considered on a case-by-case, individualized basis. The employee is often the most valuable resource in identifying their accommodation needs and should remain actively involved in the process.</p> <p>An individual's disability should not be seen as an impediment to their work performance.</p> <p>Undue hardship to the employer should not be caused. Undue hardship refers to the costs associated with accommodation. For example, undue hardship would result if accommodation would make a company insolvent. In addition, it refers to possible health and safety risks. Accommodation must not compromise worker safety.</p> <p>After the need for an accommodation is identified, usually some research is completed.</p>
Documentation	<p>The employer may request formal documentation, especially if he/she thinks there might be safety, health, or legal concerns. The information provided should be relevant to the job, non-diagnostic, and should specify the functional limitations and capabilities specific to the job.</p>
Discussion	<p>Options are discussed and a decision is made regarding the type of accommodation that will be implemented.</p> <p>In order to arrive at appropriate accommodations, the employer and employee must be able to engage in an open dialogue about different options. The appropriate stakeholders, such as managers and union representatives, may also need to be consulted.</p> <p>Things to be considered include:</p> <ol style="list-style-type: none">Job tasks that must be accomplished as a part of the job.Abilities of the person doing the job.Accommodation options: sometimes a consultant or service provider can help at this stage to assess what option would work best in a particular situation.Viability: the impacts on the financial viability of organization are examined.⁴
Implementation	<p>Accommodation is implemented.</p>
Follow-up	<p>Revisit the situation to ensure accommodation is still appropriate.</p> <p>Adjustments may be necessary.</p> <p>Accommodation is an ongoing process.⁵</p>

⁴ The employer is obligated to make accommodations that help the employee do their job, but should not experience undue hardship.

⁵ Mundy McLaughlin, "Best Practices in Workplace Accommodation," PowerPoint Presentation, Making Cents of Abilities Conference, June 3, 2008. See also Thinking Outside the Box, "Responsibilities to Accommodate: Obligations of Workplace Parties." <http://www.totb.ca/english/responsibilities.asp>

Types of Common Accommodations

Workplace accommodations can include “hard” and “soft” accommodations. Hard accommodations are adjustments to physical aspects of the work environment. They include modifications to work stations or facilities, or the use of specialized equipment or technology. Soft accommodations involve adapting work arrangements through, for example, modifying work hours, job redesign through the adjustment of job duties, allowing employees to work from home, or changing work locations.

Statistics indicate that the most common accommodation for Canadians with disabilities was a modified work schedule, but accommodation needs do vary by the type of the disability. According to data collected by Statistics Canada, one in five people with disabilities require modified hours or days, or reduced work hours. Fewer required physical accommodations such as workstation modifications.⁶ Approximately one in six people required a special chair or back support, or a job redesign, while about one in ten required a modified or ergonomic workstation.⁷ Employed people with a hearing limitation were less likely than people with other limitations to require modifications in order to work.⁸ A job redesign was more likely to be needed by people with psychological or developmental limitations.⁹ Modified hours

or work days were more common for people with memory and psychological limitations.¹⁰ Human support was the most common for people with communication or developmental disabilities.¹¹ Special chairs or back support were required by people with mobility or agility limitations.¹² Overall, the majority of persons with disabilities noted that they received workplace accommodations. In 2001, 25 per cent of persons with disabilities did not receive accommodation.¹³

Workplace Accommodations Specific to the Skilled Trades Based on Literature Review and Environmental-Scan Findings

As a part of the literature review and environmental-scan research, specific information on workplace accommodations in the skilled trades was gathered.

The accommodations needed for adults with disabilities who had completed trades certificates/diplomas were similar to the overall patterns, according to data from Statistics Canada. When adults with disabilities were asked if they required modifications to their work conditions/environment, the most common response for those with trade certificates/diplomas was modified hours or days or

10 *Ibid.*

11 *Ibid.*

12 *Ibid.*

13 The 2006 figures for this question were not found. The 2006 information only referred to statistics relating to specific accommodations such as job redesign and human support. The 2001 figure is mentioned in Cara Williams, “Disability in the Workplace,” *Perspectives on Labour and Income*, Statistics Canada, Volume 7, No. 2, February 2006. <http://www.statcan.gc.ca/pub/75-001-x/10206/9096-eng.htm>.

6 Statistics Canada, “Participation and Activity Limitation Survey of 2006: Labour Force Experience of People with Disabilities in Canada.” <http://www.statcan.ca/english/freepub/89-628-XIE/89-628-XIE2008007.htm>.

7 *Ibid.*

8 *Ibid.*

9 *Ibid.*

reduced work hours (16.4%).¹⁴ Job redesign (13.9%), appropriate parking (11.9%), a modified or ergonomic workstation (9.2%) and accessible washrooms (4.7%) were the other responses.¹⁵ The modifications identified by apprentices were not available from Statistics Canada.

In terms of qualitative research, information on workplace accommodations and the trades is limited, and rarely are journeypersons or apprentices specifically mentioned. Most of the information is from American sources.

The Job Accommodation Network and the Rehabilitation Engineering Research Council have examples of accommodations that were actually used by employers. In some cases where the accommodations were more extensive, employers obtained advice and financial support from disability agencies. Although the occupation names used might not be designated trades in Canada, these examples give some idea of the technical accommodations available in the trades environment. Most of these accommodations relate to physical accommodations in terms of equipment and tools.

It would appear that employers in the skilled trades could benefit from being connected to these types of resources that describe accommodations, based on the focus-group and interview findings. Employers sought clarification on the types of accommodations available. For the employers who hired persons with disabilities, they said they needed direction on what accommodations are appropriate for various types of disabilities. They

said this information would help them when talking to their employees about accommodations. The information provided through the Job Accommodation Network and Rehabilitation Engineering Research Council would potentially meet their needs.

Examples:

Manufacturing

For those with visual limitations:

An employee with visual limitations needed to work safely in a factory. The employer

- Enhanced facility access through coloured floor strips, different-coloured flooring, tactile strips, and improved lighting to help those with visual impairments safely navigate through the facility. A programmable cart for navigating the facility was made available.
- Provided resized and relocated gauges, large monitors with screen magnification, high-contrast keyboards, and screen readers with voice outputs.
- Repositioned tools and workspaces.
- Braille was made available.¹⁶

For those with hearing limitations:

An employer made the following adjustments in order to hire an employee with a hearing impairment at a company where there was a lot of forklift traffic. The employer wanted to ensure that the employee would not get hurt while working at the company. According to

14 These figures are based upon data obtained from Statistics Canada by CAF-FCA specifically for this project.

15 *Ibid.*

16 S. Endicott and S. Haynes, "Assistive Technology in Production Settings," Workplace Rehabilitation Engineering and Research Center, February 2008. http://www.workrerc.org/Presentations/ICADI08/ICADI08_Production_files/textmostly/slide1.html.

the employer, the accommodation worked well. The employer

- Determined set paths of travel for forklifts and pedestrians.
- Put strobe lights on the equipment.

In another situation, employees with hearing limitations needed, for health and safety reasons, a device to inform them of an emergency. Each employee was provided with a vibrating pager that was connected to an alarm system. When the alarm sounded, they were paged. Laminated note cards with communication options and flashlights to assist with signs or lip reading were also provided.¹⁷

For those with learning limitations:

An employee had difficulty remembering task sequences of the job. The supervisor provided

- Written instructions, whereby each major task was broken down into sub-parts.¹⁸

For those with mobility limitations:

- An assembly-line worker with bursitis in his knee was limited in his ability to stand.
- His employer gave him a Stand/lean stool.
- Provided him with anti-fatigue matting.

17 Job Accommodation Network, SOAR database on accommodation, <http://www.jan.wvu.edu/soar/hearing/hearingex.html> and Rehabilitation Engineering Research Council, Case Study, http://www.workrerc.org/case_study/viewCaseStudies.php?casestudy=360

18 Job Accommodation Network, SOAR database on accommodation, <http://www.jan.wvu.edu/soar/LD/LDex.html>

- Purchased vibration-dampening shoe inserts.¹⁹
- A warehouse worker whose job involved maintaining and delivering supplies was having difficulty moving product from one area to another. The individual was provided with
 - A vacuum lift.
 - A pallet server.
 - A fork truck.²⁰

A chemical-processing-plant worker was limited in his ability to turn large wheel valves due to a back injury. The worker was accommodated with

- A specialty tool designed to increase torque on wheel-valve handles.²¹

A man with right upper extremity epicondylitis (inflammation of the elbow caused by overuse) worked as a sandblaster at a company that manufactured parts for water-treatment facilities. His job required him to carry large, heavy sandblasting hoses.

- Hose was adjusted to put less strain on arms.
- Safety belt was adapted.
- Other employees benefited from the adapted equipment.²²

19 Job Accommodation Network, SOAR database on accommodation, <http://www.jan.wvu.edu/soar/ctd/ctdex.html>

20 Job Accommodation Network, SOAR database on accommodation, <http://www.jan.wvu.edu/soar/back/bkex.html>

21 Ibid.

22 Rehabilitation Engineering Research Council, Case Study, http://www.workrerc.org/case_study/viewCaseStudies.php?casestudy=358.

One airplane-assembly task is the installation of sheets of insulation that are held in place with steel clips. This job involves high-force and highly repetitive operations. Because the springs are difficult to spread open, some employees developed musculoskeletal injuries.

- To reduce the amount of force that is needed to install the blanket clips, a hand-lever tool was developed. The lever handle of the tool enabled the clip to be opened with less force. The tool has a padded, adjustable handle that can be adjusted to an angle to suit the user.²³

A woman had pain in her wrists from her job as a saddle-maker.

- Many of her tools were adapted to require less gripping force.
- To alleviate her back pain, she was provided with a powered, height-adjustable table to house her very heavy granite anvil and embossing tools. She could use the table for various job functions, at any desired height within the range of the table.²⁴

A student using a wheelchair signed up to participate in an arc-welding class at a community college. Arc welding produces a lot of hot sparks. There are safety aprons available for arc welding, but not for someone using a wheelchair. Another problem was that metal fragments or sparks can puncture wheelchair tires.

23 Rehabilitation Engineering Research Council, Case Study, http://www.workrerc.org/case_study/viewCaseStudies.php?casestudy=356.

24 Rehabilitation Engineering Research Council, Case Study, http://www.workrerc.org/case_study/viewCaseStudies.php?casestudy=357.

- A fire-resistant lap garment that would cover both the student's lap and the front part of the chair was designed.
- Tires with solid, tubeless inserts to protect them from the hazards of the shop floor were used.²⁵

A woodworker with mild cerebral palsy had an employment opportunity in a woodworking facility where most of the work is done at various benches, all the same height. The individual needed to be able to work at any of the benches, where typically the employees sit on tall stools. Due to stability issues, standing or working from a tall stool was not an option for this employee.

- A specialized portable seat was designed for the individual. The shop-quality seat that was selected had adequate adjustability and durability, and was fitted to promote stability.
- A wood platform was constructed to raise the seated height to the proper level for work at the benches, while keeping both feet flat on the platform.²⁶

25 Rehabilitation Engineering Research Council, Case Study, http://www.workrerc.org/case_study/viewCaseStudies.php?casestudy=340.

26 Rehabilitation Engineering Research Council, Case Study, http://www.workrerc.org/case_study/viewCaseStudies.php?casestudy=362. http://www.workrerc.org/case_study/viewCaseStudies.php?casestudy=361. http://www.workrerc.org/case_study/viewCaseStudies.php?casestudy=473

Construction

For those with learning limitations:

A building contractor with dyscalculia was inefficient when creating job quotes. To ensure the mathematical calculations were accurate, the employee spent extra time “figuring” and “double-checking” the numbers. The site supervisor purchased

- The Jobber 6 contractor’s calculator to help the employee calculate the quotes more efficiently.²⁷

For those with mobility limitations:

A construction worker with DeQuervain’s disease²⁸ had severe inflammation of the wrist and forearm after prolonged use of hand tools. The employer provided him with

- Lightweight and pneumatic tools.
- Anti-vibration tool wraps/gloves.
- Tool balancers/positioners for stationary work.²⁹

A construction worker was undergoing treatment for a back injury during working hours. The individual was

27 Job Accommodation Network, SOAR accommodation database, <http://www.jan.wvu.edu/soar/LD/LDex.html>.

28 DeQuervain’s Disease: pain comes from the tendons becoming inflamed on the side of the wrist and forearm just above the thumb.

29 Beth Loy, PhD, “Accommodation and Compliance Series: Employees with Cumulative Trauma Disorders,” Job Accommodation Network, <http://www.jan.wvu.edu/media/CTDs.html>

- Transferred to light duty and provided a flexible schedule in order to attend treatment and also continue to work full-time.³⁰

Transportation

For those with mobility limitations

A truck driver with thoracic outlet syndrome was having difficulty driving for long periods of time and unloading bags at his delivery destination. The employer installed

- A small crane in the back of the trailer and provided him with a lightweight aluminum hand truck to help him unload materials.
- A steering-wheel spinner knob to eliminate prolonged grasping of the steering wheel.
- An anti-vibration seat to cut down on fatigue.³¹

A mechanic with a bending restriction due to a lower-back impairment had problems accessing the engine compartment and low task areas of vehicles. The mechanic also had difficulty lifting. He was accommodated with

- A tire lift.
- A mechanic’s low task chair.

30 Job Accommodation Network, SOAR accommodation database, <http://www.jan.wvu.edu/soar/back/bkex.html>

31 Beth Loy, PhD, “Accommodation and Compliance Series: Employees with Cumulative Trauma Disorders,” Job Accommodation Network, <http://www.jan.wvu.edu/media/CTDs.html>.

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- A specialty creeper designed to support the body while accessing engine compartments.³²

To assist him with lifting, he was accommodated with

- A jib crane.
- Tool balancers.
- Work positioners.³³

A person of short stature had difficulty reaching the accelerator pedal in fleet delivery vehicles.

- The solution was to develop a pedal-extension adapter that fits over existing accelerator pedals. The device is constructed of lightweight aluminum, is portable and fits all vehicles in the fleet.³⁴

32 No author, "Accommodation and Compliance Series: Employees with Back Impairments," Job Accommodation Network, <http://www.jan.wvu.edu/media/back.html>.

33 Job Accommodation Network, SOAR accommodation database, <http://www.jan.wvu.edu/soar/back/bkex.html>.

34 Rehabilitation Engineering Research Council Case Study, http://www.workrerc.org/case_study/viewCaseStudies.php?casestudy=341.

Service

For those with mobility limitations:

A sous chef had paraplegia

- A standing wheelchair and the electric wheelchair were purchased by a service agency for persons with disabilities so the individual could get around the kitchen.
- His employer, the Hyatt, purchased a basket to allow the individual to carry his knives between work stations. The Hyatt built a platform-type box so the individual could access a work station.³⁵

35 Rehabilitation Engineering Research Council, Case Study, http://www.workrerc.org/case_study/viewCaseStudies.php?casestudy=630.

Part 3:

Statistical Data on Trade Participation and Employment Trends for Persons with Disabilities

This section is intended to provide statistical information on persons with disabilities with a focus on those working in the skilled trades. This information was gathered from Statistics Canada. Additional information from secondary sources has been added for context when appropriate.

Statistical Overview

After each recent census, Human Resources and Skills Development Canada has funded Statistics Canada to gather information on persons who face limitations due to a health condition or disability. This survey is called the Participation and Activity Limitation Survey (PALS). Readers should keep in mind the following points when looking at the data:

- Individuals who participate in the survey self-identify as having a health condition or limitation.
- A broad definition of activity-limiting conditions is used, including, but not limited to, hearing, seeing, speech, mobility, agility, learning, developmental delays, psychological conditions, pain, memory, or other limitations.
- Trades-related information has been highlighted when it could be obtained.
- For the purposes of the survey, trade certificate/diploma is defined as it is in the census. A registered apprenticeship certifi-

cate is defined as a sealed certificate from a certified apprenticeship program or a provincial/territorial certificate. A certificate or diploma through technical training in trade-level vocational and pre-vocational courses also counts as a part of this definition. Such courses are given at community colleges, institutes of technology, and similar institutions. In Quebec, those who have a DEP (diplôme d'études professionnelles) are included. Any training certificates from an employer, unless they correspond to certificates or diplomas recognized by departments of education, are not included.

- Statistics from 2001 and 2006 have been used. The PALS sample for 2001 was 43,000, consisting of approximately 35,000 adults and 8,000 children.¹ Statistics from 2001 were used in cases where 2006 data was not released. The most recent PALS survey conducted between November 2006 and February 2007 sampled 48,000 individuals.² There were 39,000 adults and 9,000 children in this sample.

1 Statistics Canada, "A profile of disability in Canada, 2001," Participation Activity Limitation Survey. <http://www.statcan.ca/english/freepub/89-577-XIE/index.htm>

2 The population covered by the survey is made up of only persons residing in private and some collective households. Persons living in institutions and on First Nations reserves are not included, even if they are persons with disabilities. See Statistics Canada, "Participation and Activity Limitation Survey of 2006: Labour Force Experience of People with Disabilities in Canada," <http://www.statcan.ca/english/freepub/89-628-XIE/89-628-XIE2008007.htm>.

Numbers of Persons with Disabilities in the Skilled Trades

- There are more than 4.4 million persons with disabilities out of a total Canadian population of 30.9 million, according to the 2006 census.³
- 276,790 persons with disabilities were identified as being from trades, transport and equipment operators, and related occupations, as defined by Statistics Canada. The only occupation with higher numbers was sales and service, with 465,470. The third occupation is business, finance, and administrative, with 262,620.⁴ The trades is also a major occupation for persons with disabilities in Australia, ranking third after professionals and intermediate clerical, sales, and service workers.⁵
- The majority of the 276,790 were in the 45-to-64 age group (183,980), followed by

3 Statistics Canada, "Participation and Activity Limitation Survey 2006: Tables" Catalogue Number 89-628-XIE-003. (Ottawa: Social and Aboriginal Statistics Division, Ministry of Industry, 2008), 35. http://dsp-psd.pwgsc.gc.ca/collection_2007/statcan/89-628-X/89-628-XIE2007003.pdf.

4 Statistics Canada, "Participation and Activity Limitation Survey 2006: Tables (Part III)," Table 11 Occupation of persons with disabilities by sex, and age group, Canada, 2006. <http://www.statcan.gc.ca/pub/89-628-x/2008008/t/5201165-eng.htm>

5 Australian Government, Australian Safety and Compensation Council, "Are People with Disability at Risk At Work? A Review of the Evidence," (Sydney: Commonwealth of Australia, March 2007), 2, 13, 15, 24, 25. <http://www.safeworkaustralia.gov.au/NR/rdonlyres/262E0DA1-4BBC-44ED-A617-1CC1B2ECE853/0/ArePeopleWithDisabilityatRiskatWork.pdf>.

30-to-44 (66,970). The fewest were in the 15-to-29 age group (25,840)⁶

- The majority in this group were also men (250,360), not women (26,430)⁷

Overall Employment Trends

- Generally, persons with disabilities tend to have higher unemployment rates and make less money than persons without disabilities.
- 53.5 per cent of persons with disabilities are employed, compared to 75.1% of persons without disabilities.⁸
- In 2001, it was reported that the median income⁹ for workers with disabilities was \$22,600, about 17 per cent lower than for other workers.¹⁰
- In terms of education, the majority of persons with disabilities have less educational training than the non-disabled. When compared to the non-disabled population, more

6 Statistics Canada, "Participation and Activity Limitation Survey 2006: Tables (Part III)," (Ottawa: Social and Aboriginal Statistics Division, Ministry of Industry, 2008), 35. http://dsp-psd.pwgsc.gc.ca/collection_2007/statcan/89-628-X/89-628-XIE2007003.pdf.

7 *Ibid.*

8 Statistics Canada, "Participation and Activity Limitation Survey of 2006: Labour Force Experience of People with Disabilities in Canada," <http://www.statcan.ca/english/freepub/89-628-XIE/89-628-XIE2008007.htm>.

9 Income for the purposes of PAL was defined as total income from all sources, including employment income, income from government programs, pension income, investment income and any other income.

10 Cara Williams, "Disability in the Workplace," Perspectives on Labour and Income, Statistics Canada, Volume 7, No. 2, February 2006. <http://www.statcan.ca/english/freepub/75-001-XIE/10206/art-2.htm>

persons with disabilities have a high school education or no high school education.¹¹

Inadequate training is still perceived as a barrier to initial participation in the labour market. When asked about the limitations and barriers to working, most persons with disabilities who responded in the PALS survey identified the fear of losing current income and supports was the top barrier. Some additional barriers included, “feel training is not adequate,” “no jobs available,” “have been a victim of discrimination.”¹²

Training and Employment Trends for Post-Secondary Graduates

- Research on post-secondary students with disabilities tends to focus on college or university graduates.¹³ Apprentices are generally not mentioned as a specific group.
- For context, some general trends for post-secondary students with disabilities have been shared.
- In general, post-secondary graduates with disabilities have a harder time accessing training than the non-disabled. A lack of supports for students with disabilities is a part of the issue. According to the findings of “Employability in Canada: Prepar-

ing for the Future,” a report prepared by a House of Commons committee, “Human Resources and Skills Development Canada reported that post-secondary students with disabilities have unmet needs for disability supports. In 2001, it was estimated that there were approximately 51,000 post-secondary students with disabilities, of whom 20% reported the need for disability supports to attend a post-secondary institution. Of these 10,000 students, only about 40% had their needs met, leaving approximately 6,000 students with disabilities with unmet needs for supports.”¹⁴ Post-secondary students with disabilities can access support through the Canadian Student Loans Program, the Canada Study Grant for Accommodation of Students with Permanent Disabilities and the Canada Access Grant for Students with Permanent Disabilities.¹⁵ These grants, however, do not address barriers to learning environments that may exist or issues related to school-to-work transition.¹⁶

- Although post-secondary education is a key factor in helping persons with disabilities obtain jobs, it is generally harder for post-secondary graduates with disabilities to obtain employment when compared to the

11 HRSDC, “Advancing the Inclusion of People with Disabilities,” (Ottawa: Government of Canada, 2006), 88, 90.

12 Statistics Canada, “Participation and Activity Limitation Survey 2006: Tables (Part III),” (Ottawa: Social and Aboriginal Statistics Division, Ministry of Industry, 2008), 21. http://dsp-psd.pwgsc.gc.ca/collection_2007/statcan/89-628-X/89-628-XIE2007003.pdf.

13 For a study that discusses the experiences of university and college (non-trades) see Canadian Centre on Disability Studies, “Students with Disabilities: Transitions from Post-Secondary Education to Work,” Phase II, (Winnipeg: Canadian Centre on Disability Studies, December 2004)

14 House of Commons Canada, “Employability in Canada: Preparing for the Future Report of the Standing Committee on Human Resources, Skills Development and the Status of Persons with Disabilities,” 39th Parliament, 2nd Session, (Ottawa: Government of Canada, April 2008), 97. The information was presented by HRSDC, “Diagnostic: People with Disabilities and the Labour Market,” September 26, 2006., 4.

15 *Ibid.*, 108

16 *Ibid.*, 109.

non-disabled.¹⁷ Interestingly, a recent survey challenges this general observation. The Department of Education in Nova Scotia has produced a recent study on the outcomes

for university and college students with disabilities. This survey challenges that notion that the employment rates are lower for persons with disabilities when one examines post-secondary graduates. Eighty-one per cent of graduates with disabilities were working and another seven per cent were

17 Canadian Centre on Disability Studies, "Students with Disabilities: Transitions from Post-Secondary Education to Work," Phase II, (Winnipeg: Canadian Centre on Disability Studies, December 2004)

Chart A: Numbers Reporting a Disability by Trade, National Apprenticeship Survey, Canada, 2007¹

Trades	Completers with disabilities	Long-term continuers with disabilities	Discontinuers with disabilities
Total	955	753²	383³
Automotive Service Technician	95	68	
Hairstylist	87	67	
Electrician	52	38	
Carpenter	49	38	
Cook	45	49	
Welder	45		
Industrial Mechanic (Millwright)	40		
Plumber	36	39	
Electrician-Construction and Maintenance	33		
Millwright	22		
Heavy Duty Mechanic	20		
Construction Electrician	10	9	
Truck and Transport Mechanic	10		

1 This data was obtained especially for this project from Statistics Canada from the National Apprenticeship survey data.

2 There was no data for certain trades in this group. It was suppressed to meet the confidentiality requirements of the Statistics Act.

3 There was no trade specific information for this group. It was suppressed to meet the confidentiality requirements of the Statistics Act.

about to start a job.¹⁸ This total of 88 per cent mirrors the 89 per cent of Nova Scotians 25 to 49 years old with post-secondary education who were employed.¹⁹ The survey did support the trend that persons with disabilities tend to make less than those without disabilities. The Nova Scotia survey found that graduates with disabilities earned five per cent less than graduates without disabilities.²⁰

Information on Apprentices

- The Canadian National Apprenticeship Survey gives researchers some insight into what trades apprentices with disabilities are participating in. The trades where the most apprentices reported having a dis-

ability were automotive service technician and hairstylist. For more specific information see Chart A. It is important to note that the survey only includes those apprentices who self-identified that they had a disability at the beginning of their program and still had their disability at the end of their program. The results are provided for those who completed an apprenticeship, those who are long-term continuers, and those who discontinued their training. The survey did not ask respondents to identify their type of disability. The numbers in the chart will not add up to the total because some of the results were suppressed due to the confidentiality requirements of the Statistics Act.

- In terms of international studies on apprentices with disabilities, only one study from Australia, titled "Vocational Education and Training and People with a Disability: A Review of the Research," was found that discussed employment outcomes for persons with disabilities in vocational training,

18 Department of Education, Nova Scotia, "Nova Scotia Longitudinal Follow-Up: Post-Secondary Leavers with Disabilities, (Halifax: Province of Nova Scotia, 2008), 7. http://psds.ednet.ns.ca/documents/PSDS_Report_Web.pdf.

19 *Ibid.*

20 *Ibid.*



including apprenticeship. This study found that employment outcomes were “generally poorer for people with a disability compared with the general VET (Vocational Education and Training) population, although this does vary considerably by disability type.”²¹ In 2004, 51 per cent of VET graduates with a disability were employed after training, compared with 77 per cent of VET graduates with no disability.²² Graduates with hearing and visual disabilities had higher employment outcomes while those with chronic illness, physical disabilities, or other disabilities had the lowest.²³ These findings confirm the general trend that persons with disabilities have higher unemployment rates than those without. The Australian study also found fewer persons with disabilities participate in apprenticeship training than the non-disabled. This finding is problematic, according to the researchers who wrote the report, given that this type of training involves practical experience in the workplace that is more likely to result in employment.²⁴

Employment Trends for Persons with Disabilities with a Trades Certificate/Diploma

The following information is from PALS on those who completed trades certificates/diplomas. Information on apprentices was not available.

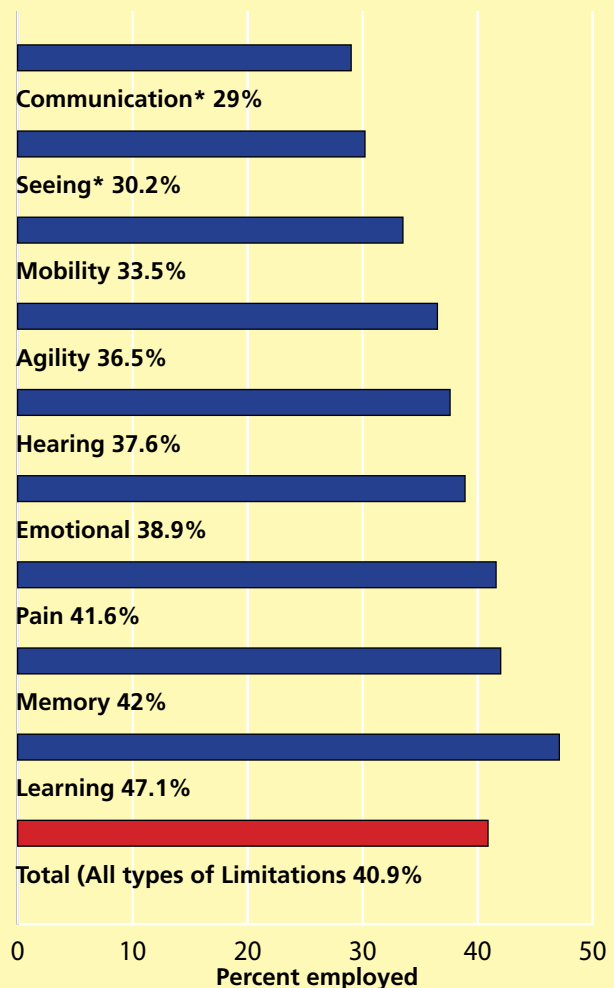
21 See Tabatha Griffin and Lisa Nechvoglod, National Centre for Vocational Education Research, “Vocational Education and Training and People with a Disability: A Review of the Research,” (Adelaide: Australian Government, 2008), 4. <http://www.ncver.edu.au/research/proj/nr07122.pdf>.

22 Ibid., 16.

23 Ibid.

24 Ibid.

Chart B: Employment Rates for Adults with Disabilities with Trades Certificate/Diploma, by Disability, Canada, 2006



Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.

* Denotes a statistic to be used with caution due to small sample size. Developmental limitations were not included in the graph as the results were statistically unreliable.

- Approximately one in eight Canadian adults with a disability have completed trades-related qualifications.²⁵

25 Statistics Canada, “Highest Level of Educational Attainment for those with disabilities by sex and age groups,” Participation and Activity Limitation Survey 2001, <http://www.statcan.gc.ca/pub/89-587-x/t/th/t1/4152889-eng.htm>.

- In 2001, 12.6 per cent of persons with disabilities had a trade certificate/diploma.²⁶
- In 2006, 40.9 per cent of those with trade certificates/diplomas were employed.²⁷
- Those with learning disabilities reported the highest employment rate (47.1%), while those with communication limitations reported the lowest (29%).²⁸ See Chart B.
- In terms of occupation, 34.8 per cent were employed in the trades, transport and equipment operators, and related occupations.²⁹ See Chart C.

26 *Ibid.* An updated 2006 figure could not be obtained.

27 Statistics Canada, "Chart B: Employment Rates for Adults with Disabilities with Trades Certificate/Diploma, by Disability, 2006." This chart was specially ordered from Statistics Canada for this project.

28 *Ibid.*

29 Statistics Canada, "Chart C: Employment by Occupational Classification for Employed Adults with Disabilities with Trades Certificate/Diploma, 2006." This chart was specially ordered from Statistics Canada for this project.

- The most common type of disability among the 34.8 per cent was hearing limitations (48.8 per cent of responses). The least common was emotional limitations (24.8 per cent of responses).³⁰ See Chart D.

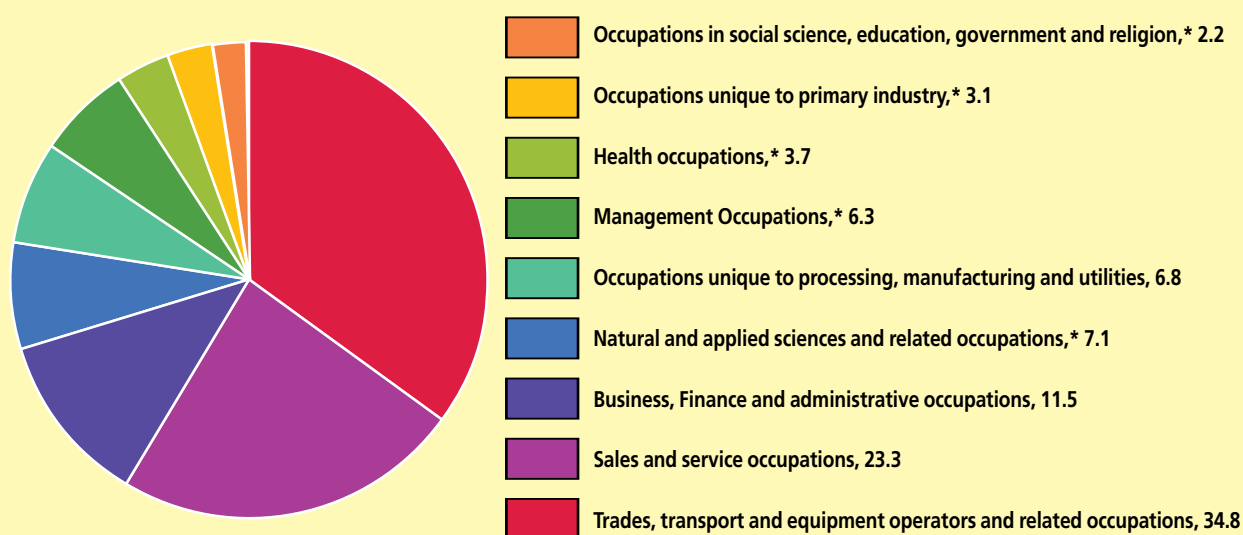
In terms of industry, the greatest proportion of adults with disabilities who have trades certificates/diplomas are employed in the manufacturing industry.³¹ See Chart E.

It is interesting to compare the figures with what Australian studies have found. In comparison, manufacturing and retail were the main industries of employment for persons

30 Statistics Canada, "Chart D: Type of Limitation Among Adults with Disabilities with a Trades Certificate/Diploma Working in the Trades, 2006." This chart was specially ordered from Statistics Canada.

31 Statistics Canada, "Chart E: Employment by Industry Classification for Employed Adults with Disabilities with Trades Certificate/Diploma, 2006." This chart was specially ordered from Statistics Canada for this project.

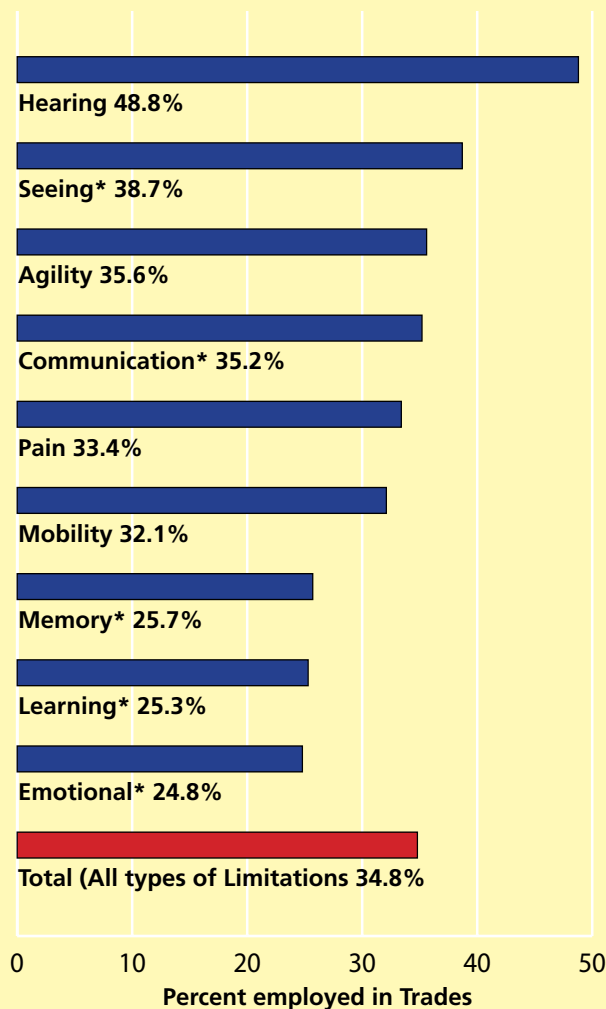
Chart C: Employment by Occupational Classification for Employed Adults with Disabilities with Trades Certificate/Diploma, Canada, 2006



Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.

* Denotes a statistic to be used with caution due to small sample size.

Chart D: Type of Limitation among Adults with Disabilities with a Trades Certificate/Diploma Working in the Trades, 2006



Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.

* Denotes a statistic to be used with caution due to small sample size.
Developmental limitations were not included in the graph as the results were statistically unreliable.

Chart E: Employment by Industry Classification for Employed Adults with Disabilities with Trades Certificate/Diploma, 2006

Industry	Percentage
Educational services*	1.4
Utilities*	2.4
Wholesale trade*	2.6
Agriculture, forestry, fishing and hunting*	2.8
Mining and oil and gas extraction*	3.1
Professional, scientific, and technical services*	3.2
Accommodation and food services*	3.8
Administrative and support, waste management, and remediation services*	5.4
Public administration*	5.5
Transportation and warehousing*	5.7
Retail trade	9.9
Health care and social assistance	9.9
Other services (except public administration)*	10.4
Construction	13.9
Manufacturing	15.2

Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.

The industry classifications arts, entertainment and recreation; information and cultural industries; finance and insurance, and real estate and rental and leasing were not included in the table as the results were statistically unreliable.

with disabilities in Australia.³² In addition, the

32 This figure includes all persons with disabilities, not just those with trades certificates or diplomas. The figure is based on Survey of Disability, Ageing and Careers data, referred to in the following report, Australian Government, Australian Safety and Compensation Council, "Are People with Disability at Risk At Work? A Review of the Evidence," (Sydney: Commonwealth of Australia, March 2007), 14. <http://www.safeworkaustralia.gov.au/NR/rdonlyres/262E0DA1-4BBC-44ED-A617-1CC1B2ECE853/0/ArePeopleWithDisabilityatRiskatWork.pdf>.

Australian study analysed type of disability and industry. Those in construction mostly had learning limitations and incomplete use of their arms or fingers. In manufacturing, hearing and learning limitations were the main disability types.³³

33 *Ibid.*, 16.

Part 4:

Perspectives of Employers in the Skilled Trades

This section of the report summarizes the findings from the focus groups and interviews with employers. Some of the employers had hired persons with disabilities while others did not. At the focus groups and interviews, employers talked about their views towards hiring persons with disabilities, examples of accommodations from their workplaces, supports, and recommendations. This is qualitative information based on those who participated in the focus groups and interviews. To gather more quantitative data, a survey would have to be conducted to investigate how representative these employers' views are of skilled trades employers in general. A survey could also indicate how widespread workplace accommodations are in various trades.

Overall, the focus-group and interview findings reveal there may be attitudinal barriers to hiring and accommodating persons with disabilities in the skilled trades. Employers who had never hired persons with disabilities wondered about issues such as safety, productivity, and cost. These issues are often raised by employers, according to other studies examined as a part of the literature review. Most of these studies are based on focus group or interview findings as opposed to surveys. Evidence gathered by the disability community suggests there is a business case for hiring and accommodating persons with disabilities. The research, however, focuses on all types of work environments. The disability

and apprenticeship communities may need to investigate the business case for hiring and accommodating persons with disabilities in the skilled-trades environment to specifically address the issues employers raised. This trade specific information could be shared with employers in order to dispel myths or to help indicate where skilled trades employers may need support.

The focus group and interview findings suggest there are differences in the approach to accommodations based on the size of the employer, but similarities in terms of attitudes towards accommodations. For small businesses, the accommodation process was informal, while larger companies tended to have more formalized processes. Most employers, no matter what their size, found that the accommodations were effective.

In terms of supports to motivate them to hire and accommodate persons with disabilities, employers recommended accommodation advice, information workshops, and financial incentives. The research for this project revealed that these resources are avail-

"Labour shortages run across all qualified occupations. When we cannot find the qualified employees, we often end up using helpers and labourers to fill the gap. This is not good, as the work suffers." – Ontario plumbing and heating firm with more than 6,000 employees

able, but employers are not aware of these supports.

Readers should note that the following material reflects the ideas, opinions, and perceptions of those who attended the focus groups and interviews and do not necessarily represent the opinions of CAF-FCA or its stakeholders.

Description of Participants

Employers who participated in the focus groups and interviews were from the construction, electrical, mechanical, transportation, and manufacturing industries, as outlined in Part 1. Some of the employers had never hired persons with disabilities before, while others had. Almost all of the employers hired apprentices.

Questions Asked

Key topics and questions addressed in the focus groups and interviews with employers included the following:

- Attitudes toward hiring persons with disabilities.
- Policies and practices of company regarding workplace accommodations.
- Nature of accommodations undertaken by the employer.
- Awareness of supports, policies, and programs available.
- What would motivate you to hire more apprentices or journeypersons with disabilities?

- How can employers be most effectively encouraged to support and accommodate persons with disabilities?
- What supports do you need?

Employers' Attitudes toward Hiring Persons with Disabilities

Hiring Practices

Some employers noted that their workplaces were not as welcoming to persons with disabilities as they could be.¹ Employers in the electrical industry said they receive résumés on a daily basis so they tend not to seek out applicants. Other employers who were struggling to find employees tended to post ads or go to immigrant agencies in order to find workers. Employers who hired persons with disabilities reported that they found out about the employee's disability after they hired them so they did not have a lot of experience accommodating people at interviews.

Barriers to hiring and accommodating persons with disabilities in the skilled trades

The following comments were made by employers who participated in the focus groups. These employers had never hired persons with disabilities. These employers'

1 A similar comment was made at the House of Commons Evidence Meeting see House of Commons Canada, "Employability in Canada: Preparing for the Future Report of the Standing Committee on Human Resources, Skills Development and the Status of Persons with Disabilities," 39th Parliament, 2nd Session, (Ottawa: Government of Canada, April 2008), 100.

concerns align with the views expressed by employers in other sectors based on studies examined as a part of the literature review.²

The insights into employers' attitudes and what barriers they feel prevent the hiring and accommodating of persons with disabilities in the skilled trades will be valuable to the disability and apprenticeship communities when strategizing about issues to address when talking to employers. In particular, employers may need clarification on liability and cost.

Safety

Safety for all employees was a major concern for employers. They do not want any of their employees to be at risk.³

Employers sought clarification on whether their insurance rates or workers' compensation claims would be affected when hiring persons with disabilities.

Employers in construction and electrical were not sure if persons with disabilities would

meet the safety requirements for commercial or industrial sites.⁴ There was a perception that customers would not support the use of workers with disabilities due to fears about additional liability. In one example provided by an employer, employees with artificial limbs were not allowed to work on a project because the customer said that the persons with disabilities could not evacuate the premises quickly enough in case of an emergency. Employers pointed out that if the construction site is in a remote area and long shifts are required, there are no facilities to provide supports for persons with disabilities and the schedule of the work is less flexible.

Since construction sites were perceived to be too dangerous, persons with disabilities could contribute to projects in cases where isolated tasks could be taken offsite. In one case mentioned by an employer, employees with visual limitations were able to do metal fabrication in a shop offsite. Their work was then brought to the construction site.

An electrical employer noted that a person with a disability could work in a residential setting, if they worked with a partner and could deal with the customer appropriately. He said there might be fewer health and safety risks in someone's home versus a commercial or industrial setting.

2 An additional research study has made a similar conclusion see Paul Seccaspina, Daniel Kaltianinen, and Frank Buchan, "Accessibility to Employment by Persons with Disabilities, The City of Greater Sudbury," (Toronto: Absolute Abilities Business Development Centre, The Ministry of Training, Colleges, and Universities, March 31, 2001), 31-32. Other researchers have noted attempts to link employer size or type of industry to particular attitudes towards persons with disabilities have produced inconsistent findings. See Canadian Centre on Disability Studies, "Students with Disabilities: Transitions from Post-Secondary Education to Work, Phase II Report," (Winnipeg, Canadian Centre on Disability Studies December 2004), 7-17.

3 Concerns about safety were also raised in a Canadian Plastics Sector study. FMP Ltd., for Canadian Plastics Sector Council, "Profitability in Diversity," (Ottawa: FMP Ltd., July 31, 2005), 13-14. See <http://www.cpssc-csp.ca/PDFS/CPSC%20TERC%20FINAL%20REPORT-ENG-LISH%20FINAL.pdf>

4 See Kirstine Stewart, Diane Grant, Mark Meadows, Catholic Blind Institute, European Union European Social Fund, Liverpool JMU, "'Skills for Life': Investigating the barriers to labour market integration for Visually Impaired people in North West England," (Yorkshire: Disability UK Archive December 2007), 8. <http://www.leeds.ac.uk/disability-studies/archiveuk/stewart%20kirsten/Skills%20for%20Life%20Executive%20Summary%20FINAL.pdf>

Employers agreed that it may be easier to make accommodations in a plant or shop environment, which is a more controlled space than a construction site. Apprentices agreed with this. When working on a construction site, some apprentices said there is less flexibility due to tight time constraints, and this is not good for their type of learning disabilities. Apprentices did note that where you can work really depends on the type of disability you have.

Research on the issue of safety has produced mixed findings. Focus groups with employers in Australia indicate that employers did not feel that there were higher health and safety or compensation costs when hiring persons with disabilities.⁵ A national study with 643 employers in Australia in 2002 found that workers with disabilities have a lower number of safety incidents, lower workers' compensation costs, and fewer sick days than other employees.⁶ The writers noted, however, that persons with disabilities tend to work in white-collar occupations, where rates of

injury are lower, possibly accounting for the lower rates. Studies with railway workers and with workers at the DuPont Corporation in the United States indicate that workers did not experience higher rates of injury and had average or above-average safety records.⁷ On the other hand, there are some studies that show an increased safety risk for those with severe disabilities.⁸ No Canadian-specific research was found to indicate whether the number of safety incidents was lower or higher for persons with disabilities.⁹ More trades-specific evidence to clarify whether employers' assumptions about safety are warranted would be useful.

Productivity

Employers wondered if persons with disabilities were as productive as other workers and worried about the additional supervision time that might be required. In residential settings, employers said the customer might not be willing to pay more if the person is perceived to be slower. Additional supervision might be difficult if there are only two people working at the house and each has their own set of jobs to do. Employers in the focus groups stressed the importance of their business remaining competitive within their sector. Employers working in commercial set-

5 Australian Government, Australian Safety and Compensation Council, "Are People with Disability at Risk At Work? A Review of the Evidence," (Sydney: Commonwealth of Australia, March 2007), 29. <http://www.safeworkaustralia.gov.au/NR/rdonlyres/262E0DA1-4BBC-44ED-A617-1CC1B2ECE853/0/ArePeopleWithDisabilityatRiskatWork.pdf>.

6 *Ibid.*, 30. For United Kingdom studies that noted similar findings see Sue Arthur and Gerry Zarb, "Measuring Disablement in Society: Working Paper 4 Barriers to Employment for Disabled People," (Yorkshire: Disability Archive UK, 1995) <http://www.leeds.ac.uk/disability-studies/archiveuk/Zarb/barriers%20to%20employment.pdf>. and Dan Goodley, Centre of Applied Disability, University of Sheffield, "'Jobs Not Charity,' Promoting Disabled People's Access to the Labour Market and the Role of Organizations of Disabled People," (Sheffield: University of Sheffield, 2005), 21. <http://www.shef.ac.uk/jobsnotcharity/>.

7 *Ibid.*

8 *Ibid.*, 31.

9 *Ibid.*, 2, 13, 24, 25.

tings noted there are tight time constraints on projects and projects tend to go to the lowest bidder.

In some cases apprentices with disabilities who participated in the focus groups noted that they do need extra supervision and more time, but not in all cases and sometimes only at the beginning of their job. As they gain more experience, often less supervision is needed.

Research has found that employees with disabilities have similar productivity rates compared to other workers.¹⁰ A survey with employers in Sudbury found that employers who provide flexible work arrangements for persons with disabilities still find these workers productive.¹¹ The overall gains must also be considered. Significantly, employees with disabilities perform better than non-disabled employees in terms of reliability. Studies show there are higher retention rates, better

attendance, and fewer sick leaves for persons with disabilities, leading to reduced costs for employers.¹²

Cost

Employers perceived there were high costs to hiring and accommodating persons with disabilities. A Canadian Plastics Sector council confirmed that employers perceive there is limited or no return on training investment when hiring persons with disabilities.¹³ Employers who had never hired persons with disabilities expressed concerns about the costs of accommodations.

In contrast, employers who had made accommodations reported that the costs were not prohibitive. Most accommodations were less than \$500. In one case, in which a truck was modified for a journeyman, the cost was a few thousand dollars.

The research suggests that accommodations are not necessarily costly and can lead to enhanced performance. A study by the Canadian Abilities Foundation found that the

10 *Ibid.*, 33-34. See also Sue Arthur and Gerry Zarb, "Measuring Disablement in Society: Working Paper 4 Barriers to Employment for Disabled People, (Yorkshire: Disability Archive UK, 1995) <http://www.leeds.ac.uk/disability-studies/archiveuk/Zarb/barriers%20to%20employment.pdf> and Dan Goodley, Centre of Applied Disability, University of Sheffield, "'Jobs Not Charity,' Promoting Disabled People's Access to the Labour Market and the Role of Organizations of Disabled People," (Sheffield: University of Sheffield, 2005), 21. <http://www.shf.ac.uk/jobsnotcharity/>.

11 See an additional research study that has made a similar conclusion such as Paul Seccaspina, Daniel Kaltianinen, and Frank Buchan, "Accessibility to Employment by Persons with Disabilities, The City of Greater Sudbury," (Toronto: Absolute Abilities Business Development Centre, The Ministry of Training, Colleges, and Universities, March 31, 2001), 35.

12 Australian Government, Australian Safety and Compensation Council, "Are People with Disability at Risk At Work? A Review of the Evidence," (Sydney: Commonwealth of Australia, March 2007), 29. <http://www.safeworkaustralia.gov.au/NR/rdonlyres/262E0DA1-4BBC-44ED-A617-1CC1B2ECE853/0/ArePeopleWithDisabilityatRiskatWork.pdf>.

13 FMP Ltd., for Canadian Plastics Sector Council, "Profitability in Diversity," (Ottawa: FMP Ltd., July 31, 2005), 13-14 <http://www.cpsc-ccsp.ca/PDFS/CPSC%20TERC%20FINAL%20REPORT-ENGLISH%20FINAL.pdf>

average annual cost of accommodation per worker is less than \$500.¹⁴

American research indicates the following:

- During the period from 1992 and 1999, 71 per cent of workplace accommodations cost US\$500 or less, and one in five cost nothing.¹⁵
- Nearly all of the 500 accommodations made by one American retail company were cost-free or required only a modest cost.¹⁶
- Most employers who made a workplace accommodation found the costs of accommodation to be less costly than they expected, or about what they expected.¹⁷
- The Job Accommodation Network reported that, when making workplace accommodations, 46 per cent of American employers spend nothing and 45 per cent experienced

14 Cara Williams, "Disability in the Workplace," *Perspectives on Labour and Income*, Statistics Canada, Volume 7, No. 2, February 2006. <http://www.statcan.ca/english/freepub/75-001-XIE/10206/art-2.htm>

15 Job Accommodation Network, "Fact Sheet Series: Workplace Accommodations: Low Cost, High Impact," 2. <http://www.jan.wvu.edu/media/LowCostHighImpact.doc>.

16 P.D. Blanck, "The Economics of the Employment Provisions of the Americans with Disabilities Act: Part 1 - Workplace Accommodations," *DePaul Law Review*. Vol. 46, No. 4, (1997), 877-914. <http://www.csun.edu/cod/conf/2005/proceedings/2351.htm>

17 K.A. Dixon, with Doug Kruse and Carl E. Van Horn, "Restricted Access: A Survey of Employers about People with Disabilities and Lowering Barriers to Work," (New York: John J. Heldrich Center for Workforce Development, Rutgers University, No date), No page number. <http://www.heldrich.rutgers.edu/uploadedFiles/Publications/Restricted%20Access.pdf>

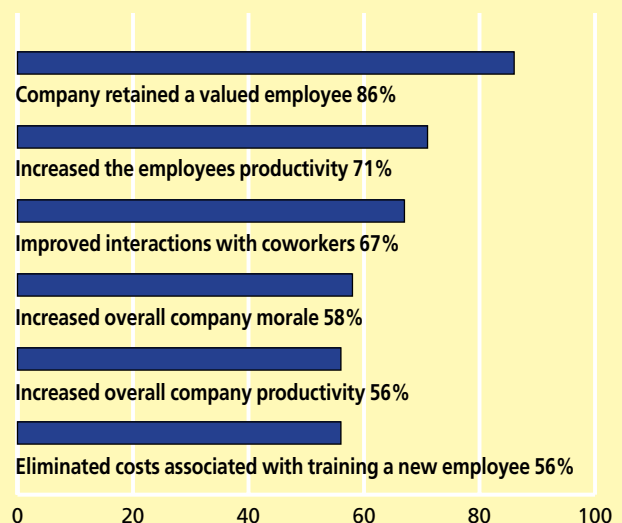
a onetime cost of \$500 or less. Only 7 per cent of employers indicated that their accommodation resulted in an annual, ongoing cost.¹⁸

- Appropriate access to accommodation and care for employees can save between \$5,000 to \$10,000 per employee in annual costs related to prescription drugs and wage replacement.¹⁹

18 Job Accommodation Network, "Fact Sheet Series: Workplace Accommodations: Low Cost, High Impact," 2. <http://www.jan.wvu.edu/media/LowCostHighImpact.doc>.

19 M. Wilson, R. Joffe & B. Wilkerson, "The unheralded business crisis in Canada: Depression at work. An information paper for business, incorporating 12 steps to a business plan to defeat depression." (Toronto: Global Business and Economic Roundtable on Addiction and Mental Health, 2002), 4, 18. http://www.mental-healthroundtable.ca/aug_round_pdfs/Roundtable%20report_Jul20.pdf?blank.

Proportion of Employers who had made Workplace Accommodations Reporting Direct and Indirect Benefits of Workplace Accommodations, Job Accommodation Network, United States, 2004 to 2006



Source: Job Accommodation Network. "Workplace Accommodations: Low Cost, High Impact". Accessed online August 8, 2008 at: <http://www.jan.wvu.edu/media/LowCostHighImpact.doc>.

The preceding chart presents selected findings from a Job Accommodation Network survey with over 1,000 American employers that had undertaken accommodations for their employees between 2004 and 2006. As noted, businesses identified a range of benefits associated with workplace accommodations,

**"All accommodations have worked out satisfactorily, and were morale boosters for the employees."
"[By making workplace accommodations] the employee morale was boosted, as staff appreciated what the company was doing for the affected employee."
— Managers of workers with disabilities with 800 employees**

including retaining valuable staff, increasing employee productivity, and improved interactions between co-workers.

Studies in other countries confirm these findings indicating that accommodations are generally not expensive for employers. In a British study of employers, the average cost was less than fifty pounds. An Australian study indicated, on average, the effects were cost neutral and there were clear performance benefits to making accommodations.²⁰

It is also important to note that many governments will help employers pay for accommodations, although some employers have

argued there needs to be more money available to pay for exceptional accommodations.²¹

Customer Reaction

If it is a trade in which the person is dealing directly with customers, employers did not know how customers would react. Employers who hired apprentices with disabilities did not note any adverse customer reactions.

Size of Business

Small-business owners said they might need special consideration given the size of their business. Sometimes smaller businesses do not have the resources to pay for human resource managers to facilitate the accommodation process and to create policies. They noted, as a result, they may need extra supports.

Nature of work

Many employers who participated in the focus groups perceived that the nature of the work was too demanding to accommodate persons with disabilities.²² Other studies mentioned that this was a common attitude among employers.²³ Employers had the impression that persons with disabilities could only do narrowly defined jobs. Apprentices who participated in the focus groups perceived that employers underestimated their skills, and these comments by employers would suggest that this is an accurate perception. In

20 Australian Government, Australian Safety and Compensation Council, "Are People with Disability at Risk At Work? A Review of the Evidence," (Sydney: Commonwealth of Australia, March 2007), 33-34. <http://www.safeworkaustralia.gov.au/NR/rdonlyres/262E0DA1-4BBC-44ED-A617-1CC1B2ECE853/0/ArePeopleWithDisabilityatRiskatWork.pdf>.

21 Stuart-O'Hara Inc Knowledge Management Services, "Closing The Gap Employer Research Project Report," (Toronto: Stuart-O'Hara, July 2005), 23. http://www.closing-the-gap.ca/docs/employer_research.php.

22 *Ibid.*, 3.

23 Canadian Centre on Disability Studies, "Employment for Youth with Disabilities: Issues and Experiences," (Winnipeg: Canadian Centre on Disability Studies, March 2000), 12.

contrast to the employers' views, a study done in Britain revealed that persons with disabilities expressed a desire for skilled jobs. Some were enhancing their training so they could compete for higher-level jobs.²⁴ They felt discouraged when they were "pushed" into lower-level positions and had much greater ambitions and goals for their careers.

Transportation

The ability to drive a car is important in many trades, and the issue of people not having cars to get to work or licences was raised. In cases where someone would have to be hired to drive a crew, an additional expense would be incurred by the employer.

Length of Time to Complete Training

Some employers were concerned with the length of time that apprentices with disabilities would need to pass courses in their trades. The testing process was also seen as challenging for those who do not do well in a traditional text-based testing format. Employers said it would be hard to invest time and money into an employee who might not finish his or her training. Some employers did say they would be more willing to hire persons with disabilities if they had a diploma from a recognized college or had done pre-training.

24 Frances Chapman-King, "The Barriers to Working Lives: The Experiences of Disabled People," MA, Department of Social Policy and Social Work, University of York, June 2007, 76.

Accommodation Policies and Practices

This section only deals with the comments from employers who hired persons with disabilities.

The policies and practices of employers depended on the size of their company. Larger companies tended to have formal policies and more established procedures. They often had a designated HR specialist who addressed accommodations. For employers with small businesses, it was the owner who made the decisions about accommodations on a case-by-case basis. Data suggests that larger firms in the United States tend to make more accommodations than smaller businesses.²⁵ Small businesses may, however, be less likely to report accommodations because they have a more informal process.²⁶

Employers generally found out about their apprentices' disabilities after they were hired. The need for accommodation was often identified when apprentices had to complete tasks involving manuals, written instructions, or measurements. Employers instigated the accommodation in these cases in order to allow the employee to work more efficiently. Employers identified that they lacked knowledge about accommodations and had to educate themselves. Employers said they did Internet searches on their own for the infor-

25 International Association of Jewish Vocational Studies, "Enhancing Employment Opportunities for Individuals with Disabilities: An Employer-Directed Approach," (Philadelphia: IAJV, December 2007), 9. <http://www.iajvs.org/documents/IAJVS-003%20MasterCopy2.pdf>.

26 *Ibid.*, 29.

mation and did not report getting help from outside sources.

Most employers had more experience with accommodating older employees who developed a disability rather than new hires. This finding is typical of other employers' experiences as well.²⁷ Most older employees

"Loyalty is a big factor, as often employees [with disabilities] will not leave since they know that they can rely on the company's established policies and programs and that the company will sincerely consider the needs of the employee." — Human-resources manager, Ontario plumbing and heating firm with 102 employees

were accommodated through a job reassignment within the office as an estimator or manager. They were also accommodated, if they could not lift heavy items, through the assignment of a helper. Employers often said they are more willing to make accommodations for long-term employees than for prospective new employees because they know the person has a good work ethic and has demonstrated loyalty to the company.

Many employers were satisfied with the degree to which workplace accommodations had effectively allowed workers to perform their duties. Employers indicated that overall employee morale was boosted by their company accommodating workers with disabilities. As one employer explained, it makes employees feel like "one of the family."

27 A similar finding was found in a study with manufacturing and service employers see Stuart-O'Hara Inc Knowledge Management Services, "Closing the Gap Employer Research Project Report," (Toronto: Stuart-O'Hara Inc., July 2005), 11-12. http://www.closing-the-gap.ca/docs/employer_research.php.

Research supports this finding. An American survey of employers who had made workplace accommodations noted that doing so had improved interactions between co-workers.²⁸ A University of Iowa survey found that, among employers who had made workplace accommodations, 75 per cent said they found the accommodations to be either very effective or extremely effective.²⁹

Nature of Accommodations Undertaken by Employers

These accommodations were made for apprentices and/or journeypersons by employers who had hired persons with disabilities.

Learning disabilities

Employees with learning disabilities have been accommodated in a variety of ways:

- The main accommodation provided by employers was spending more time explaining tasks to employees and repeating instructions.
- Additional supervision for apprentices who needed extra help was also given.
- Employers gave employees flexible work arrangements.
- Employers also adjusted work processes so employees would not have to read extensively or do detailed paperwork.
- In a case where the apprentice had difficulty adjusting to new people, the employer

28 Job Accommodation Network. "Workplace Accommodations: Low Cost, High Impact." <http://www.jan.wvu.edu/media/LowCostHighImpact.doc>

29 *Ibid.* The original study could not be found.

adjusted the work process so the apprentice would not have to switch his partner as much.

- One employer ensured an individual was tested to identify the nature of their disability.
- One employer paid for a tutor for his employee. It took the employee longer to do the program and the employer absorbed the cost.
- Apprentices or journeypersons with dyslexia were given more time to complete tasks involving reading or writing on the job.
- In one case, the job was adjusted so the apprentice would not be given too many multiple tasks at once. Tasks were added on after the apprentice had mastered the first task. For this type of accommodation, the employer struggled with finding a balance between providing exciting work and preventing frustration when too many complex tasks were assigned.
- An apprentice experienced extreme test anxiety. The employer was patient with the employee and encouraged him to take the trade certification exam. The apprentice eventually passed his exam.

"I had a guy who could not pass his exam to get his gas ticket, but he was a really smart guy. Then I realized he was dyslexic." The employer worked with the provincial training authority to make exam accommodations and the apprentice eventually passed his exam. — Employer in Vancouver

"I have worked with a person [with a hearing disability], and I know from experience that they saw the person adapt and be accommodated. And they were successful in their job. The co-workers also adapted, and some even started to sign. — President of a Contracting Company"

- Employer made arrangements so the apprentice could take his exam orally.
- Employers said that they accommodate employees by making sure the person's abilities suit the project to reduce frustration.
- An apprentice with dyslexia was accommodated in his apprenticeship training through having the training delivered in ways that best met his learning style. He was provided with a laptop. He also received audio module software. The computer software read out the text for his apprenticeship technical training course work. The employer said that the software had been successful in helping the apprentice complete his coursework.

Physical disabilities

Ways in which employees with physical disabilities have also been accommodated in the workplace included:

- A tradesman with a prosthetic leg was provided with a modified work schedule.
- An electrician with hearing and speech limitations was provided with a wireless device to assist in communicating with others at the workplace.
- Assembly and fabrication tasks were taken off-site for a construction worker with an artificial leg due to on-site safety concerns.

- An employee who was blind in one eye had his job modified. Additional supervision was also provided.
- A paralyzed journeyperson switched to an office job within the company.
- A modified truck for a journeyperson with MS was provided.
- A laptop was provided so a journeyperson with carpal tunnel could fill in work orders.
- Some journeypersons with back pain had their work duties modified. Employees had help with heavy lifting or climbing ladders. Others were given tasks that specifically did not involve having to climb ladders or going into crawl spaces. Others were given more supervisory responsibilities or jobs estimating.

Awareness of Supports, Policies, and Programs Available

This section includes comments from employers who hired persons with disabilities and those who did not hire persons with disabilities.

Both groups of employers were generally unaware of supports, policies, and programs available relating to hiring persons with disabilities or workplace accommodations. This finding fits a trend that employers in a variety of sectors are unaware of where to get infor-

“Having ready access to information might ... motivate employers to employ more persons with disabilities in the skilled trades.” — Owner/president, Alberta machine shop with five employees

“The accommodations required were very modest and easy to accommodate. As well, they were very inexpensive.” — Human-resources manager at an aerospace manufacturing company with 1,550 employees

mation about supports.³⁰ Employers perceived that there was no easily accessible information on supports for employers in the skilled trades who are interested in hiring persons with disabilities. In a 2006 survey of employers in the manufacturing and service sector, completed as a part of the Closing the Gap project, small businesses said they would like accessible information on hiring persons with disabilities and accommodation.³¹ A study with employers in Sudbury made a similar conclusion, noting that employers lack information about accommodations. Employers in that study noted that there should be greater public awareness of what resources are available.³²

Some employers noted that the federal government and provincial/territorial governments help persons with disabilities through

30 See Tabatha Griffin and Lisa Nechvoglod, National Centre for Vocational Education Research, “Vocational Education and Training and People with a Disability: A Review of the Research,” (Adelaide: Australian Government, 2008.), 10 <http://www.ncver.edu.au/research/proj/nr07122.pdf>. A similar finding was found in a study with manufacturing and service employers see Stuart-O’Hara Inc Knowledge Management Services, “Closing the Gap Employer Research Project Report,” July 2005., 13.

31 Stuart-O’Hara Inc. Knowledge Management, “Closing the Gap Validation Perspectives,” (Toronto: Stuart-O’Hara, July 2005). See http://www.closing-the-gap.ca/docs/validation_perspective-key_findings.php. For the complete study see http://www.closing-the-gap.ca/docs/key_findings.php.

32 Paul Seccaspina, Daniel Kaltianinen, and Frank Buchan, “Accessibility to Employment by Persons with Disabilities, The City of Greater Sudbury,” (Toronto: Absolute Abilities Business Development Centre, The Ministry of Training, Colleges, and Universities, March 31, 2001), 29.

work programs, but they did not know of supports for employers, except in Alberta where employers thought there were subsidies from the provincial government. A few employers from Manitoba did mention return-to-work programs associated with workers' compensation boards. One employer said a social agency called him asking him to provide opportunities to individuals with disabilities.

The literature review and environment scan revealed that there are sources of support and information for employers. Just a few examples are provided.

- **The Opportunities Fund** for persons with disabilities has as a key objective to encourage employers to provide individuals with work opportunities and to assist individuals to increase their employment skill level. Funding may be covered to cover the costs of participants' wages or related employer costs, as well as overhead costs related to the organization, delivery and evaluation of activities, including staff wages. Participants may also be eligible to receive contributions to cover all or part of the costs such as specialized services, equipment, dependent care, accommodation, transportation and tuition.³³ Approximately 400 to 500 agreements a year are signed with employers.³⁴ This fund is managed by the Government of Canada. The fund was recognized in Australia as a program worth emulating.³⁵

33 House of Commons Canada, "Employability in Canada: Preparing for the Future Report of the Standing Committee on Human Resources, Skills Development and the Status of Persons with Disabilities," 39th Parliament, 2nd Session, (Ottawa: Government of Canada, April 2008), 102-103.

34 HRSDC, "Advancing the Inclusion of People with Disabilities," (Ottawa: Government of Canada, 2006), 51.

35 *Ibid.*, 52.

- **Assistive Technology Links**, managed by Industry Canada, provides employers with information related to technology and accessibility.³⁶
- **The Canadian Human Rights Commission** has a "how-to guide" for employers titled "A Place for All: A Guide to Creating an Inclusive Workplace." This guide helps employers develop their own policies and practices for workers with disabilities.³⁷
- **Disability WebLinks** is also another information source on financial supports, accessibility, and accommodation.³⁸
- The Canadian Council of Rehabilitation and Work also has the **Disability Awareness Series**, which provides workshops for employers and employees with information on accommodation and inclusive practices in the workplace.³⁹
- Each province and territory has its own set of programs for persons with disabilities. The provincial/territorial human-rights commissions also provide online information on accommodating persons with disabilities. Many provinces and territories have accommodation funds to assist employers financially when making accommodations in the workplace.

36 Industry Canada, Assistive Technology Links, www.at-links.gc.ca/.

37 The Canadian Human Rights Commission, "A Place for All: A Guide to Creating an Inclusive Workplace," (Ottawa: Minister of Public Works and Government Services, 2006) http://www.chrc-ccdp.ca/discrimination/APFA_UPPT/toc_tdm-en.asp.

38 Disability Funders Network, "Disability WebLinks," http://www.disabilityfunders.org/disability_links

39 CCRW, "Disability Awareness Series," <http://www.ccrw.org/en/das.html>.

“The changes start from the top and by being [a] small [company], we can make changes almost instantaneously or rapidly. This results in employees recognizing they are appreciated.” — Manager, plumbing and heating company with 102 employees

- Unions can also help employers and their employees by working to find solutions, such as creating alternative work arrangements or new positions.⁴⁰
- Technical training institutes across the country can also provide support and aids if employers have apprentices who may be struggling with their technical training.

Supports for persons with disabilities are available in many countries and in every province/

40 See Paul Seccaspina, Daniel Kaltianinen, and Frank Buchan, “Accessibility to Employment by Persons with Disabilities, The City of Greater Sudbury,” (Toronto: Absolute Abilities Business Development Centre, The Ministry of Training, Colleges, and Universities, March 31, 2001), 35.

territory in Canada, but the research revealed that supports geared toward apprentices specifically are limited. Five examples were found:

- Australia:
 - Wage support for apprentices with disabilities is provided.
 - Assistance for tutoring, interpreting, and mentoring services for apprentices with disabilities is also provided.
 - Assistance is provided to employers for apprentices who become disabled during their apprenticeships.
 - Additional incentives are also offered to ensure access and success in apprenticeship training programs.⁴¹
- British Columbia employers can apply for an Enhanced Training Tax Credit if they hire apprentices with disabilities.⁴²

41 Department of Education, Employment and Workplace Relations, “Australian Apprenticeships: Incentives and Assistance.” <http://www.australianapprenticeships.gov.au/employer/incentives.asp>.

42 Government of BC, “British Columbia Training Tax Credit: Helping You Achieve Success,” http://www.icba.bc.ca/member_benefits/documents/BCTrainingTaxCredit-Brochure.pdf

- Within the context of the Workplace Apprenticeship Program in Quebec, there is support for special training projects for persons with disabilities.⁴³
- New Brunswick has a “Screening for Success” service to help develop the skills of apprentices with disabilities.⁴⁴
- The Yukon’s “Financial Assistance for Yukon Registered Apprentices Program” provides support for apprentices with disabilities who need special arrangements or a device to participate in a course.⁴⁵

43 Quebec Government, “For Equal Employment Opportunities National Strategy for Labour Market Integration and Maintenance of Handicapped Persons,” (Quebec City: Ministère de l’Emploi et de la Solidarité sociale, 2008), 35.

44 No author, “New Brunswick apprenticeship improving completion rates,” *Red Seal Matters* Spring 2006, http://www.red-seal.ca/Site/products/spring06_news01_e.htm.

45 Yukon Government, “Financial Assistance for Yukon Registered Apprentices Program,” http://www.education.gov.yk.ca/advanceded/apprenticeship/financial_assistance.html.

Supports Needed by Employers to Motivate Them to Hire and Accommodate More Persons with Disabilities

Employers who had hired and had not hired persons with disabilities identified the supports that would help them. These suggestions conform to what other researchers have found when they have talked to employers.⁴⁶

Provide Advice on Accommodation

- Provide accommodation advice applicable to specific trades. A survey with employers in the manufacturing and service industries that was completed as a part of the Closing the Gap project supports this finding. Eighty-six per cent said more information on accommodation would be highly valuable and 78 per cent said they would like expert advice on accommodation.⁴⁷ Obtaining advice on accommodation was ranked as more important than tax incentives, streamlining paperwork, and wage subsidies.⁴⁸
- Illustrate through profiles how employers are making accommodations work in their business.
- Disseminate information on accommodation to industry associations so that it can be shared directly with employers. Ensure employers are educated industry-wide.
- Provide financial support when employers make major accommodations.

46 Stuart-O’Hara Inc Knowledge Management Services, “Closing the Gap Employer Research Project Report,” (Toronto: Stuart-O’Hara Inc, July 2005), 15., http://www.closing-the-gap.ca/docs/employer_research.php.

47 *Ibid.*, 29.

48 *Ibid.*, 32.

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- Communicate to employers the learning supports that are available for apprentices.
 - Educate training officers about disabilities so they can guide employers to appropriate sources of help.
 - Considering the needs of small business is important in any advice provided.⁴⁹

Clarify Roles and Responsibilities

- Clearly articulate employers' legal responsibilities. One employer noted that he understood what he had to do for employees who were put in rehabilitation for drug addiction, but he was not clear on his accommodations responsibilities in the case of persons with disabilities.

Workshops

- Sensitivity training for employees. Employers noted that their staff might not know how to deal with certain situations that may arise when working with persons with disabilities.
- Teach employers how best to explain tasks to those with different learning limitations.

Build the Business Case in the Skilled-Trades Context

- Help employers match their skills needs to qualified candidates. Illustrate how persons with disabilities are qualified in terms of their skills. Highlight that persons with disabilities are highly motivated to work. Employers are looking for people with a good attitude.
- Link accommodations with higher productivity.

"We use seven interpreters to accommodate our thirty employees [with hearing limitations]. The motivation was that it was the right thing to do, good for the company image, as well as good for morale. As far as I know, we have never had one employee [with a hearing limitation] leave employment with the company." — Human-resources manager at an aerospace manufacturing company with 1,550 employees

⁴⁹ *Ibid.*, 10.

Part 5:

Perspectives of Apprentices and Journeypersons with Disabilities

This section of the report shares apprentices' and journeypersons' perspectives based on the focus group and interviews.

Apprentices working in the skilled trades may feel isolated due to their disability. Apprentices that participated in the focus groups said they struggled in some cases to get the accommodations they needed and had to manoeuvre through the process largely on their own. Greater awareness about working with persons with disabilities and knowledge about the accommodations and supports available could help apprentices feel less isolated.

Description of Participants

Apprentices who participated in the focus groups and interviews were from the construction, electrical, mechanical, transportation, and manufacturing industries, as outlined in Part 1.

Questions Asked

Key topics and questions addressed in the interviews and focus groups for apprentices and journeypersons included the following:

- Receptiveness of employers to hiring persons with disabilities.
- Misconceptions held by employers.
- Workplace accommodations required.
- Process undertaken with employer to

achieve accommodation, if one was undertaken.

- Suggestions that may help other apprentices when dealing with an employer.
- Awareness of existing government policies/programs to support persons with disabilities when finding employment.
- What recommendations would you make to assist persons with disabilities who are trying to find employment in the skilled trades?

Readers should note that the following material reflects the ideas, opinions, and perceptions of those who attended the interviews and focus groups, not CAF-FCA or its stakeholders.

Receptiveness of employers to hiring persons with disabilities

Apprentices and journeypersons had found their present employers through personal connections, unions, and attending interviews. Participants perceived that employers were generally not receptive to hiring persons with disabilities. Employers were often perceived to be unaware of workplace accommodations, according to participants. This lack of awareness can make "getting your foot in the door" more challenging for prospective employees with disabilities. Some participants felt they didn't get jobs because they told potential employers about their disabilities in the inter-

view. One apprentice distinguished between employers, noting that smaller firms are less receptive than larger organizations like city governments or larger firms.

Disclosure is a matter of personal choice. As a part of the focus groups and interviews, apprentices and journeypersons raised the issue of disclosure. They were fairly evenly split between those who had disclosed their disability and those who had not. Some felt that their disability was their own business, and that they would deal with any situations resulting from the disability as they arose. Some felt they would jeopardize their jobs by disclosing that they had a learning disability. In contrast, others said disclosing their disability to their employer was key to building a positive level of trust. Some apprentices pointed out that by keeping a disability secret at the workplace, an employee risks additional anxiety and stress, which can affect job performance.

Misconceptions held by employers

Research suggests that employers often lack awareness about the skills and abilities of persons with disabilities.¹ This finding was supported by the comments made by apprentices and journeypersons. Many participants perceived that they were not working to their full potential at their jobs. They said that employers, in their opinions, often assumed individuals had the most extreme version of the disability or misperceived the nature of

1 Tabatha Griffin and Lisa Nechvoglod, National Centre for Vocational Education Research, "Vocational Education and Training and People with a Disability: A Review of the Research," (Adelaide: Australian Government, 2008), 10, 17. <http://www.ncver.edu.au/research/proj/nr07122.pdf>.

the disability. A study in Britain confirms this finding, indicating that people with vision limitations could not get jobs because many employers assumed the individuals had total blindness, the most severe version of the disability.² An apprentice with learning disabilities who participated in the focus group noted that his employer talked louder and very slowly to him, although his hearing and comprehension were not affected by his disability. Another noted that his employer repeated instructions, which was not necessary. Apprentices noted that they wanted a chance to experience everything their trade had to offer, but, in their opinions, employers were more likely to offer opportunities to employees without disabilities. This experience of having your skills underestimated is common for persons with disabilities. One individual with a disability who was interviewed for a research study said that people have to realize that persons with disabilities "have ambitions [to work] just like everyone else, and they can be extremely good and successful at what they do."³

2 Other research studies have made similar conclusions about employers' attitudes see Kirstine Stewart, Diane Grant, Mark Meadows, Catholic Blind Institute, European Union European Social Fund, Liverpool JMU, "'Skills for Life': Investigating the barriers to labour market integration for Visually Impaired people in North West England," (Yorkshire: Disability UK Archive December 2007), 8. <http://www.leeds.ac.uk/disability-studies/archiveuk/stewart%20kirsten/Skills%20for%20Life%20Executive%20Summary%20FINAL.pdf>

3 Frances Chapman-King, "The Barriers to Working Lives: The Experiences of Disabled People," MA, Department of Social Policy and Social Work, University of York, June 2007, 79. In a study of Canadian university and college students similar concerns about employers underestimating abilities were also expressed. See Canadian Centre on Disability Studies, "Students with Disabilities: Transitions from Post-Secondary Education to Work, Phase II Report," (Winnipeg: Canadian Centre on Disability Studies, December 2004), 5-5, 6-1.

Workplace accommodations required and process undertaken to achieve accommodation

Apprentices generally noted they needed more accommodations during technical training than at the workplace. Accommodations during training included audio modules, tutors, taping lectures, and readers for exams. If they did need an accommodation at the workplace, they usually spoke to their employer about it and the process was informal.

Apprentices and journeypersons noted that it can be frustrating when employers don't understand accommodation. Also, short timelines, such as those in construction, make for often-hectic work environments that complicate learning. Some apprentices said they may take longer, but they produce quality work, which is better than rushing and making costly mistakes.⁴ This is a commonly expressed feeling among persons with disabilities.⁵ In order to dispel misconceptions about working with persons with disabilities, apprentices said that more information could be provided to employers. One apprentice said that employers could be provided with information on how different workers learn. In the opinion of the focus group participants, any information should be circulated to all employees in order to ensure a positive work environment.

The extent to which persons with disabilities can be accommodated in skilled trades may not be well understood by many potential

apprentices, according to apprentices and journeypersons. A lack of knowledge about what accommodations can be made can prevent many potential apprentices from even entering the program. At the recent National Educational Association of Disabled Students conference, it was suggested that workplace accommodations be taught in the classroom in order to raise awareness among post-secondary students.⁶

Types of workplace accommodations mentioned by apprentices and journeypersons:

- Employers provided more time when reading manuals, more time to complete tasks, and additional explanation when learning new tasks.
- One apprentice had job instructions written down.
- One painter from Winnipeg was injured on the job and is now limited in the amount of physical activity he can do. As a result, his employer has ensured that he spends only partial days on his feet, and that he is not required to lift heavy objects or climb ladders.
- Another painter who had back problems is similarly working with his employer to ensure that his job does not involve heavy lifting.
- One apprentice carpenter who had a hearing disability was provided with a wireless device to help him communicate with his co-workers.

4 Frances Chapman-King, "The Barriers to Working Lives: The Experiences of Disabled People," MA, Department of Social Policy and Social Work, University of York, June 2007, 60.

5 *Ibid.*, 69.

6 National Educational Association of Disabled Students, "2008 National Conference Learning Today, Leading Tomorrow," Ottawa, Ontario, November 15-16, 2008, 13.

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- An aesthetician with a learning disability was given more time to complete treatments with clients, especially in the initial stages of her employment, as it took her longer to learn the processes.

Suggestions that may help other apprentices when dealing with an employer

Apprentices and journeypersons suggested that apprentices could explain to their employers the nature of their disabilities and what they need. Clear explanations are important so the employer does not spend money on accommodations that do not suit the employees' needs.⁷

Apprentices and journeypersons also suggested that apprentices should not be afraid to ask for accommodations. According to the participants, there is still a lot of embarrassment about having a disability and this is unnecessary.

Participants said that creating a workplace culture where employees feel they can ask for support will allow them to concentrate on their jobs, not their disability, and will enable them to gain confidence in their work.⁸ If a supportive culture is not created, the alternative is that the person will simply leave their job. Studies, in fact, show that persons with disabilities often leave their jobs because they do not want to ask for accommodations. As one British person with a disability who participated in a research study commented, "It would be up to me to ask for any adaptation or changes in procedure, and that's often quite difficult when you're trying to prove yourself in a job, you feel it might look nega-

tive and not look good for you. I've changed jobs sometimes because I've reached a certain barrier that I feel that I'm not going to get over, and maybe it's my fault for not speaking up about it, but I don't feel confident in asking for it." ⁹ If potentially valuable employees leave, employers have to pay to hire and train someone else, adding to their costs.

Awareness of existing government policies/programs to support persons with disabilities when finding employment

Apprentices with disabilities were not aware of any government programs to assist apprentices or employers in the skilled trades. They said that tutors are available and they thought their wages were paid by the government.

Apprentices did say that access to learning supports has generally improved over time, but more could be done for apprentices with disabilities. Some suggested that they could have benefited from having experienced journeypersons tutor them. One person suggested that retired journeypersons could have a role to play in this regard.

⁹ Frances Chapman-King, "The Barriers to Working Lives: The Experiences of Disabled People," MA, Department of Social Policy and Social Work, University of York, June 2007, 64.

⁷ *Ibid.*, 7, 12.

⁸ *Ibid.*, 70.

Respect, Opportunity, Good Pay: Getting the Message Out

More accessible information about careers in the skilled trades is needed!

Access to accurate career information and post-secondary training is essential for persons with disabilities because it is a key factor in ensuring employment.¹ The literature review revealed that many organizations are thinking about how to improve career awareness. Apprenticeship could be a particularly desirable form of training because it involves direct contact with an employer and work experience. Persons with disabilities can lack contacts and work experience, and this makes it difficult for them to find a job.²

Connecting with persons with disabilities earlier in their formal education process to inform them about the skills they need and the training opportunities available would help increase employability.³ One of the recommen-

dations of research by the Absolute Abilities Business Development Centre was that apprenticeship needs to be talked about in grade school, so persons with disabilities have exposure to the trades at an early age.⁴

According to the study "Vocational Education and Training and People with a Disability," persons with disabilities can struggle when trying to find information on their training options. "A lack of user-friendly and accessible information about the VET (Vocational Education Training) system and poor career guidance can make it difficult for students to make informed choices."⁵ Individuals with hearing limitations, in particular, struggle to access information and lack knowledge about careers when compared to other students.⁶ When individuals with spinal-cord injuries were informed of their options, research found they were more likely to consider vocational education as a training option.⁷ Research has also found that training targeted to specific employment or career pathways is also more likely to lead to employment.⁸

1 Canadian Centre on Disability Studies, "Students with Disabilities: Transitions from Post-Secondary Education to Work, Phase II Report," (Winnipeg: Canadian Centre of Disability Studies, December 2004), 2-8

2 National Educational Association of Disabled Students, "2008 National Conference Learning Today, Leading Tomorrow," Ottawa, Ontario, November 15-16, 2008., 6. See also Canadian Centre on Disability Studies, "Students with Disabilities: Transitions from Post-Secondary Education to Work, Phase II Report," (Winnipeg: Canadian Centre on Disability Studies, December 2004), 3-6, 3-7.

3 Paul Seccaspina, Daniel Kaltianinen, and Frank Buchan, "Accessibility to Employment by Persons with Disabilities, The City of Greater Sudbury," (Toronto: Absolute Abilities Business Development Centre, The Ministry of Training, Colleges, and Universities, March 31, 2001), 48, 55. See also Kirstine Stewart, Diane Grant, Mark Meadows, Catholic Blind Institute, European Union European Social Fund, Liverpool JMU, "'Skills for Life': Investigating the barriers to labour market integration for Visually Impaired people in North West England," (Yorkshire: Disability UK Archive December 2007), 9. <http://www.leeds.ac.uk/disability-studies/archiveuk/stewart%20kirsten/Skills%20for%20Life%20Executive%20Summary%20FINAL.pdf>.

4 Paul Seccaspina, Daniel Kaltianinen, and Frank Buchan, "Accessibility to Employment by Persons with Disabilities, The City of Greater Sudbury," (Toronto: Absolute Abilities Business Development Centre, The Ministry of Training, Colleges, and Universities, March 31, 2001), 70.

5 Tabatha Griffin and Lisa Nechvoglod, National Centre for Vocational Education Research, "Vocational Education and Training and People with a Disability: A Review of the Research," (Adelaide: Australian Government, 2008), 10. <http://www.ncver.edu.au/research/proj/nr07122.pdf>. A similar point was made in Dan Goodley, Centre of Applied Disability, University of Sheffield, "'Jobs Not Charity,' Promoting Disabled People's Access to the Labour Market and the Role of Organizations of Disabled People," (Sheffield: University of Sheffield, 2005), 21. <http://www.shef.ac.uk/jobsnotcharity/>.

6 *Ibid.*

7 *Ibid.*, 11.

8 *Ibid.*, 16.

Guidance counsellors with a special knowledge of disability issues and disability employment counsellors need to be informed about the opportunities as well, so they can inform their students and clients.⁹ In Quebec, sessions for guidance counsellors are being held so they will know about the opportunities available.¹⁰ Some persons with disabilities can lack confidence due to the discrimination they may have faced at school. In some cases, counsellors need to raise expectations so persons with disabilities are not limited to a narrow range of occupations.¹¹

To help address the issue of poor career awareness, the Canadian Council on Rehabilitation and Work, as part of its Youth-Ability in Skilled Trades initiative, is presenting workshops to youths with disabilities to encourage them to enter the skilled trades. So far, many workshop participants have not been aware of opportunities available in the skilled trades.¹²

9 Kirstine Stewart, Diane Grant, Mark Meadows, Catholic Blind Institute, European Union European Social Fund, Liverpool JMU, "'Skills for Life': Investigating the barriers to labour market integration for Visually Impaired people in North West England," (Yorkshire: Disability UK Archive December 2007), 9. <http://www.leeds.ac.uk/disability-studies/archiveuk/stewart%20kirsten/Skills%20for%20Life%20Executive%20Summary%20FINAL.pdf>

A similar comment was also made in the report, Quebec Government, "For Equal Employment Opportunities National Strategy for Labour Market Integration and Maintenance of Handicapped Persons," (Quebec City: Ministère de l'Emploi et de la Solidarité sociale, 2008), 13-15.

10 Quebec Government, "For Equal Employment Opportunities National Strategy for Labour Market Integration and Maintenance of Handicapped Persons," (Quebec City: Ministère de l'Emploi et de la Solidarité sociale, 2008), 13-15.

11 Sue Arthur and Gerry Zarb, "Measuring Disablement in Society: Working Paper 4 Barriers to Employment for Disabled People, (Yorkshire: Disability Archive UK, 1995), 8. <http://www.leeds.ac.uk/disability-studies/archiveuk/Zarb/barriers%20to%20employment.pdf>.

12 Kirstine Stewart, Diane Grant, Mark Meadows, Catholic Blind Institute, European Union European Social Fund, Liverpool JMU, "'Skills for Life': Investi-

The Comité d'adaptation de la main d'œuvre pour personnes handicapées produced a promotional brochure on vocational and technical training for persons with disabilities.¹³ Support is also provided in Quebec for students who want to enrol or to continue in vocational or post-secondary studies.¹⁴

The Imperial Oil Foundation is currently supporting the initiative "Enhancing Opportunities for Post-Secondary Students and Graduates with Disabilities in Science and Technology Related-Fields" until 2010. A resource guidebook and an outreach task force are being developed.¹⁵

In addition to promoting better career awareness, the literature revealed that appropriate supports need to be there for students as they transition from post-secondary education to work. Having supports such as workplace accommodations and counselling are key factors to successfully entering the workforce.¹⁶

gating the barriers to labour market integration for Visually Impaired people in North West England," (Yorkshire: Disability UK Archive December 2007), 9. <http://www.leeds.ac.uk/disability-studies/archiveuk/stewart%20kirsten/Skills%20for%20Life%20Executive%20Summary%20FINAL.pdf>

No author, "National Research project explores how careers in skilled trades can be an option for youth with disabilities," *Red Seal Matters*, Spring 2007. http://www.red-seal.ca/Site/products/spring07_news01_e.htm.

13 Quebec Government, "For Equal Employment Opportunities National Strategy for Labour Market Integration and Maintenance of Handicapped Persons," (Quebec City: Ministère de l'Emploi et de la Solidarité sociale, 2008), 14

14 *Ibid.*, 17.

15 National Educational Association of Disabled Students, "2008 National Conference Learning Today, Leading Tomorrow," Ottawa, Ontario, November 15-16, 2008. 4.

16 Canadian Centre on Disability Studies, "Students with Disabilities: Transitions from Post-Secondary Education to Work, Phase I," (Winnipeg: Canadian Centre on Disability Studies, September, 2003), 57.

Advice from Apprentices and Journeypersons for those Interested in the Skilled Trades

Investigate a Variety of Trades

Learn about the specific trades in which you are interested before making any decisions about what you feel you can or cannot do.

Plan Ahead

If you can be tested for your disability before you apply for a job, it may save time during the hiring and training process.

Make sure you know what the requirements are for getting accommodations at your technical training institution and plan ahead. Don't miss any classes when doing your technical training!

Ask for Help

Ask other apprentices and journeypersons for advice and help. They have gone through the process and can give you advice. One apprentice suggested that upper-year apprentices could talk to first-year apprentices about what they need to do to get accommodations.

Others suggested that a mentoring program for pre-apprentices, apprentices and journeypersons with disabilities could be established so pre-apprentices could learn tips about how to be successful in the trades.

Don't Let the Exam Prevent You from Pursuing Your Certification

Make sure to find out about the special accommodations policies that are available.

Ken is a foreman for a commercial painting company in Winnipeg. As a result of an injury, he is unable to climb ladders or do any heavy lifting. Ken, the worker's compensation board, and his employer have worked together to adjust his tasks to accommodate his disability. For example, he has worked with his employer to limit the amount of time he has to spend on his feet. Overall, he says, his employer has been good at working with him to match his job duties to his abilities. Still, Ken feels that persons with disabilities often have to have a lot of determination and inner strength to work in their field.

As a result of her learning disability, Nicole, an aesthetician in Winnipeg, periodically requires more time with clients than other aestheticians at the spa in which she works. She says that "It's good to be honest with your employer, to tell them about your disability: the better the communication, the better the experience."

Fred is a 44-year-old journeyman drywall finisher working in B.C. A long-time tradesperson, he started in the trades by working with his father. Mid-career, he experienced a brain injury in a motor-vehicle accident that has had an impact on his learning, cognitive processes, and communication. Although he says that he has not required formal workplace accommodations, he said his employers have had to demonstrate a little “patience,” as it may, in some cases, take him longer to understand some instructions or to complete some tasks.

His experience with employers regarding his disability has been mixed. He has had some positive experiences with his current employer, but not all employers have provided a welcoming workplace environment. In the past, he has faced negative comments from other employees, which were not addressed by his manager. While other employees were making it difficult for him to work, his manager did not intervene.

While some employers are not receptive to employing workers with disabilities, Fred recommends that apprentices and journeypersons should always explain their disability when first meeting a potential employer. He says: “Explain the disability and requirements up front. You might not get the job as a result, but otherwise you will encounter a lot of problems on the job.”



Part 6:

Recommendations

This section outlines the recommendations made by the employers, apprentices, journeypersons, and the working group. These suggestions may help guide future activities in the apprenticeship and disability communities.

Recommendations from Employers ¹

Create special programs for employers in the skilled trades

Employers in construction did say they were willing to hire apprentices with disabilities on a field project, if there was a special program. This program could involve allowing a construction company to work on a project in a government building with apprentices with disabilities. The tight timelines for the project could be removed from the bid so that the journeypersons working with the apprentices would have the time to train them properly. Apprentices would maximize their learning opportunities and would gain valuable work experience. Along these lines, the Quebec government within the context of the Work-

1 Also see recommendations in Stuart-O'Hara Inc. Knowledge Management Services, "Closing the Gap Report on Employer Forum, Highlights," (Toronto: Stuart-O'Hara Inc., July 2005) <http://www.closing-the-gap.ca/pdf/4%20Highlights%20from%20the%20Employer%20Forum%20W.pdf>.

place Apprenticeship Program is already considering support for special training projects for persons with disabilities.²

Employers who work in residential construction could hire persons with disabilities to consult them on how to make sites more accessible. Considering that the number of persons with disabilities is growing, this measure would help employers tap into a growing market of potential customers. Homebuilders could then construct the homes with participation from apprentices with disabilities.

Discuss with employers their responsibilities

The Ministry of Labour and insurance companies could clarify the rules and regulations around hiring persons with disabilities, liability, and making workplace accommodations.

Support employers through incentives

Employers recommended that accommodation advice, sensitivity workshops, and financial incentives would help them hire and accommodate persons with disabilities.³

2 Quebec Government, "For Equal Employment Opportunities National Strategy for Labour Market Integration and Maintenance of Handicapped Persons," (Quebec City: Ministère de l'Emploi et de la Solidarité sociale, 2008), 35.

3 A recommendation to develop tax incentives to encourage employers to make accommodations was made by the House of Commons Committee as well. See House of Commons Canada, "Employability in Canada: Preparing for the Future Report of the Standing Committee on Human Resources, Skills Development and the Status of Persons with Disabilities," 39th Parliament, 2nd Session, (Ottawa: Government of Canada, April 2008), 97.

Help apprentices sell themselves to employers

Train apprentices to articulate their value to employers. Make sure they can explain to employers their skill sets and dispel myths regarding their disabilities.

Recommendations for Apprentices

Create awareness about available learning supports before apprenticeship technical training

Apprentices and employers both identified that there are learning supports available, but they are not necessarily well advertised. You have to be persistent in order to access them. As a result, some individuals do not get the help they need to be successful. Dispelling fears about technical training and informing persons with disabilities about how they can be helped is important. Apprentices said they would be willing to volunteer to speak to students about what is available to help them.

Apprentices recommended that those interested in the trades find out the accommodation requirements prior to doing their technical training. The administrative process for accessing the appropriate accommodations can be time consuming in some cases. When apprentices are in the technical training component they definitely do not want to miss classes because it can be hard to catch up, according to the focus group participants.

Create networking and information-sharing opportunities with technical training institutes and industry in order to educate employers and potential apprentices about the resources available, including information related to supporting apprentices with learning disabilities.

Develop a mentoring program for persons with disabilities in the skilled trades.

Connect journeypersons, pre-apprentices, and apprentices in specific trades. Apprentices and journeypersons could share tips with pre-apprentices on how to get accommodations and how to approach employers.

Ensure support for apprentices with disabilities

Apprenticeship stakeholders may benefit from working together to ensure that apprentices with disabilities have access to a full range of supports to succeed in their apprenticeship programs.

Use tutors that have knowledge of the trades

Apprentices said it was very important that they are connected to tutors when they are completing the technical-training component of their training.

Tutors and readers with knowledge of and experience in the trades would be helpful. Tutors in math, for example, are not as helpful as someone who knows practical, trade-specific examples of how theory can be applied. Readers can read the questions more clearly if they know the context. Retired journeypersons could be an effective pool of tutors because they have a lot of knowledge and experience in the trades. Such a program could be piloted and evaluated to determine its impact.

Conduct a communication and awareness campaign

According to the focus group participants, greater awareness of the potential benefits of employing persons with disabilities, the types of accommodations available, and the supports available is needed.

Ted works for the City of Winnipeg as a carpenter. He has a hearing limitation but is able to communicate with other staff through the use of a wireless device and interpreters. For him, it was a relatively easy process to get the accommodations he needed to effectively do his job. Still, Ted says that more work needs to be done to educate employers about persons with disabilities: “I would like to see the ... businesses [educated] about persons with disabilities.”

Additional Recommendations

Clarify issues through further research

More trades-specific research is needed to understand the business case for hiring and accommodating persons with disabilities. The unique nature of the skilled trades environment needs to be taken into account.⁴ What is the return on training investment for accommodating a person with a disability in the skilled trades?⁵

Research could explore whether, and to what extent, pre-apprenticeship programs can assist in attracting and retaining persons with disabilities in apprenticeships.

The business case for learning supports could be explored.

4 See Tabatha Griffin and Lisa Nechvoglod, National Centre for Vocational Education Research, “Vocational Education and Training and People with a Disability: A Review of the Research,” (Adelaide: Australian Government, 2008), 4 <http://www.ncver.edu.au/research/proj/nr07122.pdf>. A Canadian Plastics Sector Council study also recommended a similar study be undertaken. See FMP Ltd., for the Canadian Plastics Sector Council, “Profitability in Diversity,” (Ottawa: FMP Ltd., July 31, 2005), 13-14. <http://www.cpsc-ccsp.ca/PDFS/CPSC%20TERC%20FINAL%20REPORT-ENGLISH%20FINAL.pdf>.

5 *Ibid.*, 19.

Inventories could be developed. An inventory of pre-apprenticeship programs across Canada could help persons with disabilities find exploratory training opportunities. Since some persons with disabilities are unaware of the training opportunities available and lack work experience, a pre-apprenticeship program may help them gain exposure to the trades and acquire practical hands-on experience⁶

An inventory of the learning supports available at the various technical training institutes could help employers and apprentices know where to go for assistance.

Encourage partnerships between training organizations and disability agencies

Strong partnerships among training organizations, disability employment agencies, and employers are essential to successfully recruiting and placing persons with disabilities in apprenticeship training.⁷ Most of the success stories in the literature have involved good relationships among employment agencies, training organizations, and employers.⁸ Given these findings, there may be value in encouraging stakeholders to develop stronger partnerships.

6 A similar recommendation was also made in Paul Seccaspina, Daniel Kaltianinen, and Frank Buchan, “Accessibility to Employment by Persons with Disabilities, The City of Greater Sudbury,” Absolute Abilities Business Development Centre, (Toronto: The Ministry of Training, Colleges, and Universities, March 31, 2001), 48, 55.

7 See Tabatha Griffin and Lisa Nechvoglod, National Centre for Vocational Education Research, “Vocational Education and Training and People with a Disability: A Review of the Research,” (Adelaide: Australian Government, 2008), 9, 16, 18 <http://www.ncver.edu.au/research/proj/nr07122.pdf>.

8 *Ibid.*

Profile success stories

Examples of success stories of positive workplace accommodations could be communicated to employers and apprentices.⁹

Create user-friendly guides

In order to address some of the knowledge gaps identified in this project, workplace-accommodation guides could be developed for both employers and persons with disabilities. These guides would provide information in a format that was concise and user-friendly. A guide could provide employers with information on how to make accommodations, share best practices, and provide province- and territory-specific information on resources and legislation. A similar, but separate, guide could be written for persons with disabilities. This could include information on the accommodation policy of the Red Seal program, interview tips, tips related to finding an employer-sponsor, as well as helpful resources and supports.

9 A Canadian Plastics Sector Council has made a similar recommendation. See FMP Ltd., for the Canadian Plastics Sector Council, "Profitability in Diversity," (Ottawa: FMP Ltd., July 312005), 13-14. <http://www.cpsc-ccsp.ca/PDFS/CPSC%20TERC%20FINAL%20REPORT-ENGLISH%20FINAL.pdf>.

"Government could start its own mentoring system for apprentices ... [for] people with learning disabilities in the workplace. If the government had this kind of system, it would probably help a lot of people." — Apprentice electrician, Alberta

Conclusion

There is an opportunity to potentially enhance the effectiveness of apprentices at the workplace by making accommodations. Existing research from the disability community indicates accommodations can lead to increased productivity, improved company morale, and higher retention rates. Most accommodations can be implemented at a minimal cost. Although more trades specific evidence supporting the business case for accommodations would be useful, the findings from the secondary research suggests that employers and apprentices have much to gain through accommodations. These potential benefits are crucial at a time when maximizing productivity is critical to a company's bottom line. A lack of awareness, according to the findings of this study, is preventing some employers and apprentices from achieving these benefits at their workplaces. Improved communication about the existing resources would help connect employers and apprentices to supports they need. Hopefully, this preliminary research will fuel further research and dialogue that will lead to increased awareness and enhanced communication among the members of the disability and skilled trades communities.

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