

Apprenticeship Report

Prepared For
Staff and Board
Of
Women in Resource Development Committee

June 12, 2002

Apprenticeship Report

Included in the mandate of Women in Resource Development Committee is the encouragement and support of women who wish to enter or are currently employed in traditionally male dominated trade's occupations. Apprenticeship is the normal route to certification and higher rates of pay in these occupations.

Since March of 2002, WRDC has attended various national and provincial apprenticeship forums. **See Appendix A.** This report will define the apprenticeship training system, identify the roles of stakeholders within this system, and discuss women in apprenticeship in relation to the system and the stakeholders.

Apprenticeship Training

Apprenticeship training involves on the job training under the supervision of a certified journey person, and periods of in school training to acquire the technical knowledge required in the chosen occupation. The number of apprentices and length of time on the job and in school training varies depending on the trade. When learning a trade through this system, the individual becomes an apprentice by having his or her apprenticeship contract registered with the Department of Education, Division of Institutional and Industrial Education. For Occupations designated under the Apprenticeship Act please see **Appendix B.**

There are two ways to enter into an Apprenticeship Program: An apprentice can directly enter an apprenticeship through an employer who is willing to provide the practical experience and on the job supervision by which to learn the trade. Once employed in the occupation, the entrant applies to the Department to be registered as an apprentice. In school training must be completed to complete the apprenticeship.

An apprentice can also register as an apprentice while enrolled in a trade pre-employment course through an accredited public or private college. In both routes it is the responsibility of the apprentice to find employment. Currently there is no mobility agreement in place regarding apprentices.

Apprentices employed under an apprenticeship contract are paid a percentage of a journeyperson's wage rate. A journeyperson is one who has completed the required on the job and technical training in a designated apprenticeship trade and who has passed a comprehensive examination administered by the Division of Institutional and Industrial Education.

Graduates of the Apprenticeship Program receive a Certificate of Apprenticeship and a Certificate of Qualification. In the majority of trades designated in Newfoundland and Labrador the certification is honoured across Canada through the Interprovincial Standards (Red Seal) program.

The above information was taken in part from the Apprenticeship Training, Government of Newfoundland and Labrador web site.

Stakeholders within the Apprenticeship System

Employers

Employers are the end-users of apprentices and in the current system up to 80% of an apprentice's training is completed on the job. The employer has a vested interest in the apprentice's becoming a skilled, productive and safe journeyman. There is a debate ongoing among employers with regard to the cost effectiveness of apprentices and hiring practices have not focused on apprentices in recent times. A study completed by the University of Alberta for the Construction Association of Alberta however has found that the use of apprentices can increase cost effectiveness and productivity. (The Effective Integration of Apprentices: A Pilot Study, May 2002).

Unions

A large percentage of trade apprentices are employed in a unionized environment. Apprenticeship ratios are usually negotiated in collective agreements. The Building Trades Unions comprised a large contingent at the provincial apprenticeship forums and play an active role in apprenticeship policy.

Some unions are also involved in the training of apprenticeship and have union supported training programs for apprentices and journeymen.

Government

The Provincial Government regulates apprenticeship policy under the Apprenticeship Act. Policy is recommended to government by an apprenticeship board under advisement of committees consisting of employers, unions, and educational institutions.

The in school portion of apprenticeship training is eligible for funding from Human Resource and Development Canada. Apprenticeship training, however, is the sole jurisdiction of the provincial government.

Educational Institutions

Traditionally the public college system were the only deliverers of the in school portion of apprenticeship training. Now, however, private for profit colleges and union affiliated schools have been accredited by the provincial government as apprenticeship training providers. Curriculum is developed by the training institutions as per guidelines set by the Industrial Training division of the Department of Education.

Journey Persons

As much as 80% of training of apprentices is supervised by trade journeypersons in the workplace.

Apprentices

The actions of all of the above influence the quality of training of the apprentice and his or her potential for employability.

Women in Apprenticeship

Currently only 1.2% of apprentices registered in industrial trade occupations are female. A detailed breakdown by trade and gender is included in appendix C. This percentage is evidence that women are under represented in these occupational areas. The number of female journey persons in designated industrial trades is less than 1% in this province. This is of cause for concern as there is an expected skill shortage in these areas in the near future.

The staff and the board of WRDC have discussed the reasons why women are under represented in these areas at length and a broad discussion of these barriers is beyond the scope of this report. Some of the barriers faced by women in traditionally male dominated trade occupations were outlined in WRDC's presentation at the provincial apprenticeship forums. See **Appendix D** for a synopsis of the presentation.

The following section of the report will discuss the role that the above mentioned stakeholders play with regard to equity initiatives. This information was gleaned from presentations at various forums and subsequent round table discussions. It is hoped that these observations will serve as an aid for discussion for the staff and board of WRDC.

Employers

Employer who was present at the forums is currently not taking an active role with regard to gender equity in apprenticeship. Currently only 51% of registered female apprentices remain active in industrial trade apprenticeships. **See Appendix E. Their** relative lack of input in the provincial apprenticeship forums was obvious to those who attended. The employers who did attend supported gender equity, in words, but were not enthusiastic regarding equity practices in hiring. Naturally employers supported the theory of hiring the most productive employee for the lowest cost, Some employers admitted that their current work place did not have the infrastructure in place for female employees.

Employers do not seem interested in taking a lead role in the area of equity initiatives and will probably not take proactive steps until legislative or public pressures force them to do so.

Unions

Unions by definition promote equal rights among their membership and as stated previously are active in the area of apprenticeship. None of the labour organizations present however had a proactive gender equity initiative in place. In a unionized environment, unions have a substantial amount of power with regards to hiring practices, however within the current regime equity seeking is not high on their agenda. There is potential for partnerships to be formed with these organizations, however a lot of work must be done.

Government

Almost all participants at the provincial forum believed that government should take a lead role in promoting trades occupations to women. Suggestions were made regarding funding for an awareness campaign aimed at women to more equitable access to training dollars. Currently training dollars are attached to employment insurance benefits. This condition is challenging for women as a large percentage of women are not deemed EI eligible.

A presentation made by HRDC on behalf of the labour market inventory initiative did not specify women as an untapped source of workers to fill the expected trade shortage. Immigrants and youth are being looked upon as the potential workers to fill the demand. When questioned, any equity initiative seemed to focus on young women, however a large percentage of mature women are first time entrants or re-entrants into the labour force.

Educational Institutions

Educational institutions, both public and private, comprised a large number of participants at both provincial and national forums. Again equity is supported by all. No affirmative action plan is in

place. Provincially, however, the public college system will move a qualified female applicant up the waiting list of a male-dominated training program with permission from the Human Rights Commission. This is done on a case by case basis and has worked in the favor of OTT graduates. Gender sensitivity is not a burning issue however and more education must take place within the public college system. See **Appendix G** for a gender breakdown of graduates from the College of the North Atlantic.

Journey Persons

Active Journey persons were not a strong voice at the apprenticeship forums. This was unfortunate as 80% of apprenticeship training is done under the supervision of a journey person. Gender sensitivity training among journey persons could improve the career of female apprentices.

Apprentices

Male apprentices present at the forum give little thought to equity. This could be due to a lack of gender sensitivity training during their apprenticeship.

Female apprentices generally complete and do well in the in school portion of their apprenticeship, but become disillusioned when trying to find employment opportunities. Female apprentices are more likely to drop out of the system than their male counterparts. See **Appendix E** for gender/trade activity breakdown.

Again the above are observations from the apprenticeship forums and have not been studied on a formal basis.

In conclusion there is a lot of work to be done in order to achieve equal representation for females within industrial trades occupations. It is hoped that in the future an evaluation of WRDC's work in this area can be evaluated and documented. Anecdotal evidence suggests that graduates of the Orientation to Trades and Technology program make up a large contingent of current female apprentices in the system. The results will be formally documented during WRDC's next follow up with OTT graduates.

Appendix A

List of Apprenticeship Forums Attended by WRDC

Apprenticeship Forums Attended by WRDC

Provincial Apprenticeship Forums: Goosebay, St.John's, Corner Brook
Provincial Apprenticeship Board

National Apprenticeship Forum Focus Group: St. John's

National Apprenticeship Conference: Vancouver, British Columbia

Appendix B

List of Occupations as Designated by the Apprenticeship Act

Occupations designated in Newfoundland are as follows:

- Auto Body Repair
- Boilermaker
- Bricklaying
- Carpentry
- Commercial Cooking
- Construction Lineman
- Crane Operator
- Electrical Construction
- Hairstylist (Hairdresser, Barber)
- Heavy Duty Repair
- Heavy Equipment Operator
- Industrial Electrical
- Industrial Instrumentation
- Industrial Mechanic (Millwright)
- Joinery
- Machinist
- Motor Vehicle Repair
- Oil Burner Mechanic
- Operating Lineman
- Painting and Decorating
- Power Systems Operator
- Plumbing and Domestic Heating
- Radio & Television Service (Certification Only)
- Refrigeration and Air Conditioning
- Roofer (Certification Only)
- Sheet Metal
- Ships Plater (Certification Only)
- Small Equipment Repair
- Sprinkler Installer
- Steam fitter/Pipefitter
- Steel Fabricator
- Truck and Transport Mechanic
- Underground Miner (Certification Only)
- Welding

Registered Apprentices Registrations by Region

Occupation	Gender	Burns	Cornwall	Brook	Grand Falls	Labrador	St. John's	Total
		3	98		145	46	87	379
Heavy Equipment Operator	F	1	5		12	1	2	21
	M	37	181		396	19	196	829
		38	186		408	20	198	850
Industrial Electrical	M	7	27		15	6	58	113
		7	27		15	6	58	113
Industrial Instrumentation	F	1			1	1	2	5
	M	9	22		6	4	115	156
		10	22		7	5	117	161
Industrial Mechanic (Millwright)	F				6		1	7
	M	7	11		261	31	130	440
		7	11		267	31	131	447
Machinist	F						2	2
	M		2		13	2	69	86
			2		13	2	71	88
Maintenance Operator	F					1		1
	M					63		63
						64		64
Mobile Crane Operator	F		2				1	3
	M	2	51		3	13	87	156
		2	53		3	13	88	159
Motor Vehicle Repairer	F				7	2	9	18
	M	20	56		136	24	370	606
		20	56		143	26	379	624
Oil Burner Mechanic	F						1	1
	M	2	11		3	1	40	57
		2	11		3	1	41	58

Registered Apprentices Registrations by Region

Occupation	Gender	Burin	Corner Brook	Grand Falls	Labrador	St. John's	Total
Plumbing and Domestic Heating	F				2	1	3
	M	6	4	6	5	91	112
Sub-total:		6	4	6	7	92	115
Power Systems Operator	M			5	3		8
Sub-total:				5	3		8
Powerline Technician (Construction)	M					3	3
Sub-total:						3	3
Powerline Technician (Operating)	M		17	2	2	73	94
Sub-total:			17	2	2	73	94
Refrigeration and Air Conditioning Me	M	3		5	1	66	75
Sub-total:		3		5	1	66	75
Residential Electrical	F				1		1
	M			2	9	1	12
Sub-total:				2	10	1	13
Sheet Metal Worker	M		2	2	11	27	42
Sub-total:			2	2	11	27	42
Small Equipment Repair	M	2		2	1	23	28
Sub-total:		2		2	1	23	28
Sprinkler Fitter	M					12	12
Sub-total:						12	12
Steamfitter/Pipefitter	F	1	1			4	6
	M	64	25	22	1	152	264
Sub-total:		65	26	22	1	156	270
Steel Fabricator	F	10				6	16
	M	58	35			24	117
Sub-total:		68	35			30	133
Stonemasonry	M					8	8
Sub-total:						8	8
Truck and Transport Mechanic	M	1	44			31	76
Sub-total:		1	44			31	76
Welder	F	4	9	7	1	13	34
	M	106	156	226	45	466	999
Sub-total:		110	165	233	46	479	1033
TOTAL:		497	1235	1793	426	3807	7758

Appendix D

Presentation made by WRDC to the Provincial Apprenticeship Forum

Presentation to Apprenticeship Board
WRDC
Speaking Notes
Accompanied by Power Point Presentation

Currently only 1.2% of all registered trades apprentices in the province is female.

Only 5.1% of all registered female apprentices are considered to be active in their apprenticeship.

Tabulated from statistics provided by the Department of Youth Services and Secondary Education
March 1, 2002

It is projected that in the next 10 years opportunities in the trade related apprenticeship occupations will increase dramatically.

Where do we stand?

This presentation will provide a brief overview of some of the factors that dissuade women from entering trades occupations. At the end of this presentation Dorothy will facilitate a discussion on some of the issues included in this presentation.

Social Attitudes

In the past, women have not considered careers in the trades. Society has not encouraged this choice for women. Traditionally, men were only considered to have the physical strength to complete the tasks required for these occupations. From childhood women were encouraged to depend on men as the primary financial provider. Today, however times have changed. Technology has taken the brute strength requirement out of many trade occupations and women now head a growing percentage of families. We no longer live in a paternalistic society, but in a society of equal opportunities and responsibilities. There is no one in this room who would make the generalization that women can fulfill the obligations of a trades related job. No more than anyone would make a generalization regarding any segment of humanity.

The challenge is then to alert women to the opportunities of a trade occupation and to encourage entry into the apprenticeship program.

Some things to think about

*A cosponsored media campaign to alert women to the opportunities of apprenticeship

*Expansion of **Techsploration-Profile of Techsploration**

*An orientation and information session aimed at school counselors and teachers in the provincial school system with an emphasis on opportunities for women in trade occupation.

The above mentioned statistical information supports these special initiatives aimed at women.

Educational Systems

As previously mentioned only 1.2% of registered apprentices are female. The current apprenticeship training system is not encouraging the entry of women into the trade occupations.

Currently trade centers are spread across the province. In order to pursue a trade a woman must leave her home area. This is a difficult decision because of two factors:

- 1) Women have not been exposed to trade occupations and fear moving to face the unknown.
- 2) Women are primary caregivers and eldercare providers and do not have the freedom to move just explore career options.

As well many women are not eligible for educational funding programs offered by HRDC. If a woman has not been in the workforce in the time lines specified, there is no funding available. Women leave the workforce for a variety of reasons including staying home with children or looking after other family members. There is no economic value placed on these roles and nor is there funding available for retraining.

As our group is committed to promoting women in non- traditional areas, we are making the following recommendations:

Use of technology as a trade training tool aimed at women. This will give women the opportunity to explore the course content before making a move to train.

Increased Governmental support is made available for child/eldercare givers. 90% of these caregivers are women

An admission scheme be implemented within post-secondary institutions that is favorable to women applicants

A funding scheme put in place for women who are not eligible for funding

Workplace Issues

Only 51 % of women who deal with the educational and societal issues remain active in the apprenticeship system. Of course current lack of work is an issue that faces all apprentices, but women also have gender specific issues that require special attention.

Child Care/Elder Care Issues with relation to long work hours/shift work Workplace Harassment Perceptions Fear of working in a male dominated work place

There is also anecdotal evidence that supports the belief that female apprentices are not given fair opportunity on the job sites. They are placed on short-term tasks and then laid off or are given tasks that do not enrich their skill set.

WRDC makes the following recommendations:

A joint employer/union/ Government initiative is put in place to educate all workers/management

All employers are required to have a comprehensive work place policy regarding equal opportunities

An information strategy is implemented to get the message out into the field. This information strategy could follow a similar method as safety strategies. Lunch shack talks and posters on the job site are two options

A comprehensive Government Strategy is put in place to provide quality support for caregivers

An allotment of a percentage of apprenticeship positions for women

All recommendations sited in the above presentation will require close and careful monitoring when implemented to ensure compliance.

In the year 2002, we are currently ignoring 50% of a potential workforce in areas where drastic shortfalls have been predicted. This is not wise human resource planning.

From a gender perspective, women are being excluded from as high as 70% of new job opportunities. Historically these positions will pay 3 times more than jobs in the traditionally female dominated service industry. It is the mandate of WRDC to ensure that women have the opportunity to pursue these career goals.

Please take the next 10 minutes to comment on the issues presented and any other comments you may have regarding women in apprenticeship.

Thank you

Appendix E

Breakdown of Active/Inactive Apprentices

Active/Inactive

Occupation	Active		Inactive		Total
	F	M	F	M	
Auto Body Repairer	1	97	3	58	159
	Total active for trade: 98		Total inactive for trade: 61		
Baker		1			1
	Total active for trade: 1		Total inactive for trade: 0		
Boilermaker		42	1	2	45
	Total active for trade: 42		Total inactive for trade: 3		
Boom – Truck Operator		18			18
	Total active for trade: 18		Total inactive for trade: 0		
Bricklayer		9	1	20	30
	Total active for trade: 9		Total inactive for trade: 21		
Cabinet Maker		4			4
	Total active for trade: 4		Total inactive for trade: 0		
Carpenter	16	781	8	268	1073
	Total active for trade: 797		Total inactive for trade: 276		
Commercial Cooking	92	218	87	146	543
	Total active for trade: 310		Total inactive for trade: 233		
Construction Electrician	1	451	7	158	617
	Total active for trade: 452		Total inactive for trade: 165		
Driller/Blaster		10			10
	Total active for trade: 10		Total inactive for trade: 0		
Electrical Motor System Technician		2			
	Total active for trade: 2		Total inactive for trade: 0		
Hairstylist	613	30	453	26	1122
	Total active for trade: 643		Total inactive for trade: 479		
Heavy Duty Repair	1	158	1	263	423
	Total active for trade: 159		Total inactive for trade: 264		
Heavy Equipment Operator	10	299	12	570	891
	Total active for trade: 309		Total inactive for trade: 582		
Industrial Electrical		151		18	179
	Total active for trade: 161		Total inactive for trade: 18		
Industrial Instrumentation	4	114	1	49	168
	Total active for trade: 118		Total inactive for trade: 50		
Industrial Mechanic (Millwright)	1	249	6	256	512
	Total active for trade: 250		Total inactive for trade: 262		
Insulator (Heat and Frost)		5			5
	Total active for trade: 5		Total inactive for trade: 0		
Ironworker	3	29			32
	Total active for trade: 32		Total inactive for trade: 0		
Machinist		62	2	30	94
	Total active for trade: 62		Total inactive for trade: 32		
Maintenance Operator	1	63			64
	Total active for trade: 64		Total inactive for trade: 0		

Occupation	Active		Inactive		Total
	F	M	F	M	
Mobile Crane Operator	2	93	2	95	192
	Total active for trade: 95		Total inactive for trade: 97		
Motor Vehicle Repairer	15	541	6	198	761
	Total active for trade: 557		Total inactive for trade: 204		
Oil Burner Mechanic	1	56	1	23	81
	Total active for trade: 57		Total inactive for trade: 24		
Painter and Decorator	1	17			19
	Total active for trade: 18		Total inactive for trade: 0		
Partsperson		3			3
	Total active for trade: 3		Total inactive for trade: 0		
Plumbing and Domestic Heating	2	111	1	20	134
	Total active for trade: 113		Total inactive for trade: 21		
Power Systems Operator		10			10
	Total active for trade: 10		Total inactive for trade: 0		
Powerline Technician (Construction)		3			3
	Total active for trade: 3		Total inactive for trade: 0		
Powerline Technician (Operating)		56		52	108
	Total active for trade: 56		Total inactive for trade: 52		
Refrigeration and Air Conditioning Me		75		20	95
	Total active for trade: 75		Total inactive for trade: 20		
Residential Electrical	1	28			29
	Total active for trade: 28		Total inactive for trade: 0		
Sheet Metal Worker		47		4	51
	Total active for trade: 47		Total inactive for trade: 4		
Small Equipment Repair		40		6	46
	Total active for trade: 40		Total inactive for trade: 6		
Sprinkler Fitter		15			15
	Total active for trade: 15		Total inactive for trade: 0		
Steamfitter/Pipefitter	3	196	4	130	333
	Total active for trade: 199		Total inactive for trade: 134		
Steel Fabricator	12	87	4	55	158
	Total active for trade: 99		Total inactive for trade: 59		
Stonemasonry		9		2	11
	Total active for trade: 9		Total inactive for trade: 2		
Truck and Transport Mechanic		62		32	94
	Total active for trade: 62		Total inactive for trade: 32		
Truck-Trailer Repairer		2			2
	Total active for trade: 2		Total inactive for trade: 0		
Welder	11	522	23	559	1115
	Total active for trade: 533		Total inactive for trade: 582		
TOTAL:	792	4776	623	3060	9251

Appendix F

Gender Breakdown of College Graduates in Trades Occupations

**Trades Program Gradustoo 2000-41 by Gener
College of the Noft Atlantic**

PROGRAM	MALE	FEMALE	FEMALE PERCENTAGE
Aircraft Structural Repair	20	7	25.9%
Autobody Repair (Entry)	12	1	7.7%
Automotive Service Technician	18	1	5.3%
Baking	0	6	100.0%
Brircklaying (Entry)	6	0	
Carpentry-Construction/Joinery Entry	24	2	7.7%
Commercial Cooking Entry	26	34	58.7%
Commercial Transport	15	0	
Construction/Industrial Electrical Entry	20	0	
Crane Operator	22	0	
Driller/Blaster 11	6	0	
Hairstylist	0	29	100.0%
Heavy Duty Repair Entry	2	0	
Heavy Equipment Operator Entry	19	0	
Heavy Equipment Service Technician	12	0	
Machinist Entry	6	0	
Marine Cooking	13	3	18.8%
Metal Fabrication - Entry	16	5	23.8%
Millwright	8	0	
Motor Vehicle Repair Mechanical Technician	1	0	
Multi-Skilled Industrial Worker	22	0	
Multil-Skills Worker	11	0	
Non-Destructive Testing	6	1	14.3%
Oil Burner Mechanic Entry	8	0	
Operating Lineman Entry	2	0	
Power Englineering Upgrading	3	0	
Powerline Technician	14	0	
Security Guard	12	5	29.4%
Steamfitter/Pipefitter Entry	13	0	
Stonemasonry	1	0	
Truck Transport Service Technician	4	0	
Welding Entry	68	6	8.1%
Total	410	100	19.8%