



Marginalized Women and Apprenticeship Training: Investigating a High-support Model

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EXECUTIVE SUMMARY

By 2025, Canada's skilled labour shortage is expected to reach 1.2 million people. Ontario is expected to face a shortage of skilled trades workers. Apprenticeships and employment in the trades continue to have very low female participation across Canada despite small recent increases and governmental initiatives to encourage women to enter the trades. Given the imbalance in the labour market in trades and the disparity in men's and women's incomes, there is an urgent need to expand employment opportunities for women. Working in a high-wage, traditionally male occupation is one important strategy for increasing economic self-sufficiency for women and improving the standard of living of their families. This is vital for women seeking to leave situations of violence, particularly those seeking to support children alone. However, women in, and seeking to enter, the labour force, especially in non-traditional occupations, face barriers in access to training and work, pay inequity, occupational segregation and gender discrimination. Cultural stereotypes regarding appropriate occupations for women continue to affect employers' recruiting and promotion practices as well as women's perceptions of their own opportunities. This inefficient use of women in the workforce wastes human resources, affecting economic growth.

Educational initiatives are key to bringing marginalized people into greater economic and social participation. The compound effects of various intersecting factors such as gender, poverty, racism, violence, and primary responsibility for children, place women at a particular disadvantage, marginalizing their access to social and economic well-being. This premise underpinned the previously funded project in that women who have experienced violence often have difficulty participating successfully in postsecondary education and training. In addition to intersecting social factors, they also experience a broad range of effects of post traumatic stress, including low self esteem and a complex array of responses to stress. To break "cycles of violence" and open a gateway to a different life, education initiatives must address the complex personal histories and consequent barriers experienced by diverse women who have been additionally marginalized by violence.

This study investigates the effectiveness of the George Brown College's Residential Heating Ventilation and Air Conditioning Training (RHVACT) for Women, a pre-apprenticeship pilot project funded by the Government of Ontario – Ontario Women's Directorate. This was a high-support cohort-style project for women who had experienced violence and/or were at high risk. It offered women the opportunity to escape the traps created by violence and poverty by embarking on a career in a skilled trade. The project included Level 1 pre-apprenticeship in-school training in Gas and Refrigeration, relevant safety training and a minimum 8-week work placement with an industry partner. It also included trade readiness, employment preparation, teamwork skills and academic upgrading. All of these activities are designed to prepare students for work in skilled trades and apprenticeship. The training the women received included specific skill-building leading to certification and defined job opportunities rather than generalized readiness for employment. The project drew attention because of its innovative approaches, the complexity of challenges the women were facing, and their success in the project. The project was designed to meet the needs of the participants, contribute to addressing the needs of the labour market, and advance social equity.

The goal of the study was to identify the components of the project that were effective for these students, particularly those that could be adapted in designing future programs for women who have experienced violence and members of other marginalized groups. The research focused on three overarching questions.

Research Question 1: What program supports did the women use and how did they use them?

Research Question 2: What are the women's perceptions of the program's components? How do they compare with the staff's perceptions?

Research Question 3: Did the women secure and retain related employment?

The data sources included demographic information, detailed notes taken during the project, project evaluations, participants' employment and other experiences after the project, individual interviews and focus groups with students and faculty, and interviews with government and private industry representatives. The research study combined both qualitative and quantitative elements and was shaped by a modified participatory action research methodology.

Of the 37 women who began, 22 completed the program. In general, the women who completed the program were younger, had better prior academic preparation, and were more likely to have driver's licenses than those who did not complete. Although the design of the program precluded a control group, comparisons with other student groups who also completed their programs indicated that these women had similar or superior academic performance, even though the other students had fewer systemic disadvantages. The retention rate was similar to that in another program for marginalized students.

The findings for the first research question showed that most of the women used the broad range of supports and resources, although to varying degrees. Travel costs were covered for all thirty-seven women who began the program. Safety boots, goggles, calculators, overalls, first aid kits and textbooks were also provided. Thirty out of thirty-seven women were given referrals to health/dental providers, housing advocacy, and legal supports. Four women received safety planning to deal with on-going violence. All women participated in large group discussion sessions with the counsellor and twenty-five of thirty-seven accessed additional one-to-one support. Eight women were reimbursed for childcare costs.

Several curriculum-based supports were identified as facilitating learning and academic success, as well as supporting the women in making lasting changes in their lives. These supports included an integrated counselling model, the job developer/coach and mentor, the role of the coordinator, and an integrative seminar course that created space for women to connect with each other. Building a community of learners and addressing academic challenges with timely and individualized supports helped the women to discover their strengths and engage fully in learning. Similarly, exposing them to role models, allies and mentors, and proactively engaging with employers facilitated the transition into their new careers. Although some students were still struggling to get jobs at the end of the program, students, including several who were still unemployed described the program as life-changing.

Secondly, we wanted to know what supports students used, how they were used, and whether there were differing perceptions between faculty and students about the value of these supports. We hoped to be able to tease out which of these supports were most useful and to recommend

particular supports as of primary importance. We learned much to answer these questions, in particular that the key was not in any one individual support, but in the relationships developed during the course and in the funds, flexibility, and non-judgmental attitudes that made it possible to respond to needs as they arose, to develop creative solutions to meet these needs, and to prevent a wide variety of material and emotional barriers from limiting participation and academic achievement. The research findings revealed two general elements of the course design and support that were found to be crucial:

- a. Relationships developed with faculty and between peers which led students to feel connected, supported, not alone, and to believe that the faculty cared about each student and their success
- b. Non-judgemental response and attempt to meet every need that got in the way of students' access to the pilot program, success in it, and opportunities for employment

In contrast to the supportive elements, the findings also indicated judgment as an important emergent theme that hindered learning for RHVACT students. Some of the components of this included judgments and attitudes like: *she is not a serious student*, *she doesn't have aptitude*, and *she doesn't want to be here*. It was difficult for students to persist when they felt judged in these ways by faculty or staff, even when those attitudes were expressed indirectly. In identifying important directions and understandings about how to support women who have experienced violence to learn effectively and prepare them to enter the trades, this revealed the importance of curriculum designers and faculty working diligently to suspend assumptions and judgements about non-traditional students.

Our third question was about employment. Fifteen of the 22 pilot program graduates secured full or part-time work and for most this was related to their training. Two workplaces accounted for six of the women who were hired, both full time and part time. Some women were under considerable pressure to find work, whether it was related or not, and a few took other employment. Five women took their Gas Technician 2 training at night while working full-time in the gas and appliance service sectors, giving them the second of the three levels of qualification.

Like many studies, this research also had some important unexpected findings that relate tangentially to the research questions but are considerations for designing similar programs in the future. On an institutional level, the findings revealed the challenges of negotiating change, seamless communication and cooperation across departments in the college, collaborating across academic and industry cultures, working within institutional constraints, and allocating resources for special projects. The study also underscored the need to work with employers to create a welcoming and supportive environment for employment and on-going learning on the job after formal training. Offering only one type of training in the trades gave the women limited choices about future career paths making it difficult for a large cohort to obtain employment.

This study reveals a need for further research to understand with more nuance and depth the perspective of employers and their hiring processes, and the dynamics in the workplace when women enter non-traditional trades. A longitudinal study would be valuable to track women over a longer period of time to assess the impact of interventions like the ones in the RHVACT program. The high levels of support made available to the students in this project would probably be beneficial for many students, female and male. At this stage we can only speculate about this, but there are probably students in every program who have experienced disadvantages similar to those of the women in this project and who would benefit at least as much. While providing greatly increased logistical support for all students is impractical financially, facilitating better relationships, building learning communities among students, and modelling non-judgemental acceptance are possible.

A second follow-up project with a similar group of women is underway. The findings from RHVACT project described here have been incorporated into the design of the successor project. We are fortunate to have the opportunity to apply the results of this research to strengthen the next project. Women in the current project receive supports that are similar to those in the study being reported here but also have greater vocational choice among the trades, will be integrated more fully with other students in the same department, and will have smoother links to employers.

PART ONE: INTRODUCTION

Apprenticeships, which often serve as a gateway to the trades, have very low female representation across Canada (Madsen, 1999). A survey conducted by Ontario Chamber of Commerce, in 2003, estimated Ontario as facing a shortage of skilled trades workers (Smol, 2005). By 2025, Canada's skilled labour shortage is expected to reach 1.2 million people (The Conference Board of Canada 2003-4 and 2007). The federal government, provincial governments in British Columbia and Ontario, and the territorial government in the Yukon have made deliberate efforts through policy and funding, as described below, to address this anticipated shortage and gender wage gaps by encouraging women to train for the skilled trades.

LITERATURE/HISTORY

Women's participation in the workforce.

The participation of women working in the labour force is not a new phenomenon; since the early sixties there has been a significant increase in the number of women employed. In 2004, Canadian women 15 years and older made up 58% of the general work force, up from 42% in 1976 (Statistics Canada, 2005). Of that, 67% worked as teachers, nurses and related health occupations, clerical or other administrative positions, and sales and service occupations. Only 30% of employed men worked in these areas (Statistics Canada, 2005). In other areas such as non traditional occupations, women's representation has remained stubbornly low. During the same time, 31% of women worked in manufacturing, while 19% held jobs in primary industries and 7% were in transportation, trades and construction work (Statistics Canada, 2005).

Women account for 70% of the employment increases in Canada in 2007, while men make up the remaining 30% (*The Daily*, Nov. 2, 2007). At 47%, women made up almost half the workforce in 2006. This is a 10% increase since 1976 (Almey, 2007). Canadian women's employment levels increased 16.4% between 1976 and 2006; in comparison, men's employment *decreased* 5%. This indicates women's contribution to the Canadian economy is extensive. According to the Status of Women Canada (2004), women contributed \$185 billion through wages and self-employment to Canada's Gross Domestic Product (GDP). Women's unpaid work constituted the equivalent of 12.8 million jobs to the economy in 1992 at a value of about one third to one half of the GDP--equalling as much as \$374 billion (Report on Plan of Priorities on

the Status of Women Canada, 2006-2007). Despite these impressive numbers, women in Canada still face tremendous barriers in achieving economic independence and increased participation in skilled trades, an important avenue to higher wages and greater economic independence. Very high rates of participation by Canadian women in paid work reflect the fact that most women want or need to, work, to pursue a career, and to enjoy some measure of economic independence.

Under-representation of women in skilled trades.

Even though the workforce participation of women has grown, gendered work segregation has remained static. Apprenticeships, which often serve as a gateway to the trades, have very low female representation across Canada (Madsen, 1999). Although women made up 16% of apprenticeships in 2006, the vast majority were in low-paying fields and relatively few in the higher-paying construction trades (Ontario Youth Apprenticeship Program)

Statistics available from Registered Apprenticeship Information System Canada, (2003) indicates that women who were registered apprentices numbered 9.7% and only 10.6% of these completed their apprenticeship training. This trend is a global phenomenon (Kruger, 1999, Lasonen, 1999). As a result, few women are employed in the skilled trades. In the UK for instance, 8% of the people employed in the skilled trades are women compared to 92% who are men (Equal Opportunities Commission, 2006) and in Australia 9% are women compared to 91% who are men (Preston & Whitehouse, 2004). Similarly, women are underrepresented in apprenticeships in Canada, where between 12% and 16% of apprentices are women (Ménard, Chan, & Walker, 2008).

Poverty and the gender wage gap.

Women are still largely excluded from blue collar jobs, especially in the skilled trades. Although a growing number of women have indeed moved into professional and skilled technical jobs, in education, health care and other community and public services, these women are still paid less than comparable skilled men, and are significantly under-represented in very well-paid jobs. More than three in four of the earners making at least \$89,000 per year are men (the top 5% of the Canadian workforce), and men are still three times more likely than women to be senior managers (Canadian Labour Congress, 2008). Women still earn less than men, and are more

likely to work part-time or contingent work. On average, a Canadian woman earns 72 cents to every dollar a man in similar work earns, and her annual income will be 63% of his (Hausmann, Tyson, & Zahidi 2007). The situation for Aboriginal women, women with disabilities, racialized women and newcomers is even worse than this average. Many work precariously and live in poverty (Statistics Canada, 2006).

Women's employment remains concentrated in low-paying, part-time, entry-level and temporary jobs or self-employment. Thus, jobs are without union protection and without benefits, including sickness and pension benefits. Approximately 40% of working women, in comparison with less than 30% of working men, are in part-time, contract, or other non-standard work arrangements (Townson & Hayes, 2007). As of October 2007, 21.2% of Canadian women worked part-time compared to 6.4% of men (Statistics Canada, 2007). Women are almost twice as likely as men to be part-time temporary workers (Cranford, Vosko, & Zukewich 2003).

Male-dominated industries tend to pay more than industries that have always employed large numbers of women; therefore, exclusion from these industries has been harmful to women seeking better-paying skilled jobs (Pocock & Alexander, 1999). Even if women can enter these better-paying male-dominated industries, the difference between men's and women's wages is often pronounced. Women often navigate a variety of obstacles to reconciling their financial and familial responsibilities, including the cost of formal child care, inflexible work environments, and low paying, insecure jobs that lack health, pension, and flexibility benefits (Hartmann, Hegewisch, & Lovell 2007; Henry, Werschkul, & Rao 2003; Lee 2007; Lovell 2007).

Canadian skills shortage.

A survey conducted by the Ontario Chamber of Commerce in 2003 estimated that Ontario is facing a shortage of skilled trades workers (Smol, 2005). By 2025, Canada's skilled labour shortage is expected to reach 1.2 million people (The Conference Board of Canada 2003-4, 2007). The Government of Canada, is concerned about the under-representation of women in skilled trades. Working to create opportunities for women in skilled trades is not only a way to improve the overall status of women but also to address the skills shortage. Access to the non-traditional occupations, those in which women comprise 25 percent or less of the total number of

individuals employed, is especially important for women without post-secondary education (U.S. Department of Labor, 2008).

Current as well as anticipated long-term trade shortages provide a rich opportunity to focus the attention on increasing the participation of women in skilled trades. Government has exhibited a commitment to improving the lives of working-class women. Human Resources and Development Canada [HRDC] adopted the Designated Group Policy which recognized that certain groups of people are disadvantaged in the job market and concentrated in certain types and levels of work (Ursule, 2003). A solution to this challenge includes deploying a number of strategies to increase the participation of marginalized groups that are scarcely represented in skilled trades. The Government of Ontario has initiated various programs to eliminate the many barriers that prevented these groups from being more fully integrated in better-paying occupations. Since 2003, Ontario has provided \$6.1 million to train up to 592 women in the skilled trades. In 2006, women accounted for 17 per cent of the active apprentices and 20 per cent of the new registrations in the apprenticeship program (OWD News Release, 2008).

Barriers to women entering skilled trades.

Socialization.

Many researchers have identified barriers women face (e.g., Bower, 2007, Dancey, 2002 Grzetic, 1998;). A Canadian Apprenticeship Forum study conducted by the Canadian Labour and Business Centre concluded that barriers to participation in trades apprenticeship faced by women result primarily from gendered perceptions of the trades. As a result of the perception that the skilled trades fall squarely under the category of “men’s work” (Kerka, 1999; SPR, 2002b), women are not generally encouraged to consider the trades as a viable career option. The notion that trades are gender-based, particularly for trades in which women have been traditionally under-represented, affects the attitudes of women who may be good apprenticeship candidates, as well as the attitudes of individuals who have significant influence on the career and training decisions of young women. Such gendered perceptions of the trades can result in the “de-selection” of women from these occupations (Dancey, 2002) either because they are discouraged (WITT-Alberta, 2000) from seriously thinking about entering a trade or because they are steered away from educational choices that will lead them into the trades. This perception may also result in an absence of support from family, peers, counsellors, and teachers for women

interested in trades (WITT-Alberta, 2000). Generally speaking, a lack of support from spouses and parents can diminish the prospects of women's successful access to or completion of apprenticeship (SaskWITT, 2001).

One problem lies in the traditional upbringing of girls who model themselves on their parents' expectations (Centre for the Study of Living Standards, 2001) and are differentially reinforced by parents, teachers, and other adults, to engage in gender normative behaviors and to pursue gender appropriate academic subjects and occupations (Correll, 2001). This role-modelling is further reinforced by the patterns of learning in our education institutions where female students tend not to participate in science and math-related courses (Harding, 1996; Kerr, 2010; Rossiter 1982) that lead to training in trade and technology occupations (CLMPC, 1990). At the same time, these attitudes and expectations (Reskin & Hartmann 1986) about gender appropriateness of occupations are inculcated equally strongly in boys and young men, reinforcing resistance in the workplace (Glick & Fiske, 2007). Often, for example, female computer scientists are mistaken for secretaries or marketing personnel (Kalson, 2000). Other barriers women face include *recruitment and hiring practices that create de facto entry barriers* (Government of Yukon Women's Directorate, 2005) in that employers consider women to be a risky investment (Canadian Apprenticeship Forum 2004) as they may have difficulties in obtaining childcare (Human Resources Development Canada 2002) or lack physical strength for completing the work (Government of Yukon Women's Directorate, 2005).

Though the emergence of women-led trade unions has been an empowerment tool for women working in the trades in Canada (Briskin, 2006) and in the UK (Kirton & Healy, 2004; Ledwith, 2006; Parker, 2006), the number of women in trades still remains low. Research suggests that early support for young women through parenting plays a key role in forming learners' identities, as well as their educational decisions and achievements (Biddulph, Biddulph, & Biddulph, 2003; Epstein, 1995; Maani & Kalb, 2006). From their early school years, young women are discouraged from some male-dominated careers and from trades in particular by the formal school system (WITT-Alberta, 2000; Zimmerman, 2001). Other research demonstrates the need for proactive recruitment of women into the trades (Dancey, 2002; Grzetic, 1998) as well as the

need for positive modelling in training and educational environments (Madsen, 1999) in order to counteract strong social barriers to women entering trades programs.

Lack of access to apprenticeship programs & training inadequacies.

Women lack access to apprenticeship entry points through family networks (Madsen, 1999; WITT-Alberta, 2000). This automatic streaming of men and women into different career or educational choices leads to inadequate promotion and career information targeted to women (Sweet & Gallagher, 1997; WITT-Alberta, 2000) and results in a lack of proper academic preparation, which presents another barrier for women entering non-traditional skills trades.

There are suggestions from some sources that the apprenticeship training model itself, based on an implicit pedagogy that takes men's learning patterns for granted, is not tailored specifically for women. Male apprenticeship instructors are often ill prepared to respond to the "kinaesthetic" approach (simultaneous combination of theoretical and practical teaching) some women prefer to take when learning new material (Sweet & Gallagher, 1997). While this lack of preparation could be offset by active recruitment of women as trade instructors, it might also suggest that male instructors should be given support to diversify their teaching methods. Given these educational barriers, some women may lack the academic or certificate qualifications they need to become apprentices. Removing those barriers involves the difficult work of changing attitudes and overcoming social expectations. However, barriers go beyond educational access to apprenticeship programs.

High cost of apprenticeship.

High costs of apprenticeship for individuals, employers, and unions, such as wage and supervision costs, rising tuition and tool costs, and income interruption, make apprenticeship programs unaffordable. In their role as primary caregivers, women—particularly single mothers—may face a number of financial barriers, which, without adequate financial support mechanisms, prevent them from entering or continuing with their apprenticeship training (O'Hara & Evers, 1996; Madsen, 1999). Restrictions associated with Employment Insurance legislation create additional barriers for women who want to upgrade their education, particularly if they are single mothers on social assistance (Grzetic, 1998).

Workplace environment.

With few exceptions, discrimination and stereotyping in hiring practices and treatment of women in classrooms and workplaces is perceived to continue and continues to pose significant barriers to women entering the trades (CLMPC, 1990; Grzetic, 1998; SPR Associates, 2002a). These barriers include: biased or discriminatory hiring practices (Grzetic, 1998); stereotypical perceptions of women's abilities (Grzetic, 1998); isolation or segregation of women in male-dominated worksites (SPR Associates, 2002a); unequal pay for women performing similar jobs as male co-workers; and sexual harassment or sexist treatment on job sites (Madsen, 1999).

Impact of violence on learning.

Violence against women continues unabated. It can drastically impact the ability to learn. Severe violence can eliminate the possibility of even imagining a different life. Anecdotal evidence and initial research (Horsman 1999/2000) suggest violence undermines the capacity of women to feel capable, smart, able to learn in programs, or make desired life changes. Research reveals that educational achievement is affected by experiences of violence and suggests that the failure of educational institutions to take account of this impact may be extremely costly (Horsman 1999/2000).

Women who have experienced violence often enrol in education programs and training to initiate change and escape violence, yet are expected to learn as though they are not victims of violence. When impacts are acute, victims of violence are generally viewed as needing medical solutions and a withdrawal from learning until they are able to learn in the educational system as it currently functions. For example, Bowlus et al (2003) document that: "Many victims of abuse experience behavioural problems and learning problems which result in lower levels of educational achievement." Consequently, these victims are unable to secure employment or have erratic or low-level employment. In addition, the long-term impacts of abuse may also lead to high rates of absenteeism and addictions which have a negative effect on a victim's ability to secure stable employment. Education and training affects access to employment, quality of life, and personal satisfaction. Women who are seeking to provide a better life for themselves by leaving a violent spouse need to support themselves and, often, their children. Otherwise they

frequently exchange relative financial security for the hope of greater emotional and physical security.

In one study, the costs of violence against women were estimated at more than \$4.2 billion annually (Greaves et al., 1995, p.2), however, neither the full breadth of forms of violence women experience, nor the costs of educational failure and under-achievement were included. The high school dropout rate for girls was estimated in 1999 at 9% (Statistics Canada, 2004). Although fewer young women quit school without their high school diploma than men (Statistics Canada, 2008) the probability that young female dropouts will return to school decreases by 6 percentage points, or 17%, with each quarter that passes. For young women, time elapsed since leaving school is the most influential factor in determining if they will return to school. However, young women who left school due to personal reasons are 30% more likely to return than other female dropouts (Statistics Canada, 2008). Thus, any effort to improve the educational success rate for women needs to reach young women and take into account the personal reasons and social pressures that impact on women's lives and their desire to pursue educational and vocational goals.

Research to date (Horsman 1999/2000, 2001, 2004; Mojab 2000; Mojab & McDonald, in press) suggests that all forms of violence can have a major impact on educational achievement. Horsman's research explores the nature of the impact of violence on learning for youth in and out of high school (2004), as well as for women in adult literacy programs (1999/2000), and examines discourses that help or hinder addressing the impact of violence in adult literacy programs (2001). Mojab's research on "War, diaspora, and learning: Kurdish women in Canada, Britain, and Sweden," uses learning theory to examine the relationship between war-related violence and learning, especially the dynamics of women's "informal learning," their experiences of war and the ways this relates to their learning in their new countries of residence.

Prior to Horsman and Mojab's research, few studies or practitioner materials addressed the issue of teaching students who have experienced violence. Research by Rockhill (e.g.1987) and Horsman's earlier work (e.g.1995) questioned what experiences of violence might mean for literacy education. The impact of violence on learning was only acknowledged in teaching

English to immigrant survivors of torture (e.g., Martinez, 1997). A recent growing body of practitioner materials that build on Horsman's research (e.g., Isserlis, 2000; Morrish et al, 2002; Parkdale Project Read, 2003) reveal strong interest in this research focus and its potential to lead to educational change.

Special initiatives across Canada.

In recent years, some provincial governments in Canada have taken some unique initiatives to encourage women in non-traditional skills trades. For example, the British Columbia Institute of Technology (BCIT) has developed a program called Trades Discovery for Women. Students in the program gain hands-on experience in over a dozen different trades and also participate in a period of job shadowing. This approach allows women to see beyond their perceptions of "men's work" and provides them with an accessible route into apprenticeship training (For the Record, 2010). A small selection of innovative programs are available to women in some locations across Canada. The Yukon Government made a commitment to exploring ways to improve the situation of women working in the trades in order to reduce the barriers faced by women to working or studying in the trades. This resulted in the establishment of the Yukon Women in Trades and Technology (WITT) agency in 2000. Since then, WITT has managed to create a number of programs that aim to increase the participation of women in the trades (Government of Yukon Women's Directorate, 2005). The initiative of the Ontario Women's Directorate to fund pilot employment training projects resulted in 10 unique programs across Ontario for women who have experienced violence. The RHVACT program at George Brown College – the project under study in this research - was the only project that was entirely trades-focused. Evaluation of that project stressed the value of "active involvement of violence against women (VAW) services from project initiation forward" and the "provision of practical support" to "help women address very basic needs" (Leach, 2008).

THE RESEARCH STUDY

Rationale.

The goal of this research study was to investigate the effectiveness of a high-support cohort-style training project¹ for marginalized women², leading to employment in skilled trades. Along with many commonly recognized aspects of marginalization, the women participating in this project had also experienced violence³, frequently the interplay of many different forms of violence, throughout their lives. This project, carried out at George Brown College with several internal and external partners and funding from the Ontario Women's Directorate (OWD), provided full-time training in technical and job search skills to prepare women to work in the gas, refrigeration and air-conditioning fields. The project was recently completed when the research study was designed.

During the project there was diverse anecdotal evidence – observed by faculty, students, and others – which suggested that it was worth systematic investigation for its potential as a model to support women to escape from violence and poverty. The project drew attention from college administration and funders because of its innovative approaches, the startling complexity of challenges the women were facing, and their success in the project. The Ontario Women's Directorate evaluation recognized the value of this project with high praise. In addition, this project had potential to model a way into the well-paid workforce for women who have experienced violence, giving them opportunities to escape the cycles of violence and poverty. We chose to study this project to learn more about the essential aspects of such high-support programming.

¹ Throughout this report we use the term “project” to refer broadly to this pilot including in this term all aspects of the courses, system of support, funding arrangements, and partnerships that were funded by the Ontario Women's Directorate and completed prior to the research. This project was our object of study in the research we are reporting here. We will also refer to students and faculty's experience of the different individual components of the project. The students participated in the training “program” which formed part of the overall project. We refer to the research as a “research study” throughout to clarify the separation between the study itself and the object of study.

² The effect of intersecting oppressions based on gender, race, poverty, difference and disability marginalize many people, disadvantaging them in educational settings. Women in this study were marginalized by many of these oppressions. Many also had complex histories of mental illness and/or addiction, common consequences of violence.

³ Women had experiences of many different forms of violence as children and adults, from abusive parents and spouses, but also from strangers, in situations of war and migration, and the daily realities of racism, sexism, homophobia, transphobia, and the vulnerability of acute poverty and homelessness.

The success by women who were experiencing multiple barriers suggested a study might identify best practices in supporting any marginalized or multi-barriered⁴ students so they can successfully complete their studies and obtain employment. The best practices would include practical recommendations for classroom techniques to improve the educational experience for any students facing multiple barriers to success and make them widely available to educators and program administrators through the growing innovative vehicle of www.learningandviolence.net and professional development for faculty members at George Brown and other colleges.

In the design of the project, the only research component was a summative evaluation. Towards the end of the project the opportunity of funding for in-depth research brought a diverse group of people to the table to draft a proposal – each bringing our own interests to cause us to prioritize the idea of this study. As feminist researchers we are clear that entirely objective research is not an achievable goal and that the identities and interests of the researchers influence the research and therefore need to be made visible. We are a group that includes white and racialized, lesbian and heterosexual, non-disabled women. Some of us had been involved as designers, partners, evaluators, and the coordinator of the project, others became involved only with the research study. We were fascinated by the stories we were hearing of women’s struggles and achievements in the project, including students’ striking academic success. Systematic study might clarify exactly what happened during the project and deepen our understanding of the impacts of violence on learning and how to address them. Members of the original project team were immediately seen as experts on this area and wanted to have a solid base for their recommendations and advice. Several of us have a strong interest in the education of people who are acutely disadvantaged and face multiple barriers to successful learning, particularly in institutional settings. This study was an opportunity to understand how to design more effective learning opportunities for these students. In the midst of stories of success from this project, the women’s own voices were missing, limiting the full range of understanding of what was most valuable about this innovative project. The research was an opportunity to learn more and to hear from women directly. Early on in the research study, we learned that there would be an

⁴ Increasingly —“multi-barriered” is a term often used to refer to people previously identified as marginalized – it draws attention to the experience of difficulties moving out of current circumstances. During this study we refer to the women participants as experiencing violence, marginalized, and multi-barriered. Although these terms are not synonymous they all apply to the women.

opportunity to apply for funding to replicate and expand this training, so we knew the research would be applied immediately and would provide information to re-design and strengthen future programming.

OVERVIEW OF RESEARCH STUDY AND PROJECT

This research study attempts to bridge the gap between research on violence and learning - the impact of violence on learning and ways to address these impacts - and the range of research on women's training for and experience in non-traditional trades. If women who have experienced violence can learn successfully and prepare for, and obtain, a well-paid job then they have more viable possibilities to escape some forms of violence and increase economic and personal control.

Consequently the study examined a pilot project which provided a high-support training program for 22 women survivors of violence, giving them skills and knowledge to enter the heating and air-conditioning trades, The intent was to learn more about the value of each aspect of this model to strengthen successful learning, and the effect of such a program on women obtaining and maintaining adequately paid employment. We expected to learn more about best practices which could be drawn on to support learning for all marginalized students in the college and elsewhere. We also expected to understand more about the most appropriate models for future programming to support women who have survived violence to obtain adequately paid employment.

In order to explore these areas of inquiry the research study was framed by three questions and investigated using available data sources.

Research Question 1: What program supports did the women use and how did they use them?

This was addressed through quantitative measures (e.g., what do the project records⁵ show about the supports⁶ that were used in terms of frequency, variety, multiple supports, differential use of

⁵ Log books and other records were maintained throughout the project. These were viewed as a primary source of data in the research study as they contained substantial detail about the participants, their use of supports, and staff reflections on the project. Admission data and students' academic records

supports at different stages in the project) as well as qualitative data (e.g., which supports do women describe as most important, least important, absent or insufficient; what made the important supports helpful, etc.) A basic cost-benefit analysis of the costs of various support components against the documented use and perceived benefits was also conducted.

Research Question 2: What are the women's perceptions of the program's components? How do they compare with the staff's perceptions?

We analyzed data from semi-structured interviews, exit interviews and other project records. Staff perceptions about the classroom work, the labs, the seminar, and the availability of other supports was also examined. The focus group participants were asked to build on and generate further questions for interviews and initial themes for analysis. While many questions and themes could have been anticipated, the perspective of the participants was crucial to ensure that important areas were not overlooked.

Research Question 3: Did the women secure and retain related employment?

The students' employment status was confirmed at the end of the project and at several follow-up intervals after that. As the project had no control group or condition, we compared the data about the women in the program with students in comparable programs in order to examine differences in gender and age distribution, attrition/retention, grades achieved, as well as post program employment rates. Demographic data, retention, academic achievement and employment were compared with apprenticeship and a post-secondary cohorts in the same trade. Comparisons were also made with a high support program for students with mental health and/or addictions issues learning a different trade (cooking).

We expected the study would show that a high-support, cohort-style apprenticeship program is effective. However, we were aware that significant resources are required to offer such a high-support program. The research endeavoured to identify which resources are essential. We believed this study would lead to the creation of better preparation for trades training and other

⁶ Supports included staff such as coordinator, counsellor and job coach, funds for food, childcare, and transportation, academic supports such as math coaching, and work clothes. There is more detail about these in the description of the project and in the findings of the research study.

forms of education and training for marginalized students, particularly women who have experienced violence.

PART TWO: METHOD

THE PROJECT

Description.

George Brown College's (GBC) Residential Heating Ventilation and Air Conditioning Training (RHVACT) Women's Program was a unique Canadian pilot project that began in December 2006. It was developed in response to a request for proposals by the Ontario Women's Directorate for their Domestic Violence Employment Training Program. The goal of this provincial government initiative is to "help women who have experienced abuse or are at risk of abuse to develop new skills, find employment, and achieve economic security" (excerpt from email invitation from the Ontario Women's Directorate, sent 10/21/2008). Women who have experienced, or are experiencing, violence are often trapped by poverty and by cycles of abuse. Access to a steady, well-paying job is key to supporting women and their children to escape or to change their circumstances. Yet this goal is frequently elusive. The goal of the project was to provide training in technical knowledge and skills, along with job preparation and job search skills in a safe and welcoming environment that would effectively prepare women for work in the gas, refrigeration and air conditioning field.

Outreach and recruitment.

Information about the program was distributed through the project partners to VAW workers, community agencies and social service agencies, including Ontario Works, in the greater Toronto area. The Program Advisory Committee composed of community and college representatives gave advice about recruiting and ensured that diverse communities of women would get the information. Materials distributed included a brochure with fax-back application, a Frequently Asked Questions sheet, and questionnaires for potential participants to complete. The Project Coordinator responded personally to inquiries about the program. Information sessions allowed women and agency staff to learn more before applying or referring. About 2500 brochures were distributed. Social service and VAW workers were asked to identify and inform

potential applicants and give them the printed information. The promotional materials clearly described this as training for women who were survivors of violence or vulnerable to violence, and who had an interest in working in the trades.

Sixty applicants were invited to small-group interview sessions. In these sessions, applicants were told about the potential training, identified supports they needed, and self-identified as vulnerable to or survivors of violence. They also completed mechanical aptitude self-assessments and described their process for figuring out answers to mechanical problems. Applicants were encouraged to withdraw their applications if the training did not seem to meet their interests or needs.

Thirty-seven applicants were accepted. Since this was a new endeavour, it was important that students had an opportunity to evaluate their suitability and interest and to drop out in the early stages, as is common in most forms of adult training. Although the project was designed for about 20 women, almost twice that number were admitted, based on the advice of the Director of Apprenticeships at the college.

It was anticipated that outreach activities would result in the enrolment of 22 women in the pilot program and that 19 participants (approximately 85%) would graduate from the pilot program with Residential Air Conditioning Systems Mechanic Level I and Gas Technician 3 training completed, making them eligible for entry-level positions with heating system companies and other employers in this sector. Level 1 is the highest of the three levels for each of these qualifications. It was anticipated that after completion of the in-class training, 75% of the graduates (14 graduates) would obtain employment in the Residential Heating and Air Conditioning Systems sector trade and/or be enrolled in further training. There is no established apprenticeship in this area of this trade, so the pre-apprenticeship training would qualify for entry to employment, after which a graduate might carry out this work or become an apprentice in an allied area. Pre-apprenticeship training often serves as a bridge in this way, particularly for individuals who have not entered a trade through employment, carrying tools and lending low-level assistance before they are sent to school for further training. [Government-sponsored pre-apprenticeship training has been made available for youth at risk, Aboriginal people, and similar

groups who have fewer avenues to obtain entry-level jobs in the trades because they lack the informal experience and personal contacts which typically facilitate initial employment.]

Description of project participants.

Students ranged in age from 21 to 57 and came from diverse ethno-cultural backgrounds. Twelve of 37 who started the project had children under the age of 17 living at home. Three students had disabilities that had been assessed and they were provided with accommodations. As the project proceeded, it became apparent that several more students probably had learning disabilities. Two women received a diagnosis of serious medical conditions while they were students in the program, one of whom was able to continue and eventually finish all the program components. Students continued to deal with many challenges while participating in the program. Some women had precarious housing or had to make sudden changes in their housing. Others had family members, including partners, who did not support their goals, or lived in shared situations such as an emergency shelter, where they could not get the quiet space they needed to read and study. Most students were the first in their family to attend post-secondary school.

Project delivery.

The project was designed to include delivery mechanisms and supports that emphasized responsiveness to individual needs and understanding of the impacts of violence and socio-economic barriers on students' ability to learn. Individuals who have experienced violence can experience significant barriers in accessing, participating in, and most importantly successfully completing, postsecondary education. The project designers anticipated that students would benefit from tailored supports, such as those often provided for Aboriginal learners, students who are the first in their family to attend post-secondary education or those who have experienced serious mental illness, immigration, or disrupted employment.

The project introduced the participants to the working environment in the selected industry (in this case Residential Heating, Ventilation and Air Conditioning), taught them basic skills, or improved their existing skills, and introduced the work areas they could study further in later training. The project included job search coaching and support, math upgrading, discussion

seminars and a ten-week work placement. For the purpose of this pilot project, intra-college partnerships were forged among the trades and technology, human services, academic preparation, and community outreach departments of the college. These are separate departments and usually function independently of one another. The project also included external community partnerships with Nellie's Shelter for Women, The Toronto Rape Crisis Centre/Multicultural Women Against Rape TRCC/MWAR), and Parkdale Project Read (PPR). The first two organizations have long histories of providing support, safety planning, advocacy, and referrals to women who have experienced violence, and assisted with recruitment of students and consultation about how to deliver supports effectively, PPR is committed to finding ways to respond to the barriers to learning imposed by violence and offers literacy groups for women who have experienced trauma. They provided referrals and tutoring, and consulted on curriculum around clear language, literacy, and violence and learning.

The project provided 8 months of classroom teaching in technical theory and direct skills practice (-shop"). Math classes and tutoring were provided throughout the project. This resource is routinely available to Apprenticeship students. Throughout the project, additional math tutoring was provided by Parkdale Project Read. The project incorporated discussion and reflection on the training in an integrative seminar course to troubleshoot problems, encourage women, provide peer support, develop communication skills, and increase women's understanding of discrimination. This seminar was also the place for supportive sessions that provided women with a variety of skills, such as self-defence and self-care and made it easier for them to keep going in the project. This course was a carefully created vehicle for providing flexible support for the women.

The classroom-based portion of the project was supplemented by 400 hours of on-the-job training. During the project, participants completed the trade requirements for Residential Air Conditioning Systems Mechanics - Level 1 and Gas Technician 3. Gas Technician 3 theory and shop practice classes ran for 17 weeks. Gas Technician 3 covered the 9 modules necessary to write the TSSA (Technical Standards and Safety Authority) Gas Technician 3 Ontario certification exam. After that, Basic Refrigeration and Air Conditioning (including welding) theory classes and shop practice ran for 8 weeks.

A coordinator, a job developer/coach, and a counsellor all assisted students to obtain the necessary resources and supports to complete the program and attain, or work towards, employment. Classroom support for job search continued after the on-the-job experience for an additional 4 months, followed by 3 more months of informal follow-up support. Childcare and travel subsidies, training allowance for eligible participants, emergency support, counselling and advocacy were added supports provided for the women.

The on-the-job placement took place during July and August, delivered by the industry partner, Direct Energy Essential Home Services. Students participated in ride-along exercises with Direct Energy technicians Monday through Thursday throughout the summer months. Direct Energy provided Workplace Health Management Information System (WHMIS) training, defensive driving instruction, first aid, and customer service skills training. Direct Energy also provided a senior HVAC woman technician through a workplace secondment arrangement to participate in some theory and classroom HVAC shop classes, and during the summer on-the-job training, to be a tutor, role model, and mentor for the women students.

From July through December, Job Skills classes were delivered each Friday for 4 hours and focused on job preparation activities, including interview skills, job search strategies, and employer presentations. The Integrative Seminar continued to meet weekly on the same day. These two classes allowed for: time to debrief placement experiences, advocacy regarding personal issues, and job readiness preparation with the Career Skills Centre at GBC. One week of this time was spent in safety training at Direct Energy, which included WHMIS, defensive driving, first aid, and customer service skills. The Friday classes also provided resume-writing skills and focused on issues related to transition to work life and job search skills.

The project offered supports that ranged from those that were usual for students at the college to some that were quite atypical and unique to this project. For example, math tutoring is usually made available for students in pre-apprenticeship and apprenticeship programs. Counselling services and the food bank are available to student in the college generally but are not facilitated to match the needs and schedule of students in a specific program, as they were in this project. Other supports, such as the full-time counsellor, the customized classroom environment, child

care and transit subsidies, health care referrals, and the job coaches are unusual. They were provided and modified in response to the needs of the student as these emerged. Although this project was not the only high-support program the college has run to meet the needs of students who do not usually have access to post-secondary education, the extent and combination of supports in this project was unique.

Throughout this project, GBC faculty and project staff faced challenges in course delivery and in program placement. These challenges related to building a team approach and developing learner-centered methodologies that accommodate the needs of vulnerable women learners. Women who have been socially isolated faced a multitude of challenges, including working in groups, returning to work, giving and receiving feedback, and crisis management. Despite the challenges, the RHVACT at GBC had remarkable success as an innovative intervention in this bleak picture. The project, made possible by a special grant, would not have been possible with usual apprenticeship funding. This project was specifically tailored to the learning needs of women who have experienced violence and were at risk of experiencing violence while in the program. The uniqueness of this project is not in the achievement of these trade requirements but in fundamentally modifying the approach to teaching and delivery of the material to address the barriers that women, especially those who are vulnerable, face when seeking to work in a trade. The project addressed the issues of gender, impacts of violence on learning, sexist work environments and similar types of barriers. This approach provided graduates with the ability, in a direct and meaningful way, to increase their understanding of discrimination and vulnerability in society.

Project rationale.

George Brown College has a long history of providing access to education for individuals and groups who have low rates of participation in post-secondary education. This project was aligned with that core value of the college. In addition to the Ontario provincial government's interest in increasing women's participation in the skilled trades, as described above. Some college staff teaching trades programs and staff at the industry partner believed that householders, especially women, would be especially receptive to women trades people providing residential services.

The Ontario Women's Directorate (OWD) has made a considerable investment in helping women achieve employment in skilled trades, a job sector considered non-traditional for women that generally offers income levels higher than female-dominated occupations such as childcare, food and secretarial service, and retail sales. While non-traditional work of this kind would not appeal to all women, it was anticipated that it would appeal to some. The number of women who showed interest and subsequently applied for the program bore that out. The Global Gender Gap Report 2007 demonstrates that gendered wage inequality is a significant challenge for Canada⁷. While a variety of intersecting social factors including gender, poverty, racism, and primary responsibility for children, already converge to disadvantage women who seek substantive employment, the OWD sought to factor in the additional effect of experiencing violence in the funding initiative that supported the RHVACT pilot project. The project high support model was drawn from the combined expertise of the college and community-based partners.

Students who come from marginalized groups often have great difficulty in successfully participating in postsecondary education and training and consequently, this very often leads to difficulty in gaining access to meaningful, skilled employment. These marginalized students can experience a broad range of effects of post-traumatic stress, struggle with low self-esteem, and seek to learn despite life stress which can lead to erratic attendance, difficulty completing assignments or participating in tests, and disengagement in the classroom. Women, already marginalized by gender, who have experienced, or are experiencing, violence are often additionally trapped by poverty and by cycles of abuse. Access to a steady, well-paying job is key to the OWD funding support for women and their children to escape violent relationships.

The myriad impacts of violence on learning and the practical barriers to course completion for women who struggle with homelessness, health, and other crises in their own and their children's lives, more often leads to drop out, lowered self-esteem, and loss of hope, thus making the achievement of a job above minimum wage an ever more elusive goal. Through the project, the hope was that one cohort of women would experience success in learning and acquiring well-paid jobs, making meaningful life changes a real possibility, and that vital information would be

⁷ The Global Gender Gap Report 2007. <http://www.weforum.org/pdf/gendergap/report2008.pdf>

gleaned about how to provide future education and training opportunities for women like them and, more generally, for people whose life situations make it difficult for them to be successful in post-secondary education.

RESEARCH DESCRIPTION

Research study team.

This research study was shaped by a feminist participatory action research methodology (PAR). This approach was selected to enable faculty and students from the project to take as active a role as possible in designing and carrying out an appropriate study to draw out from students, faculty, and partner organizations the crucial factors that support student success.

At the start of the research study, a team was created to undertake the research including the initial proposal writing team and two research assistants who were recent graduates of the Assaulted Women and Children's Counsellor/Advocate Program at GBC. The research team included the community partners who brought important insights to the project and the study. The research team shared a belief in the value of a formal applied research process to strengthen teaching practice, along with a perspective founded in feminism and anti-oppression education. Together we designed and carried out the entire research study in a collaborative, participatory manner.

The research team did not include any of the Technology division faculty or administrators. This reflects the focus and overriding purpose of the research, that is, *which supports were most effective for women who had experienced violence and/or were at high risk of violence as they pursued this program of study?* It was not primarily research about making Residential Heating and Air Conditioning (or the trades in general) more accessible to women. Although the two topics are intertwined in our study, the aim was to have findings we could extrapolate to programs for marginalized women and not on reducing the barriers to the trades for other marginalized groups (e.g., Aboriginal people, immigrants, people with disabilities). Although there are findings that are applicable to trades education, this was secondary to our purposes.

This decision was also partly pragmatic. Few faculty in the Technology division are engaged in the college's newly-expanded applied research activities. Their schedules made them less available for meetings and research work. Accordingly, we decided at the research proposal stage that the most effective way to include the experience and perspective of the Technology faculty and administrators was as key informants. They participated through individual interviews and focus group discussions and also provided feedback in informal exchanges. The Technology division was helpful in making data about comparison groups available and in providing supplementary information.

As described above, that education and opportunity was judged to be in the trades generally and on the assessment of employment trends in this trade in particular. In effect, the RHVACT project provided the content that enabled us to research the efficacy of a range of supports for women who had experienced violence and were now trying to learn in a college environment. The content shaped the findings, as any specific content would have. The broader questions and applicability revolve around how to provide effective learning opportunities for women who have experienced violence so that they can obtain adequately paid employment.

Preparation.

At the start of this study, the team met to exchange knowledge, build trust, and develop a shared understanding of the feminist participatory action research approach shaping our study. We recognized that our approach to the research could not be fully participatory due to the limitations of an institutional base, the fact that we were studying a completed project that had not been designed as research, the design decisions already made to obtain funding prior to the formation of the full team and start of the research study, and the limited time available for students and staff to participate. In these meetings we articulated our assumptions about the project we were studying and the research study itself. We identified similarities amongst us - a shared belief that every one of the team members held a large body of knowledge, and that our world views were complementary. We were clear that our approach lay within a feminist, anti-oppression, anti-racist framework, and we shared the assumption as feminists with an

intersectional⁸ analysis that real barriers prevent women from being successful in the trades (i.e., barriers created through sexism, racism, poverty, etc).

Date collection and analysis.

Initial research team meetings were used to refine the research design, develop the detailed themes to be investigated in initial focus groups, and created open-ended questions for an interview schedule for students. We also assessed the existing documentation collected during the project phase to see what might provide relevant data for the study.

We collected and reviewed data from a range of sources.

- Demographic information about the participants
- Detailed records collected during the project by the coordinator and support personnel
- Participants' employment and other experience reported at the end of the project
- Student focus groups
- Individual student interviews
- Small group student interview
- Faculty focus group
- Faculty individual interviews⁹
- Project evaluation data¹⁰

All members of the project staff had carried out detailed record-keeping. Staff continued this practice through to the end of the project and during a follow up period, September to December 2007. These records include detailed notes about all aspects of the project, including reflection on student needs and participation, teaching issues, and programmatic decisions. Staff also kept

⁸ Ontario Human Rights Commission, 2001.

⁹ Open-ended interview guides and focus group questions are included in the appendix – most follow-up interviews were open-ended and individualized – consequently these questions are not included in the appendix.

¹⁰ We were also able to draw from a previous faculty focus group, individual student interviews, an online student questionnaire, and informal employer interviews, which were carried out before this research study began as part of the summative evaluation of the project. Though the purpose of that evaluation was different – to evaluate the effectiveness of the project in relation to initial project goals - some of the data were applicable and informative. See appendix for evaluation tools.

notes on intake interviews and exit interviews, test results, and attendance records including reasons for absence. Aggregated counselling reports, work logs, meeting minutes, and post program employment statistics were all part of the detailed records from the project that provided data for the study.

Additional data were collected through individual interviews with faculty and administrators from the Centre for Advanced Building Technology (CABT) and a group interview with the counsellor, job coach project coordinator, and AWCCA coordinator. In addition to the data it provided, this group discussion enabled the researchers to generate open ended questions that were explored further in individual interviews with each of the group interview participants.

All students attended a focus group and several students took part in short interviews. The setting was not ideal for recording interviews or meeting as a group. There was not as much time to explore in-depth questions as we would have liked. However, it was the only time some students with work, study, and family commitments were free to meet with us and the only space available to us at that time and location. To augment these group sessions, we carried out several longer individual interviews. It was also hard to reach students who dropped out before the end of their program. Not surprisingly, some of these students could not be found again, as unstable housing contributed to the difficulties that resulted in some women dropping out.

We drafted open-ended questions and theme areas to explore in focus groups and interviews in team meetings and used these as loose guides only to ensure that we were also open to unexpected information relevant to our study. In subsequent monthly meetings, we strategized how to ensure that all data were collected and analysed. We also developed further questions for follow-up interviews.

The timeline and activities for the data collection extend from the beginning of the project to the end of the research data collection, a total elapsed time of 23 months. The weekly staff meeting notes, quarterly and final reports, and daily logs were based on the full number of participants at that time, the industry placements and contacts, and the staff from both departments in the

college. The remaining data collection activities were with subsets of those. The data collection timeline, activities and the number of people involved in each are summarized in the table below.

Table 1: *Data Collection Timeline and Activity.*

Time frame	Data Collection Activity
<i>Aug 23, 2006 – March 31, 2008</i>	<i>Project duration</i>
— — — —	Weekly staff meeting notes
November 2006 - May 2008	Quarterly reports and final report
January 2007 - October 2007	Daily logs
January 07 – April 07	Individual exit interviews with 7 students who discontinued the program [non-completers]
December 2007 – April 2008	Individual interviews with 5 students who completed the program [3 employed at time of interview, 2 not yet employed]
December 2007	Focus group with 10 students who completed the program
January 2008	On-line survey taken by 17 students who successfully completed the program
Jan 23, 2008	Focus group with 6 college administrators, coordinators, and job coach
Feb 4, 2008	Interviews with 2 representatives from Direct Energy [industry partner]
April 2008 – May 2008	Group interview and 4 individual follow-up interviews with the program counsellor, math teacher, job coach and program coordinator
May 2008	Interview with mentor from Direct Energy
May 2008	3 individual interviews with Technology department faculty and coordinator
June 2008	Focus group with 4 program staff
June 2008	Focus group with 15 graduates
July 2008	Individual interviews with 3 additional graduates

A research assistant team member made notes from all interviews and focus groups recordings. She transcribed some in full immediately, others she created extensive notes for later transcription of all areas that might offer relevant quotes. During the process of transcription/note taking she also kept a record of her own observations of themes and further questions. Other members of the team read transcriptions/notes carefully looking for patterns and themes. We

were looking for words that reoccurred, ideas that contrasted or were similar amongst students, amongst instructors and project staff, and between students and faculty/project staff. We came together in small group meetings to compare and contrast the themes we were each identifying and continue to develop our analysis of all of the data. We then brought tentative analyses and supporting information along with any exceptions and surprising data to our full team meetings for further exploration of our findings and their implications. Our approach is described in the classic manual of social change oriented research:

We think of it [analysis] as the time to live with the data, to get comfortable with what it has to say and to discover the “larger, more holistic understanding. The focus is on seeing patterns/arrangements... behind the totality of what’s being studied” (Carney, 1983:58)

...an analysis which is based on dynamic relationship between data, between categories and the changing links between categories. Part of the dynamic is created by the researcher’s efforts to simultaneously live with the data and make sense of the data... The other part of the dynamic is created by the researcher’s constant moving, back and forth, between data and concepts, and between individual ideas and research explanations in order to fully describe and explain what is being researched. This keeps the researcher constantly vigilant for new understandings at all analytical points. (Kirby & McKenna, 1989:128-9).

The approach is drawn from the constant comparative method of generating grounded theory (Glaser & Strauss, 1967). Influenced by feminist poststructural theory (eg. Weedon, 1987), we were particularly interested in discourse and the similar and contrasted accounts of their reality told by each interviewee and focus group participant. We were scrupulous in not omitting any data that did not fit our emerging themes and patterns; rather we shifted our tentative theme development until we had a space for all the contradictory possibilities revealed by the data.

We continued regular monthly meetings, throughout the study to develop a collective analysis of the data through discussion as we deepened our understanding of the patterns revealed by the data and presented by individual team members. Because many of the research team members had also been involved in the project phase in different roles we were also able to collect missing data during these meetings and to create a form of “member check”¹¹ of our analysis making sure

¹¹ “Member check” is a technical term, used in qualitative research, when a researcher is working with the words and meanings of others, e.g., interviewees, or focus group members, where the researcher sends the participants a draft of what they are reporting with a view to receiving from the participants a sign-off that the draft is a fair representation of what happened, and how it might be interpreted. It is a means of gaining some 'external validity'

it resonated for those with a closer knowledge of the project. We also explored our findings to draw out effective practices to support marginalized students to successfully complete their studies. These best practices have already been reported at conferences and online, to reach diverse academic and practitioner audiences in our endeavour to change educational practices to support learning for all.

A symposium organized in Toronto in September 2008 was an opportunity to explore initial findings with an audience of university and community-based educators with expertise in teaching people with experiences of violence (personal and systemic) and learners themselves. This deepened the research analysis and contributed to the development of best practice recommendations. Members of the research team continue to take an active role to educate others about best practices through workshops, presentations, and interactive material online. In the report of the findings and discussion and best practices which follows we have selected quotes to illustrate and bring alive the nuance of our themes and to provide evidence for our conclusions through the inclusion of the actual words of students and faculty. Where contrasting quotes exist we have included those also to ensure that we are revealing the full complexity of our findings. Aside from some statistics of student achievement we can not include accurate numbers (and do not consider it useful in a study of this kind) to show how many interviewees held a particular opinion or had a specific experience. Substantial data were collected in focus groups, where we cannot know the exact number of students holding an opinion or sharing an experience. Consequently we use “one” when we only know for certain that one person holds a particular view, terms such as “several” or “few” to show when we know more than one shared a perspective, and “many” only when something was reported a substantial number of times.

and checking about the tendency, in a research interpretation, to let the researcher's biases distort the picture presented of the events and/or conversation.” Dianne Allen <http://www.alara.net.au/node/848> Although we had planned to carry out a more extensive member check, returning the analysis to the students and faculty involved in the process the difficulties of their availability made this impossible.

PART THREE: RESEARCH FINDINGS

Who was in the course: Who stayed and who left?

We had a group of 37 women - number one it was a large group. They ranged from a woman who is essentially what people would refer to as a “bag lady” - so we had a woman who had a shopping cart full of all her worldly possessions - everyone from her to a pretty traditional kind of newcomer student - ESL - those kinds of needs and every thing in between. And they were a group that stuck out from everybody else at that campus in that they were older, they’re clearly poor in some ways in that they can’t keep up with fashion – you know, you can just tell when someone has money to spend on clothes and when they don’t. (Faculty Interview 6)

...we are not just talking about non-traditional students; we’re talking about people who are facing very significant challenges in terms of going to school. (Faculty Interview 6)

So many women [who] experience violence are either one step away from not having a house to live in or they’re in a shelter and they are essentially homeless. But the kind of grinding on-going homelessness that our women actually brought to us was deeper than that. (Faculty Focus Group interview 8)

Project completion.

Of the 37 women who began, 22 completed the project and 15 discontinued at some point¹². Although each woman’s situation was unique, there are some group differences between those who completed and those who did not,. Comparisons of those who completed the project [Completers] with those who did not [Non-Completers] are relevant to Research Question 1 about the use of supports. Completers were younger, with a mean age of 37.4 years (range 22-56 years) than Non-Completers, who had a mean age of 48.3 years (range 21-57 years). This difference is substantial, although it may not be meaningful, given the size of the cohort, the similarity in the range, and the fact that birth dates for three of the Non-Completers were not recorded. The physical demands of working in a trade or the complexity of their lives may have discouraged older students, but there is no direct evidence on this point. Overall, the project drew women who were well into their adult years, unlike college programs designed primarily for young people who have recently left high school.

¹² Of the 22, one finished some courses separately and another had a stroke very late in the project, making her unable to work. Both have been included as having completed the project, as they were engaged in it for its duration and completed the coursework successfully.

The Completers and Non-Completers differed in their academic preparation and in having or not having driver's licenses. Those who completed generally had more years of math and English in high school than those who did not, although the range was similar. Similarly, more than half the women who completed the project had driver's licenses while most of the Non-Completers did not. Having a driver's license is strongly related to future employability and may have been an additional factor that encouraged women to complete the project or discontinue it.

Differences in preparation were significantly related to success in the project for two of these three factors using a Chi-square test for independence. Women who had higher preparation in math were more likely to complete the project χ^2 (df=1, N=33) =5.56, p<.05. Similarly, those who had driver's licenses at the start of the project were more likely to complete their studies χ^2 (df=1, N=36) =5.84, p<.05. There was no significant difference between the two for preparation in English. These differences between Completers and Non-Completers are displayed in more detail in the table and figures below.

Table 2. *Differences in Preparation in Academic Levels and Driver's License.*

	Completers (22)	Non-Completers (15)
Highest level reached in Math Grade 11 or lower	6	12
Highest level reached in Math Grade 12 or higher	11	4
Highest level reached in English Grade 11 or lower	3	7
Highest level reached in English Grade 12 or higher	13	3
Had driver's license	12	3

Note: data were not recorded for 4 women about math, 5 women about English, and one woman about a driver's license, so the numbers do not always add to 22 and 15 respectively.

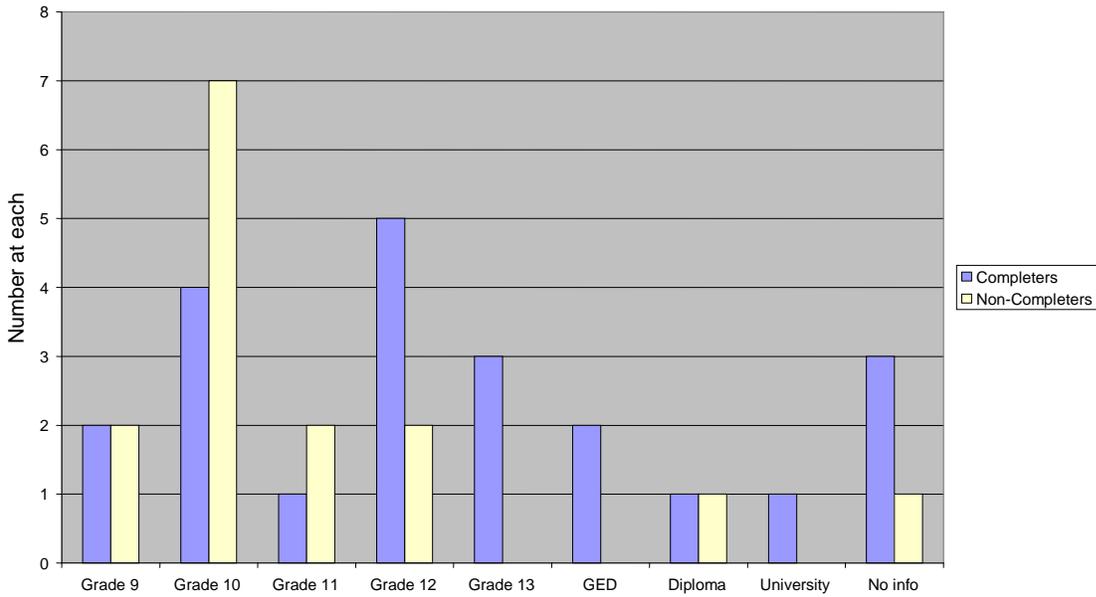


Figure 1. Preparation in math indicated by highest level of math completed prior to project.

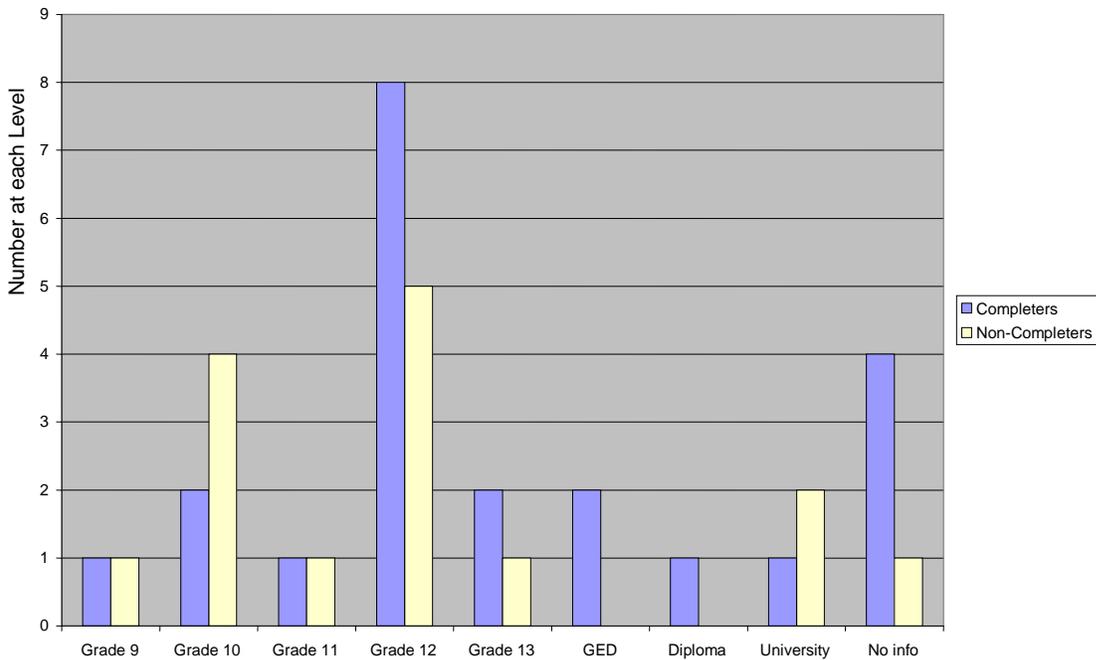


Figure 2. Preparation in English indicated by highest level of math completed prior to project.

Women who discontinued the project gave several reasons for doing so. The most common was health issues, cited by 4 of the women. Pregnancy and child care, financial problems, housing

issues, and discrimination accounted for 6 others. At least one decided that she was not interested in this project and another was asked to leave by the college as a result of a student conduct problem. Four others did not give a reason or could not be contacted. Ten of the 15 women who did not complete the project discontinued during the first 60 days.

The 22 participants who completed the training were diverse in many respects. Twelve self-identify as Caucasian, three Aboriginal, two Filipina, two African Canadian, one West Indian, one Korean, and one African. Most were in stable rental housing situations (none identified as a homeowner) although three were living in shelters and at least two others had unstable housing. They had 14 dependent children among them, ranging in age from young children to teenagers. Over 80% were receiving social assistance, typically Ontario Works or disability support, although this was true in large measure because that was how the women were recruited. All but three travelled from home to school by public transit.

Comparison with other student groups.

The nature of the project was such that no control group or direct comparison group existed. However, there are programs at the same college that are similar in some respects and permit partial comparisons with these students. The Assistant Cook Extended Training Program (ACET) is a vocational program for people who have experienced mental health needs or addictions. It accepts men and women and its students often face challenges with stable housing, meeting basic needs and so on, as the women in the project did. This is also a high-support program, with job coaches and job developers, small classes, and individual attention for students. In a recent cohort in this program, 31 students started the program. Seventeen finished and 14 did not, which is comparable to the retention rate in the RHVACT project. The age ranges for the ACET program are also similar to that of the students in the RHVACT project, with the ACET Completers in that cohort averaging 39.5 years of age and the Non-Completers 34.46 years.

Achievement in the project.

Academic performance data are available only for those women who completed the project. They had a grade point average (GPA) of 2.93 out of a possible 4.0, which translates to a B

average. Comparisons can be made with two Technology groups that are more traditional, although again each has its particular characteristics. There were 260 students in the Heating Refrigeration and Air Conditioning Technician program. This is a four-semester post-secondary program that primarily draws young men, although there is always a range of ages and occasionally a women student. At the end of the first semester (roughly equivalent to the level of training the women in the RHVACT program received), 17 had left the program. The 243 who remained had an overall group GPA of 2.65.

Another comparison can be drawn to the Air Conditioning Basic Level Apprenticeship students. These students are already employed and have been registered as apprentices. Not surprisingly, in a cohort of 33, only one withdrew and the other 32 finished. Their group GPA was 2.87. Although the group differences are such that these comparisons are approximate at best, they illustrate an important point. The women were able to achieve academic success at a level similar to that of students these comparison groups. Barriers for the women who remained in the project were not rooted in academic ability. They performed similarly to comparable groups of students studying similar material. It is likely that many students in the comparison groups did not face some of the challenges the women in our group faced, both personally and as a cohort, although no data about this are available as these were not true control groups. The value of the comparison is that it demonstrates that the barriers the women experienced, and that many continue to experience, are not tied to difficulty in learning the material when it was offered in an appropriate manner. Even though they frequently described themselves as struggling with their lack of self-confidence and sense of competence both during the project and in the follow-up interviews, the women were able to master the theoretical and practical material in the project and had grades similar to those of students in the comparison post-secondary group and the apprentice group. Of course, those groups of students might have had even higher grades if the supports the RHVACT women received had been available to them, and this point will be addressed more fully in the discussion.

What supports did they use?

As described above, project staff kept records about the provision of individual and group supports during the project. During the focus groups and individual interviews after the project

ended, women were asked about their experience of the supports and their responses were recorded. Faculty members were also asked how they became aware of women's needs for specific supports and how they responded. While supports were provided for all women during the time they were in the project, support use data are reported only for the 22 women who completed it. 17 women were provided with referrals to health/dental providers, housing advocacy, and legal supports. Four women received financial assistance to help with the cost of child care. Two received assistance with safety planning to deal with on-going violence. Individual one-to-one support was accessed by 13 women, in addition to the group sessions in which all women participated.

In addition to the academic support in English and math, less typical classroom supports provided for the entire group included food and pillows for class sessions. Both of these became a regular part of the classroom environment. All women were provided with travel costs and materials such as safety boots, goggles, calculators, overalls, first-aid kits and textbooks. The counsellor worked with all the students in group sessions. The faculty also worked with the college food bank to increase stores provided there so that students had increased access.

Interviews with faculty members revealed how much they learned about the myriad of barriers the students were contending with.

There were several things that got in the way of women attending classes. There were things - some of them that I wasn't thinking of, I just thought that those would be solved like childcare, like housing - I didn't think anybody was actually on the street, I thought yes, women do not have their own space or their own homes, but they'd be in a shelter or they'd be staying with someone. But there were people who were actually on the street and trying to find a place to live. So of course that got in the way several times. Child care situations where people would change from time to time and so that got in the way. Health situations got in the way. All those things are real to women's lives but for some reason I thought this fabulous program would just remove all of that and although we had planned and budgeted for those things - they still got in the way of women getting into classes. (Faculty Focus Group interview 8)

Project faculty observed both the women's needs, individually and collectively, and responded or arranged for responses to these. For example, food, such as fresh fruit, was originally provided to generate a welcoming atmosphere in the classroom, without any plan to continue to provide it throughout the project. The women's reaction to the food led the faculty to conclude that this

was filling a nutritional need that was even more pressing than the social one, and nutritious food was then provided regularly. Similarly, project staff noticed that some women would arrive early and nap before classes started. Blankets and pillows were provided to make this more comfortable. Individual needs that students expressed for housing advocacy, financial assistance, and so on were referred to the counsellor or other staff.

Women who came into the project faced many issues that presented significant challenges throughout the project. These included serious physical health, mental health and addictions issues, homelessness and inadequate housing, poverty related problems, ongoing domestic violence, lack of childcare, legal issues, discrimination, and unstable living arrangements. The Integrative Seminar, delivered as a scheduled class, created a “hub” for addressing, delivering, and problem-solving various support needs and is included here as an overall support cost. About half of the support costs were for supports that included direct personal contact between the participants and the staff (e.g., the job developer and counsellor), while the remainder were for more tangible logistical supports (e.g., exam fees, travel costs, materials), most or all of which are usually borne by the students in a conventional academic program. The highest costs, proportionately, were for project staffing, materials, and the accessibility supports made available to the entire class and used by all the students. This is very similar to cost pattern for the ACET program referred to earlier, which is also a high support program with many comparable supports. The cost of the additional academic support was covered by separate government funding, as it is for any student group needing this assistance, and is therefore not included in the figure below. It would have been available to students in this project regardless of the other supports or funding.

Although a preliminary cost-benefit analysis was done, this proved to be unproductive. The students spontaneously described all the supports as important and did not draw meaningful distinctions among them when asked in the focus groups and interviews. They had some suggestions about refining student supports [e.g., the assistance the job developer provided with résumés duplicated services already being provided by social service agencies and students thought she could have used that time in ways that were more beneficial to them], but these changes would not affect costs overall. Although some supports, such as subsidizing child care costs, were used by only part of the group, they were described as essential by those who used

them. However, the analysis did identify a gap. Funding dollars were stretched, thanks to the flexibility of the funder, to allow the funding to cover exam and special registration fees. Although these were not high in cost, the inability to fund them would have blocked further progress for the students who needed them.

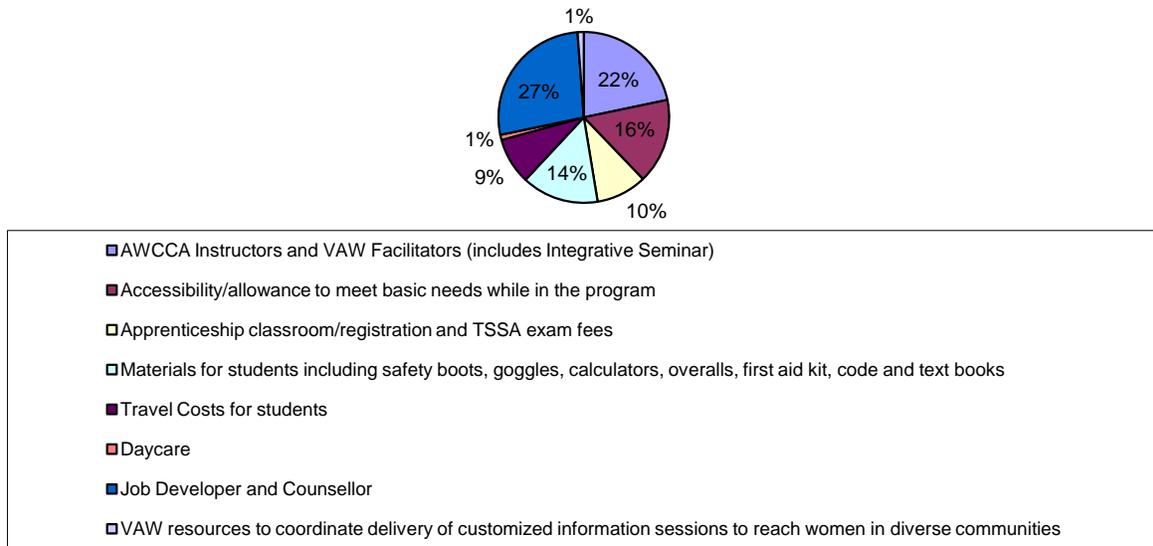


Figure 3. Project Costs related to Student Supports [\$191,135 total]

Securing and retaining employment.

This project focused on vocational training in the trades, specifically residential heating and air conditioning maintenance. Research Question #3 addresses this outcome. In the original project design, it was anticipated that most of the women would get jobs with the industry partner. Even if these positions were not permanent, they would have the opportunity to gain relevant employment experience that would open the way to other jobs or to self-employment. As described above, however, the industry partner had an unanticipated union issue and was unable to offer employment as planned. The partner attempted to assist by suggesting complementary training, such as appliance repair, which might lead to employment with them, and one woman who did this was hired by them. Although some women expressed interest during their training in securing employment in Alberta, to our knowledge none of them did so during the one-year follow-up. Women who secured employment were helpful to their classmates, contacting and recommending when there were openings. The majority of the women employed, whether

fulltime, part-time, casual or a combination, worked with either of two employers as a result of this. An additional credential, Gas Technician Level 2, was also identified as increasing employability and women who wished to pursue this were given partial financial and logistical assistance to do so through full-time or part-time study. Although the number of women in related employment increased over the follow-up period, it did not do so evenly, as women moved among full-time, part-time and temporary work, as well as between related and unrelated employment, in response to opportunity and their individual circumstances. At the end of the follow-up period, 17 of the 22 women were employed to some extent, although only 6 had fulltime work directly related to their training. These results are summarized in Table 2.

Table 3. *Securing and Retaining Employment During 12-month Follow-up.*

	Fulltime	Part-time	Casual/ temp	FT post- sec training for G2	Part-time post sec	Self- employed	Job search	Unable to work	Not known
Sept 30/07	4 with full-time work in HVAC tech/related**		2 *	1	4 in G2 training **		12 *	1	3
Dec 31/07	5 with full-time work in HVAC tech/related**	1 related work *		1	4 in G2 training **		12 *	1	2
Mar 31/08	10: 7 in HVAC, Appliance, construction or lab. ** 3 in other work	2 in Appliance/ tech/related work *	3 *	1 *	4 in G2 training **		5 *	2	2
June 30/08	7: 4 in HVAC tech/related work ** 3 in other work	2 in Appliance/ tech/related work *	3 *		8: 3 in G2 training** 7 in Appliance Tech training * 1 in other post sec	1	8 *	1	2
Sept 30/08	9: 6 in HVAC tech/related work** 3 in other	6: 2 in Appliance/ tech/related work * 4 in other work	2 *		1 in G2 training** 1 in other post sec	1	2 *	1	3

Total students included in this table =22. Total of rows may be greater than 22 because women are in two or more categories (e.g. Part-time work and post-sec training) – shared categories indicated by * and **

Perceptions of project components.

The results reported above describe the use of the supports and the women's employment history subsequent to the project (Research questions 1 and 3), as well as providing context for those findings. The women's perceptions of the project components (Research question 2) were investigated through a series of interviews and focus groups, which also explored the perceptions of the Technology and AWCCA staff. As described in detail in the preceding section, these sessions and related notes were transcribed and a thematic analysis was carried out, both independently by members of the research group and through further clarification in group discussion. This research method, as anticipated, resulted in qualitative data, most of which were a series of reflections and narratives about individual experiences. There is a high degree of concordance among these, particularly with respect to the supports and other components, and relevant themes were evident, despite the diversity of the data sources.

An analysis that moved this material from narrative accounts to paradigmatic syntheses (Bruner, 1986) seemed contradictory to the spirit of the project and the research. Accordingly, although some abstraction was imposed in the descriptive category titles, the analysis remained as close as possible to the women's own language. The power of the participants' accounts of their experiences lies in what Bruner called *–the landscape of consciousness: what those involved in the action know, think, or feel...'* (Bruner, 1986:14). We were challenged to understand these accounts from the more distanced stance of researchers without losing the participants' voices and the texture of their experiences in the process.

Accordingly, we have chosen to weave these results into a discussion section, subtitled *–Successful Learning,* which relies strongly on quotes to illustrate the themes while also elucidating the principles that emerged across interviews and were supported by the other data. This strategy allows ample opportunity for exemplars and minimizes repetition. It links the participants' words with the researchers' summary and analysis. It also creates a natural segue between the material that was expressed as the experienced world of the participants and the conclusions and implications for future practice and research that form the final section of this paper.

PART FOUR: DISCUSSION - SUCCESSFUL LEARNING

Two of our over-arching research questions were focused on the actual supports offered in this “high-support” pre-apprenticeship program. We wanted to know what supports students used, how they were used, and whether there were differing perceptions between faculty and students about the value of these supports. We hoped to be able to tease out which of these supports were more or less useful and to recommend particular isolated supports as of primary importance.

The project itself was exciting, leading to remarkable student persistence and enthusiasm, as well as high levels of completion and academic success. These results were particularly striking in a population which was more acutely marginalized than had initially been expected.¹³ The impacts of long-term poverty, homelessness, violence, addictions, and dependence on government assistance, on personal and family physical and emotional health, and the frequency of family crises was apparent throughout the project according to faculty interviews. In spite of the students’ success, it is likely that there would be few opportunities for a project perceived as so “rich,” so replete with such abundant resources, to be offered in a college or community-based setting in the future. The research design was shaped by the desire to assess what supports could safely be omitted in order to create a less costly program and still replicate the successes. During this research we were looking for what could be gleaned from this pilot project that could be instituted in any program in any setting. We learned much to answer these questions, in particular that the key was not in any particular individual support, but in the relationships developed during the pilot program and in the funds, flexibility, and non-judgmental attitudes that made it possible to respond to any needs as they arose—to explore creative solutions to meet these needs—and so to prevent a wide variety of material and emotional barriers from limiting participation and academic achievement.

¹³ The general expectation particularly by funders was of women leaving or having left abusive partners. The reality was that women had mostly experienced violence throughout their lives – as children and adults, from abusive parents and spouses, but also from strangers, in situations of war and migration, and the daily realities of racism, sexism, homophobia, transphobia, and the vulnerability of acute poverty and homelessness. Women were marginalized on many dimensions including those who also had histories of mental illness and addiction.

WHAT HELPS?

Building relationships and responding to needs.

The most fundamental thing we learned, primarily from the student focus groups, interviews, and answers to the previous online evaluation questionnaire, was that two overarching elements of the project design and support were vital:

- Relationships developed with faculty and between peers which led students to feel connected, supported, not alone, and to believe that the faculty cared about each student and their success.
- A non-judgmental attempt to meet every need that got in the way of students' access to and success in the pilot program and those that might limit their chance of getting employment.

An illustration of this is one student's description of what made success possible:

...it was all of the support that... [the coordinator], [the job coach] and what was her name? [the counsellor] – all of that support...and then all the girls there.

You weren't alone – there was all of us. And we just felt so excited that something was going to change – we didn't know what but we were here - and something was going to happen good.

I don't know – all the support – going to school again felt really good – I had responsibility in school and then I saw a taste of what it's like when you had people coming in and talking –I saw a taste of what it's like to actually be working and I liked it.

I found out that I'm good at stuff.

Relationships with staff.

Connection and believing someone cared about their presence and their success was described as a vital element by most students. Students talked in every interview about how “awesome” the coordinator was and expanded with descriptions of how much she cared and how well she listened. They listed the material supports she supplied, and over and over again said she was “awesome.” Some spoke of the way she always checked in with them, others about how she gave them food vouchers and passes for public transport, or helped them figure out how to address a problem, either within the project or with external services. When asked exactly what she did that made such a difference, a typical reply was:

Everything... She's everything, there's no replacing her, without her you've got nothing, you could talk to her ...gives advice, she's great and you can't get rid of her. (Student Group interview 12)

Several students talked about the difference it made that she called them when they were missing classes and getting close to dropping out. They spoke strongly of her “never giving up” on students and repeatedly encouraging students to return. Some students spoke of particularly powerful connections with the counsellor, others with the mentor from the trade, or with individual technical teachers who helped them believe that they could “do it” or would get a job. Relationships were vital

Relationships with other students.

When asked about the importance of being in an all-women group, most students spoke about their doubts and worries before they began. Far from having high expectations of friendship and support, most feared the competition and “bitchiness” that they expected. Many complained about the dramas that took place as each woman struggled with her own self-doubts and material realities that got in the way of her attempt to learn. However, the way women interacted with each other during the group interviews, with camaraderie, warm support, and easy teasing, was evidence that supportive friendships had developed. Even a student who talked about staying quite separate from other students during the RHVACT pilot program spoke about how different and how utterly alone, and lonely, she felt when she tried to continue her studies afterwards, supported only by a student loan. Faculty also described the powerful connections and support they observed between women participating in the project:

It is to the credit of the pilot that so many women did well—well enough that women were helping each other in and outside the classroom—women were great supports to each other. (Faculty Interview 7)

Meeting needs without judgement.

The second overarching theme that connected with the importance of relationships was that of meeting needs without judgement. A broad array of supports was put in place during the project, each in response to an identified need. While this may initially sound like an obvious approach, details of the supports provided make it clear that this response was exceptional, particularly in an institutional setting. The coordinator described it this way:

And then realizing things like...realizing that the women were hungry. And then before I could set up a system to get some food into the classroom - just taking my bundle buggy - so I shared with the women. And going and getting water and food and bring that in and laying out a lot of cash personally and bringing in the food vouchers. I was a teacher and I was a service provider and I was a coordinator in that I would notice the things that were missing and think –oh, let's do this". So a lot of running around. It was a lot of hard work.

Similarly, when staff recognized that students were sleepy in the morning they obtained pillows and blankets and set up a corner where students could nap before the teacher arrived to begin class. Accommodations to meet these needs were made, even though college regulations usually require that classrooms be locked when no teacher is present and that food and drink are banned.. In interviews students praised each of the supports, often saying that without them they simply could not have continued. Key amongst these were all of the ways that their access to nutritious food was increased. Snacks in the classroom, gift cards to buy food from the supermarket, and an augmented food bank were all referred to frequently by students as absolutely vital to their ability to continue in the pilot program.

A couple of the women illustrate this point:

A. And you know what was the best – was having the fruits and vegetables [as snacks in class]

B. Oh yeah – and the food cards and the TTC.(Toronto Transit Commission – i.e, tickets for public transit)

A. If it wasn't for that I wouldn't have come to school because I had no food most of the time. A lot of the times I'd be coming to school – I'd be coming on an empty stomach. But I'd be so happy knowing that once I got there, there would be grapes and blueberries and everything. (Student group Interview 12)

Every time we asked women about the supports that were important they listed each item that was offered, not only the food and the transportation, but also the work clothes, the tools, the support with accessing social services and other vital services such as housing.

Another example of flexibly responding to need arose when students were having trouble with understanding the math. Project staff asked the math teacher to tie teaching more closely to the

technical skills students were learning in other classes and to provide more individualized tutoring for students who needed it. In interviews, the staff team spoke about the time they spent reflecting throughout the project about what the students needed to continue and their own desire to meet those needs without judgement. Staff wanted to meet student needs without giving the students that feeling that they were the problem, that funds were coming out of an individual's pocket, or that students were being judged as to who was worthy of support. As one stated:

And we hadn't budgeted for food box and the food vouchers in the way that we found that we needed. So that's where we would shift things around and just be responsive to what was coming up. It became clear that women could use some vitamins – their health was terrible, so vitamin supplements was something we built in. Work clothing and boots - again we didn't really know going in just exactly what we'd need. But we had budgeted money for boots, I know we had budgeted money for some work clothing. We managed to get a fantastic donation of tools for women upon graduation (Faculty focus group interview 8)

Several factors helped to make this uncritical meeting of needs possible. Most basic of course is the availability of the material resources needed, the funding and the flexibility of the funders to apply the funds as needed. Secondly, the commitment to egalitarian relationships and respectful interactions with each student supported this approach. Thirdly, the team of the counsellor, job coach, project coordinator, and AWCCA coordinator worked closely together. This team approach supported creative thinking about possible options and solutions.

Interplay between relationships and responding to needs.

A review of elements of the project illustrates the way in which the importance of relationship building and responding to needs played out through each of the different support mechanisms.

Integrated counselling model.

One of the most startling aspects of the project was the choice the counsellor made to sit in on all classes during the initial stages. This unusual model privileged the students' time over the counsellor's, ensuring that rather than having to wait for the counsellor to be available, the counsellor was ready to connect with a student whenever she needed it. By sitting and observing, she was able to support the women by her presence, reminding them in a glance of approaches that might ground them and help them stay present to learn, bearing witness to their pain and struggle to stay engaged, reminding them through a look that somebody –sees them” and cares

about their struggle, and offering the immediate support of a brief meeting if the student wanted to leave the room and talk. In this way, women were less likely to lose substantial time when something in the class or in their personal life triggered memories or discomforts and made it hard for them to stay present and learn. The counsellor said:

So I was with them in their shop, I was with them in their classes. When they were having content sessions I'd be sitting in the back as if I was one of the students. I don't talk with them while I'm sitting in there. I'm just watching everybody, just observing what's going on, I'm watching the teacher, watching the students. Especially in shop...as they're doing whatever, I'd be moving from one table to another just standing there and chatting about what they are doing - but having a sense of what's going on with each person... I could look at someone and see how their body is reacting to something that is being said as the teacher is teaching or they're watching a demonstration - I could watch their body and see a reaction in the body. And I could sometimes see that this person needs to talk right now but we are at a critical point in this particular lesson for this person and I don't want them to have to leave the room to go and talk. So I would give a wink. And they would know that I saw, I know what's going on and we will talk about it later. Or sometimes I would just [say]... -breathe!" And nobody else knows that this is going on between us you know. But this person gets it and is okay for this moment and can last for a little while longer in this classroom. Then afterwards we can talk about it. Sometimes we didn't even need to talk about it because they just in that moment needed something. Just you know, just help me ground myself is the message I was getting from the eyes at that moment - that kind of thing. There are other times like I said, that I would just walk out of the room and we would have made eye contact already and I walk out of the room and this person knows - if she walks out I can go out and meet with her. And so she comes out and I'm standing by the door. So we'd have this unwritten rule - that kind of thing.

[This approach] just evolved... There were times I wondered that when I walked out and that other person walked out after me - if the others even knew where this person was going. Is this person going to the washroom or is this person going for a smoke or is this person meeting with [the counsellor]? No one knew for sure. We both just left the room not together. And we're meeting outside and we would meet for probably about 5 minutes. So counselling sessions are usually about half an hour, forty five minutes, one hour but they don't need that. But they need this moment.

...they needed me every day but they didn't need me for an hour a week.

Working in this way, the counsellor built a relationship with the women and could observe when they were having a hard time staying focussed on their learning. She could explore what support could best meet women's needs to return quickly to learning and could also support women in learning how to meet their own needs. As one student said with appreciation:

She always knew when something was wrong even before you did (Student group interview 12)

The counselling model which was developed is an example of responding to needs and of developing a caring supportive relationship. The initial model planned was for students to sign up for counselling sessions at the end of the day following a period of group work to introduce issues. When it became clear that appointments at the end of a long tiring day were not useful, the counsellor modified her approach in an attempt to meet the women's needs more effectively.

It started off with, we would leave a sheet of paper out and we would say these are my scheduled days to be in here, and these are the available times for you to schedule sessions with me. People would put their name down but it was usually closer to the end of the day so when classes end for them they are thinking - I have to go home now to be with my child or someone has an evening job or a night job, they have to think about going to work, or they are just tired from the whole day of what ever. So as much as their name is on the list and I am there and I am saying this is your time - they're saying I'm fine now, I'm okay. And they would take off. So I started to think what else can I do? How can I accommodate? – You know, how can I meet with these women? So I decided that since I had the flexibility, I would just go to their classes. (Faculty Interview 5)

Rather than judging the women as not serious for not attending appointments at the end of the day, the counsellor saw that structure was not fully meeting their needs and developed another option that might meet the needs more effectively. She focused on building a caring relationship of support that could help women believe in themselves and their ability to learn. She learned as she went along when support was needed and what could make a difference, both building the relationships and avoiding communicating judgments:

So sometimes I don't know what I'm looking for, sometimes it wasn't anything - I'm just looking. I'm just allowing my whole self to be there. So I'm sitting in the room, I'm not the counsellor, or the professor - I'm a woman. That's who I am in the room. And I'm watching sisters... So I might notice somebody's breathing had changed. Or I might notice somebody who was watching intently and paying attention to what the teacher was saying – they now start turning their head away, puts their hand at their cheek, they're now looking somewhere else, ...just looking uneasy now. And there were times when they also just turned around and looked directly at me. And I can't tell exactly what it is but I could just read the face and just know that this person is needing something at this time. And I would never know exactly what it is that they need but I would try something.

... we had a relationship. They knew that I cared about them. Many of them didn't even know that I teach at the other campus because that was not important for me... by the time they found out they were –oh, you teach, I didn't know you are a professor... ” I'm a

woman, you are too, so we are good together here. So they knew that... they knew that I cared about them.

... and they knew that they could share whatever it was that they wanted to share with me and it would just stay here. They also knew that some of the things that they would share with me - that they were even afraid to share because of judgments that society has...but they would know that it's okay, I'm not going to be shocked when they say it. And I'm not going to judge them and I'm not going to say "oh my god". It's okay, this is your life and you are choosing so share that with me and I'm here to hear it. So I think the relationship that we had was an important part – because they trusted me.

...they knew that this was a professional relationship but at the same time they knew that it was a woman to woman relationship.

The counsellor saw the importance of acknowledging the students' lives:

[Everybody] would benefit from that kind of learning environment where you know that your teachers are people who care about you, not only your head or your brain but actually care about you as a human being and recognize that you don't only show up at school with books and pen and pencil and, you know, those gadgets for school. But you show up with baggage from your childhood, you know, with your hungry belly or full belly, with your loneliness, with your full life, with joys with grief. It's all present in you. And so respecting all of that and saying "I know all of that is going on" and just validating that and saying "we can't deal with all of that right now because we are in this space to learn this particular thing" but just acknowledging that this is present with you in this moment is good and very helpful. (Faculty Interview 5)

To add to the sense that she was connecting to their whole selves, rather than only the part that was having difficulty, the counsellor also led sharing circles. These provided a space for women to share skills and interests they were proud of and get to know one another better:

I used our group session as – rather than counselling or talking about anything like that of a counselling nature - I said to people, bring stuff about your self. So bring pictures, bring talents that you have, bring anything you want to share -so we called it our sharing circle. ... And they would bring a variety of things. So there were some people who brought their photo albums and they were happy to share it. So it would be a presentation they're doing. And I didn't really know for sure that women would have been so open to this. They would bring ...and they're standing in the front of the group and we're sitting in a circle but....you know, it's your turn in the circle. And she's going through her photo album and she's saying this is so-and-so and this is where we were, this is what we were doing – and taking us through her life that way. Just sharing that - and it is up to her to share as much or as little. And there was a kind of celebratory mood in that circle where people would actually cheer each other after each presentation and it didn't matter what the presentation was about. Somebody else wanted to share a

game that[they] played when she was a kid – and she’s teaching this on the chalk board. She’s up there demonstrating this is what you do and people are into it.

This counselling model also shows how the team approach supported effective strategizing. As the counsellor explained, the question they asked about any student who was having difficulty was always:

So how can we create a space for her that can accommodate her needs, support her around her issues that she’s experiencing right now and she’s still getting the learning that she needs and not taking away from the others? So really thinking about each person and making a space that’s conducive to learning for each person.

Woman mentor from the trade.

Another person who was important in creating a space for successful learning was the mentor from the trade, a woman with many years of experience at Direct Energy. She was loaned to the project as part of Direct Energy’s support. She was in the classroom two days a week, helping students in their shop classes, sharing stories of her experience, and telling them what they would need to know in practice. She too developed a relationship with the women. As students said: *she was awesome, great, the best, she had great stories...*

When asked if it would have made a difference not to have a mentor, students replied:

It would have made a huge difference in the sense that it would have been a bunch of guys telling us what to do. (mentor) was one of these women that would come in and go no--this is how you have to do it, this is what you’re going to deal with, and this is how it’s going to be in the field –You’re going to have some guys do this like this –the guys like they’re great teachers but they really don’t know what it’s like to be a woman in that field. So it gave really good perspective in that sense.

Definitely bring somebody in that’s going to be able to relate a little bit because it’s not just going to give you perspective—sure they’ve got stories but it also just keeps you informed of what’s going to happen for you once you get out there. (Student Group Interview 12)

One of the ways the women benefited from having the mentor in the classroom was that she could recognize their particular needs as women in the trade. For example:

[I was] watching them struggle putting things together –and I would come over and say –~~Have~~ you tried it this way?’ And it’s so much easier because I work smarter not harder. So I found that this was maybe a barrier or a stumbling block because the guys automatically assumed the women knew how to use the tools. (Faculty Interview 11)

They also needed to learn how to do the work in ways that would be easy for them – rather than relying on brute strength:

...men and women work very differently--a guy will try and do something with this tiny tool and it can't be done but the guys will try to do it with as much muscle as they got -- but I will come out with a bigger tool and away we go. And sometimes the guys will grab the big machine tools and the women would do the same thing but don't know that a much lighter tool could do the same job. (Faculty Interview 11)

She was also an extra person in the classroom to notice the women's needs – to connect with them, encourage them – and give them opportunities to dig in and try out the tasks themselves:

[I] would go to the women who were hanging back and ask if they want to give it a try and not to be scared –this is how you stay safe. So I would push them a little bit and give them confidence...

I would work with those that were freaking out and if they were in their groups I would say to them to come over here –let's go one to one, put our hands on it -- and I would show them.

The mentor felt that just being a tradeswoman in the classroom was important. When she was asked whether it made a difference she said:

I think it did, I think because they can look at you for life experience...Did this ever happen to you or how did you handle this – something like that.

It seemed, from anecdotal comments, that she also offered an example of what life could look like for the women if they too were able to complete their training and get a job. For women who don't have the benefit of family members who are in the trades, earlier encouragement during their schooling, or in society more generally, the impact of a role model is crucial, offering the opportunity to make the goal of a job in a trade more tangible and real through connection with somebody who is already there.

Advocate and job coach.

The support of the advocate and job coach was less consistently evaluated and was described by participants as both very helpful and as problematic. During this project, the roles of advocate (to ensure that women received all the support they were entitled to from social service agencies) and job coach (to teach job skills and support women's search for employment) were combined in one person. The advocacy role was challenging as the advocate was positioned between the women's needs and hopes and the demands and limitations of the social service system. In this role it was hard to avoid being seen as a part of a punitive system, especially when the social

service system demands that women follow-up themselves, attend meetings with no account taken of the pressures of the studies and personal lives, and include a myriad of hoops for women to jump through to access and maintain financial supports.

Not surprisingly, given the impossible challenge of both these roles, students were somewhat critical of how these needs were met. Inevitably, the advocate was unable to provide resources women needed such as housing, to entirely mitigate the impact of the way women were treated by service providers, or produce the jobs the women so desperately hoped to obtain. Although the job coach gave women phone numbers to call and places to visit, she couldn't control whether the services called back, or how the workers treated the women. She also expected women to follow-up themselves, both the usual good practice to support women's own sense of empowerment and an approach demanded by service providers. Some students explained they felt pressured by this and believed they were unable to follow through because they had so little time available to make these contacts when their time was taken up with a full-time project.

One woman described her frustrating experience of looking for housing:

The housing issue –she started us off which was great –she took us to Woodgreen –it was actually the Woodgreen Youth Center. A group of us went there and we all signed up for this housing thing –it was supposedly for subsidized housing. And then that was it and she kind of dropped the ball on it and we were left to look after the rest of it and I don't have time to do that if I have to do all this other stuff. And every time I went to enquire what was going on –they'd look at me like you don't belong here because it is a youth center. I was bounced from person to person who said you don't belong here. Then why did we come here and sign all these forms? I'm still looking for housing).

A large amount of the vital work in this support role was the need to advocate for the women with Ontario Works, Employment Ontario, housing providers, Skills Development and licensed child care providers. Most of the women were receiving government funding supports. Helping the women to get access to all the supports they were entitled to was clearly a frustrating and challenging task. For example, women did not easily get access to the childcare support they were entitled to:

I'm still trying to grapple with why the childcare was a big deal [even] though most of the women were in receipt of OW [Ontario Works] - all the women that required childcare were on OW - there really wasn't any reason why they shouldn't have gotten early on all the supports in that area that they needed. But there were so many road blocks that OW, or rather childcare services, put up in terms of making women having to apply and qualify and the number of hoops that people had to go through time and time

again – people just get tired of having to do that. On some level it is just ridiculous and even though we shouldn't have had to spend a dollar in the program¹⁴ for child care, we ended up putting out a considerable amount of money to fill in gaps for women who didn't get the childcare when they needed it. For women who just didn't want to have to go through this process over and over again, women who were treated very disrespectfully by childcare services, and for X number of reasons it was - I would really say ridiculous - so those women stopped coming, (Faculty Interview 7)

Women were particularly critical of the job search process. Many reported that they felt the skills and resources they were being offered were skills they had already developed or resources they already had access to, particularly as many of them already had a relationship with a job coach, or a job search centre and didn't feel they needed another person in that role. When they had a choice about when to make an appointment, they therefore chose job preparation sessions as the best time to schedule them. However the job coach judged their choice not to attend her sessions or participate in practice sessions as lack of follow through and limiting their job search success:

I think that while they may feel that this was easy in terms of developing resumes and cover letters and preparing for interviews and actually searching for jobs - again the employers tell a very different story in terms of what materials they received from the women and as a group in general –the resumes and cover letters were weak.So there were women [who] in terms of doing the technical part of the course did really well and should have been more successful in terms of finding work. And while employers really liked them, they found it hard to justify hiring them, that other people did better in terms of interviews or that employers stated upfront that yes they wanted to consider our folks for the jobs, came here, did informal interviews – in one case did formal interviews here, did formal interviews at their facilities and still didn't hire. So that I'm sure, ...certainly disappointing for me but I'm sure more devastating for the women. But I just wonder what could have been different if they had been stronger in some areas in addition to the technical.

We taped some interviews and then reviewed them with the women either individually or in groups. We had employers from housing services come in and form an interview panel that would practice interviews with the women. Interesting enough some women were so nervous that they opted not to. It was a perfect opportunity too because the hiring had already happened... [Company name] had already hired 4 women so it wasn't like if they gave a bad practice interview it would be negatively impacted when it came time for the real thing - they already had the real thing. So here was a great freebee opportunity and either women didn't show up or they got there and were too shy – so that was too bad.

¹⁴ As indicated earlier, we have used the words *pilot* or *pilot project* to refer to this training project. While it was being delivered, students and staff referred to it as a program, and their language appears in their quoted passages. It should be understood as referring to the pilot project.

These two roles are complex. Yet these supports are vital if women are to access both supports and jobs. In future, the job search and employment preparation might be designed to be more flexible and responsive to individual needs so that stronger relationships can be developed in spite of the tensions of scarce resources. Faculty on the technical side also suggested that perhaps the job search component should be carried out by, or at least in partnership with, someone with in-depth knowledge of the particular trade. This study reveals the importance of acknowledging and making visible the structural and systemic limits so that both students and instructors/resource people are less likely to make personal judgments and more able to push at the limits.

Coordinator role.

The role of the coordinator has already been touched on above. The person in this role is responsible for developing relationships and responding flexibly to the women's needs. The role needs to be filled by someone who can cope with repeated crises, can think on her feet, and is open, non-judgmental, and willing to work in an ever-changing situation. During the research the coordinator spoke eloquently about how much the work of the project energized her. She had many conversations with the rest of the team as she tried to figure out how to remove all the barriers so that women could focus on their learning. She described it as: *“trying, difficult, exciting, energizing.”* It reminded her of when she first came into the women's movement.

She also described the sense of abundance and flexibility she experienced in this project: Enough money to really try to meet basic needs of students and the freedom to reallocate money to respond to the needs she and other staff members identified. This is an important contrast with the far more common experience of frustration for workers who cannot begin to address the needs with which they are confronted. In a situation of scarcity, workers can easily find themselves shifting into angrily blaming the people who expose cracks in the system that leave the worker feeling *“useless”* and unable to make a difference. In this case, the coordinator could feel effective and avoid being caught in impossible tensions to dole out scarce resources and assess the most *“deserving”*:

The neat thing was that, although we went into it with a project budget and we said we were going to do this, this and this –because we had never done it before there was latitude to change that. So we had a very general category called accessibility and it was

quite a luxury –it felt as if I had unlimited amounts of money to spend...I mean, I didn't - but you know what I mean - it was generous.

The coordinator responded to challenges by designing situations that would work as well as possible for the women. Even when assigned an inadequate room, she focused on turning it around to make it work well. This focus that says the women deserve the best —“whatever we are given we will make it as good as we possibly can” is a vital one.

So the first thing I did and one of the most helpful thing that I did was visit... www.learningandviolence.net and I went through setting up a class room - how to mitigate some of the impacts of violence on survivors. So before I even met the women I thought about those things. It quickly became apparent that we were marginalized within that college. We got given a room that was horrific. It had a fan going constantly, it was stuck off to....it was the hardest thing to find you ever saw, it had a lock on the door that you had to have the code for to get in, had no AV equipment in it –it wasn't a smart room anyway – But what we did was make the most of it. So it had moveable chairs and so we could set up a circle. It had some storage shelves so I started bringing stuff in for women to use like a coffee maker and a tea kettle and coffee and sugar and various things –and we started storing them. So we created —“Please do not remove, we're storing this”. We started putting posters up on the wall. I found this funny kind of calendar where you flip the pages and they all have feminist or funny women's saying –so we'd stick those up, our thought for the day, we had some women in skilled trade's posters, we got some stuff from the human rights area, I have posters at home coming out my ears – so I just brought in stuff. We started to decorate it. We got used to the fan - we got the guys in to try and help reduce the noise of the fan. We brought cushions in so women could have a sleep because we'd find women – basically they'd come really early and then nap. So we, I did things we weren't supposed to do. I would give women the code to the room so they could get in. Well, you're not supposed to do that. (Faculty Interview 6).

Staff planned in advance how to meet the needs as well as possible, tried to offset all the limitations present, and then finally modified the plan during the project to address each new need as it emerged.

...sometimes our experience as a program – I was very aware of it paralleling the experience of women as marginalized students. I felt that there were parallels, I really did. But my job was to kind of take that all in and absorb that and not let that affect the students, right. So to just kind of make the best of what ever it was that we had. To arrange delivery of food it became quickly really apparent that women didn't have very much – well had no money and were not eating before they came to school. We were really putting them through a lot so we decided to do the food vouchers. Provision of supports was interesting because I didn't have unlimited money. At first I would say to women - I have food vouchers that are available if needed - and so a lot of the supports were on a –you ask and we'll make a judgment.” But once women got the sense that there was this available, everyone needed. And I was constantly confronted with this thing - if you need, just ask and we'll work with you. But the fact is the need is universal.

There was no question that they needed. So I kind of gave up pretty early on doing judgment calls about who was deserving and who wasn't. (Faculty Interview 6)

The coordinator sought to meet students' needs without judgement. She also created a buffer between the institution and its inevitable institutional failure to take full account of them and their needs. Her interventions ensured that the students experienced themselves as being cared for and cared about.

Integrative Seminar.

In interviews, women spoke about the integrative seminar as the "crying circle" and then went on to talk about their different opinions of whether they liked it or not. Clearly, for some, it was quite a challenge to sit with a group of women and talk about their feelings. But in spite of some reluctance, many of the women spoke about its value for them and for the group:

Student 2: It was affectionately known as the crying circle.

Student 1: the truth though – it was good.

Student 2: yes - absolutely.

Student 1: it was a chance for everybody to say what was on their mind that morning because then you just get it out instead of being... holding it in I guess.

Student 2: It is too bad we don't have that now. .

Student 3: I like the one - checking in. If you're not like feeling well –at least they know....this lady is not doing so good today so we have to.... you know? Something like that...it's really nice.

Student 4: I just want to come to school and get to class.

Student 3: it works for me.

Student 4: well - it's good that it worked for you –the fact that they made it mandatory sucked.

Student 3: Most of the class liked that – they love...sometimes just telling what they did yesterday-something like that. The sharing.. .they're sharing their joy - or what ever. (Student group interview 12)

Through these sharing circles, the integrative seminar helped the women to engage with one another. It was also a place for acknowledging the reality of learning in the face of violence, even when women themselves did not necessarily identify themselves as survivors.

We couldn't even get consensus that identifying as victims or survivors of violence was how this group wanted to be identified, so we had that weird thing of coming in and this is how you qualify for this program and no we are not going to require you to talk about that but here's a counsellor, here's this person – so I mean - all this stuff built around that, and I would refer to it in integrative seminar often, but I would refer to it as a matter of course – –as survivors of violence we often experience this or" ... And so using that language but without the expectation that that was going to be fed back to me. So it was thinking that this was more of an osmosis kind of process. (Faculty Interview 6).



In this way, the team was able to recognize the impact of violence on learning, normalize it, and offer the resources and connections to support learning without demanding of the women that they share their experience or even identify in that way.

Figure 4. Integrative Seminar: Women learn to defend themselves.

Experiencing change.

The project gave women an opportunity to see themselves differently. Through the relationships and through the opportunity to experience new things and find new strengths, women had the chance to create lasting change. When women are treated with respect, as the project staff insisted on throughout this project, then the new experience can lead to changed identity.



To illustrate, this we include some of the women's words as they spoke with enthusiasm about what it meant to have new structure in their lives and to see themselves living lives like others – going daily on the subway and participating in the life of the college and accomplishing the skills of the trade:

Figure 5: Dressed for Welding

*Student 1: I remember when we first started –the first time we cut a pipe,
Student 2: How cool was that! - I felt so excited... I still have that pipe.*

Student 3: I have every single chunk of pipe we ever put together –it’s still at home.

Student 2: I’ve got one of mine on a mantel.

Interviewer: Why? Did it give you a sense of power?

Student 2: Absolutely –chicks with tools. I thought it was fabulous. I could have done more with that welding.

Student 3: It was very cool...I kind of forgot what it was like to actually accomplish it... to be given something and accomplish it – and not just accomplish it, but accomplish it well. That was kind of the big thing for me – putting this together so yeah okay I put it together but you know, I didn’t just put it together -it actually lasted - ..and I accomplished staying in the course. (Student group Interview 12).

The opportunity to take a demanding academic program and also acquire some solid, visible technical skills in an area in which women are not usually expected to excel is an important aspect of this project’s success and its meaning to the students. It is tempting to assume that students must be out of crisis and clearly “ready” to learn. Yet participating in this pilot program in itself helped some of the women get out of crisis. This was revealed as students spoke in interviews, as quoted earlier, about being on drugs, in despair, and even ready to take their own lives at the start of the project. Once women were participating in the project, some were still too haunted by all the problems in their lives to be able to continue, but others saw what they were capable of and went from strength to strength.

It might be tempting to conclude from the data revealing many women’s struggles during the project, in their employment search, and work experience, that an easier, and perhaps more traditional women’s employment training course might be a better choice for future employment training for marginalized women, and this is probably true for some. Yet to draw this conclusion would be to disregard the sheer delight and pride in women’s voices and demeanour as they spoke of the challenge to master such non-traditional skills as welding and described how learning skills they had been terrified they might never be able to grasp helped them shift their identity and make life-altering changes.

WHAT HINDERS?

Judgements.

She’s not a serious student.

...when you have students that are resistant you want to “pack up and go home.” (Faculty Interview 3). This interviewee doesn’t go on to describe exactly what “resistance” looks like, but

the implication is that some students don't want to learn and that makes it hard for instructors to teach them. This is problematic because the student behaviour that easily leads to such judgment is a common consequence of experiences of violence (Horsman, 1999/2000). If instructors lose interest in teaching them, their chances of success are likely to be greatly reduced.

During the project faculty saw some of the students as serious:

...those students would be in classes everyday, sitting at the front of the room and not being disruptive. (Faculty Interview 11)

But others were seen as not serious, not wanting to learn:

Those who didn't want to learn weren't engaged at all. They were here just for the ride and here to see what they could get out of it.

Several of the project staff and faculty were doubtful as to whether all the women were really there to learn:

...the screening process needs to be a bit better. And we can go back to those who wanted to learn and those who were here for the ride and the free bus tickets and the Mark's Work Wear clothes and stuff like that. Because I look at it like if you're taking up the space and you don't want to learn –you just want what can be given to you...there may be somebody out there who would like to get into this field but I can't because the class is full. (Faculty Interview 11)

The behaviours that led to this judgement, such as missing classes, coming late, spacing out, acting out, hanging back in class, and being too shy to practice the skills needed, are all typical behaviours that follow from violence (Horsman, 1999/2000). Yet instructors will frequently blame such students, see them as lacking motivation, and lose their own enthusiasm for teaching them, thus compounding their problems. One instructor described those students as:

Women who just thought that they didn't need to be here everyday - to go to class everyday or to do the job, employment support part of the program. (Faculty Interview 7)

Other staff presented a different understanding of why marginalized students might miss class as they recognized the huge shift and the corresponding pressures in the women's lives when they took on full-time school:

...sometimes they were just feeling that my whole life is taken up; I don't have a life anymore. And somebody else might see - you didn't have a life before. She did, that was her life and this life is different. So when she says I don't have a life anymore because my whole day is taken up - it's her life as she knows it is gone – suddenly. There was no

transitioning into this because as we said earlier this program started very fast. Women didn't have time to think about it. We didn't have time to think about it. That's why we were thinking as we go along - I was making it up as I go along. But I have that space in my head and in my life to be able to do that, but for them – they didn't want to lose the opportunity. It was given to them, and I'm going to take it, take it, take it...don't say no. So okay she's saying yes but... it's almost like being pulled down a hill or along a slippery road very fast. She wants to stop but she can't stop. So there are times when she just said forget it, I don't care, let go of me. So they wanted to be there [in class] but it was hard to be there sometimes. (Faculty Interview 5)

One student felt other students who were younger or older weren't really serious or even capable of carrying out the work and working in the industry. She thought perhaps some of the older women were doing it to show their kids and grandkids what they could do. She thought it was only those in the middle age group who were really serious about getting work in the trade.

There was divided opinion amongst staff whether it was important to clamp down on students who missed classes, in order to teach them to attend work regularly, or whether sensitivity to the challenge women faced to attend regularly would be more effective, especially in the face of difficulties women experienced with childcare, housing, addictions, and competing demands from social assistance officers that they attend appointments even during class hours.

She doesn't have aptitude.

—...*scraping the bottom of the barrel*” (Faculty Interview 3). There was much concern expressed by several faculty members and even some of the students that some students in the project did not have adequate mechanical aptitude or even sufficient interest in a career in the trades. Yet others argued that screening women out is a problematic way of ensuring success, suggesting that women who were in the end extremely successful would have been screened out and that common tests for aptitude are likely to weed out women who are not familiar with the techniques and tools, and simply have not considered a job in a trade. Women are less likely to be familiar with the tools, techniques, or details of the trade than men as they often have little exposure to these things or are even actively discouraged from exploring these skills or entering such careers.

I think that women were referred to this program or decided to try it who would never have engaged in this kind of work. That going back to school is its self one of the barriers—a huge barrier. The fact that it was a technical based program - that that would have normally discouraged women from applying. I think that the fact that a number of women were referred to the program that that may have given them a little

more confidence or hope that they could actually do it. I think that if we had screened for things like math – because grade 10 math was a requirement, or screened for technical ability – that we wouldn't have gotten the high numbers of women into the program and we probably would have seen a very different group of women in the program. So where I understand where that is coming from in terms of employers encouraging that, I think that there were women who did very well in the program who would have probably been screened out. (Faculty Interview 7)

One student who would likely have been screened out if traditional approaches to mechanical aptitude had been adopted told her tale to a reporter from the *Toronto Star*:

The goal of the George Brown program is to train women in an in-demand skilled trade. But along the way, Woodley, who before this course described herself as "technically challenged," has seen her once-fragile self-confidence soar and her future prospects brighten.

"There's nothing worse than feeling like a useless human being who has nothing to offer," Woodley said of her despair last fall before being accepted into the program. "To give someone a sense of self and feeling of worth is priceless."

"I was terrified at the beginning. I didn't know if I could do this," she said. "But I did it and I think it's quite an achievement." (Girard, 8:27:07)

She is now employed in the trade and she reported in her interview, and staff observed from her self-reports and from those of other students, that her confidence had steadily increased as she gradually acquired new self-esteem and a new sense of herself in this new situation, and she gained competence on the job.

Some students were concerned that others weren't really interested in the trade. Some were most concerned about other students who were struggling with —~~mental~~ "mental health" challenges, believing those students made it harder for the rest of them to learn. But others recognized that many students who would likely have been excluded in a tighter screening system did actually do well in the project and found they were capable of doing work they had never imagined possible.

She doesn't want to be there.

Students and faculty alike judged that some students were only in the project because social assistance had referred them. They judged these students as not serious and not really bothering to pursue the program with diligence:.

I think maybe to some degree, there was some resistance to being referred by OW. There are women who have been in receipt of OW – from my discussions with their offices and

the employment liaison person who we were working with directly – women who have not been active in terms of job search and who ‘ve really gotten out of the practice of really seriously looking for work and who may be a bit too comfortable just getting by. It is mostly those women who are single and don’t have a family to support and ...can’t be bothered. (Faculty Interview 7)

Although this judgement might be correct, there was also evidence in staff records and counselling notes to suggest that these students might also have been struggling to make major changes in their lives, unable to consistently believe in themselves and their ability to learn. A picture of many of the women’s lives during the project gleaned from a range of data sources suggests that these students may have “~~w~~anted to be there” but have been caught in pressure from workers to attend class **and** to attend conflicting appointments, and also to find a way to address the myriad problems in their lives: such as accessing adequate housing and child care and addressing long-term physical and mental health problems..

Some students judged each other that they were “~~o~~n the take,” believing others were simply there to enjoy the free resources, but staff worked hard to encourage them to trust that each woman was doing the best she could in the project and in her life. Perhaps some students weren’t ready to take part in the project, especially with the lack of lead time when the project began. The limitations of a project – running as a project, once only - makes it impossible for women to drop out part way through and return again the next year, or even return repeatedly until they are “~~r~~eady” and able to cope with the entire project and complete it successfully.

The coordinator and other project staff worked hard to keep students in the project, calling them up when they missed class, encouraging them to believe in themselves and come back to class, even after long absences. The coordinator wondered whether she was wise to do this or whether there was a point when by trying to encourage the women to return, she was putting too much pressure on them, making it impossible for them to respect their own need to quit. However, students spoke with great enthusiasm about what it was like to be called back and how important that was for showing them that someone believed in them and cared about how they were doing, revealing that failing to attend regularly may be about many things besides “~~n~~ot wanting to be there.”

Conflicting demands.

As mentioned above, many women struggled with conflicting demands throughout the project and beyond. When women were expected to attend appointments during the training week, they had no option but to attend them – missing class. When women successfully completed the project but were unable to get a job immediately, their problems were compounded:

So when women are finished our program I think their expectation also is right into work. And increasing pressure you know around— why are you still on OW and what are you doing? And now you have this skill on you, you even have less of an excuse to be on OW". I mean, I don't know that that's been said but women have reported to me increasing pressures, they're examining my living situation, OW wont allow me back on, somebody was cut off OW because she go angry at the job search place and was not allowed to return. So you feel bad because you wonder – have I set these people up for this kind of stuff? So on my bad days I feel that way and on my good days I think well – this person went through an addiction treatment program and is in a relationship and driving and... These three women are working in the field and have attained their G2 - there are 4 or 5 women who are employed in other areas – these are all good things. (Faculty Interview 6)

Echoes of past violence.

One possibility that was revealed through student interviews was that an educational program such as this can unintentionally replicate some elements of the dynamics of past violent or coercive experiences in subtle and complex ways. For example the features of a –special” project can replicate the common situation when abusers treat victims as _special‘ but the –specialness” comes either with strings or a sense of exclusion. In this instance the –special” designation did give women access to resources. However students were also aware that their cohort was an add-on in terms of available classroom and shop schedules. Space availability and the tight funding cycle that is common to –special” projects condensed the delivery of the project, resulting in students having less break time during their program. Some portions of the project needed to be delivered when most students were out of the building between semesters in order to access workshop space. This dissonance between the things that feel good and those that create exclusion can echo past negative experiences. Students spoke about how difficult they found some of these elements, and staff with experience in violence issues recognized that these could be particularly problematic because they echo past experiences of violence.

Common teaching practices can also echo past coercive experiences. It is not uncommon for instructors to thump on a desk for emphasis, to shout to get attention, or to single out quieter students for answers to questions in order to draw greater effort and greater achievement. For victims of violence such practices can be intimidating and echo the subtler coercive behaviours of an abusive parent or partner. The descriptions in focus groups of some of the crises and emotional upheavals during classes suggested some students were “triggered”¹⁵ by such behaviour. When students experience a teacher who appears to give some students preferential treatment over others, as students complained about in this project, even if this is done intending to support “good” students, this too, staff recognized, can echo the dynamics of coercion that created favourites and scapegoats in past environments.

A further possible echo of past negative dynamics was the tension and conflict revealed in staff and student interviews between the men in the technical department and the women who were responsible for teaching what was considered to be the soft skills and processes (e.g. job preparation, working in groups, understanding systemic issues, in contrast with the technical or hard skills e.g. welding, electricity, or refrigeration). Different approaches and cultures in the two work areas and college departments meant that faculty needed to address these tensions and conflicts throughout the project. Students spoke about the discomfort caused by these tensions. Such differences in faculty approaches can also evoke a memory of the conflicting tensions experienced by survivors of violence.

PREPARATION FOR WORK, EMPLOYMENT, AND PERSONAL CHANGE

Our third research question focused on the issue of employment.

Finding work.

The trades are oriented to the traditional ways in which men enter them.

Normal is so embedded in guys carrying tools for their fathers when they're 10. So that's what normal means and without any understanding that that's actually not really very normal for most people. That if you're a girl in the family – dad won't ask you to carry

¹⁵ This term is used in popular psychology to denote the way that current events can re-activate memories of painful or traumatic events.

the tools. So it's a whole reality and language that is so different and an applied skill stuff that is so different (Faculty Interview 6)

It seemed initially that women who came to the job market with their first level of certification in dealing with gas and refrigeration would therefore be desirable employees. The project put a lot of emphasis on teaching these demanding skills. The women also put their energy into getting over their fear and learning to deal with gas, electricity and welding, and the math that underlies these technical skills. It is also where much of their satisfaction seemed to rest as they found themselves learning and accomplishing these challenging new skills. However, it gradually became clear during the project that there were other vital elements the women needed if they were to be hired – including holding a drivers' licence in order to be able to drive a truck to get from job to job, and the ability to connect well with prospective employers so that employers would be willing to take a chance on a woman.

Unfortunately for the women, this lack of clarity about exactly what they would need to know and be able to do seems not to have served them well. During the research, ministry personnel suggested, and employers were reported as stating that what women really needed was the ability to form a relationship with the prospective employers, to strongly sell themselves so that an employer would be prepared to take a chance on them. As one employer said: ~~they~~'ve got to act like they own the place." (Employer interview, Evaluation)

There are two problems with this approach. First, it raises the question of whether employers continue to look for the traditional employees and so see only what is lacking in marginalized women rather than consider the possibility of hiring a new group of workers.

First impressions count. We don't look for candidates with previous experience – they must be young, eager, and want to do what needs to be done. The women students widely ranged in age but not in energy levels – all low. Younger people are more likely to be high energy, available weekends, etc., but also more likely to have wives and children... (Employer interview evaluation).

Clearly this employer is thinking of young men. If women had the energy required something else might have been viewed as the problem, such as their lack of availability on weekends
Second, expecting women who have experienced violence to complete a program with both the

skills to take on a challenging job and the confidence to sell themselves to a reluctant employer is asking an enormous amount. While supports were provided to address this, the extent of the challenge was underestimated.

A strong dimension of teaching about the systemic issues of sexism, racism, and so on was also included in the project in the hopes this would prepare women for work in male-dominated trades. Although one who has spent years in the trade insisted she had experienced little discrimination once she got into the trade, this perhaps suggests most strongly that it is easier to survive in the trade with blinkers on to avoid seeing and fighting too many battles rather than with a strong awareness of how discrimination plays out. Certainly one project graduate reported her experience on the job as extremely difficult and dangerous. She believed she, and the other women in her organization, were being pushed out by a series of subtle and not-so subtle actions by her male co-workers. Such experiences suggest that women might have benefited from more preparation as part of their program to prepare them to withstand any pressure they might meet from male co-workers – both direct and indirect – particularly responses that might put them at risk.

The challenge to obtain work.

The project was based on the premise that there is a shortage of skilled labour and that the heating and air conditioning trades in particular are experiencing vacancies rather than stiff competition for jobs or training. Unfortunately, for the women graduates of the project, this seems not to reflect the current job market:

...the Feds have been doing advertising of the shortage of skilled trade - which hasn't happened yet – this is the problem. It's going to happen.

Province wants to increase numbers by 25% in next 2 years. The trade has changed in ways that allows older people to stay in trade longer.

The shortage hasn't happened yet.

This is why apprentices aren't working because they keep adding more. (Faculty Interview 3)

The largest problem for the women seems to have been that the project was based on this premise which is not yet true. It was also based on the belief that women householders will be eager to have women technicians in their home. This may very likely be true for many women, but until women know that there is an option of requesting a woman, few women are likely to do

so. A coordinated campaign to encourage women to put pressure on companies to hire would likely lead to increased demand, but the idea that the onus should be placed on women consumers to demand women technicians makes it appear women's responsibility to create the job market. This obscures the injustice that women may be denied access to well-paid work based on their gender.

Many women described how they sent in application after application, never receiving any response. When the women talked together, they talked about the different reasons they had been given about why they weren't hired. One had been told she was not hired because she didn't have her G2 – the second stage of gas fitting qualification – but another had that qualification and still wasn't hired. Another had been told her problem was the lack of a driver's licence, but again others with their licences were also still searching for employment. Another thought the issue was age, but others who were younger said that wasn't their problem. In the end, it seemed that there would always be a reason that could be offered for why they could not be hired - but they believed the men simply did not want to hire women and looked for an acceptable justification.. While job seekers in many fields experience being turned down for reasons that are nebulous or self-contradictory, this was particularly frustrating for these women, who had been unemployed or underemployed and had such high hopes for their new careers.

Interestingly, the experience of some graduates of this project reveals how vital relationship is successful job searches. Those who were able to get jobs in the trade did so through the connections of staff on the project or through their own connections. One Korean student explained that she got her job through Korean networks and was able to bring in others from the project as other jobs became available. Such relationships were instrumental, as they often are. The women had relatively few such relationships at the start of the project because of their gender and socioeconomic status, so they had fewer opportunities to “network.” However, as some students got jobs, they used their influence to help create opportunities for classmates.

The design of this project, like many others in a long tradition of attempts to get women in to trades and technology (WITT), reflected the belief that if women were prepared for the trade then they would be welcomed, but the women's experience was that this did not appear to be the

case. Practical and attitudinal barriers exist for women seeking to obtain adequately paid employment, such as start times that don't fit with childcare availability, lack of onsite childcare, shift work and travel demands, and the need to have driver's licenses and access to vehicles – something less common for poor women, along with attitudes that they can not do the work adequately, or will simply be a threat to existing workplace cultures. In an article published fourteen years ago, but still extremely relevant today, Braundy (1994) explains that what is needed to create change for women is —no more dip service.” She continues that while ~~many~~ employers are still saying, “we can't find any women;” women are still saying “no one will hire us”” (1994:3). It seems clear that in the heating and air conditioning field, women are eager to take on the work, and anecdotal evidence suggests there would likely be demand from clients for women technicians. Women who do manage to enter the trade appear to be highly valued and they rise quickly through the ranks, leaving technical positions behind. Yet entering the field was a challenge that many of the project graduates could not get past. Again, this challenge is not unique to these women or to trades, of course, but the fact that it is experienced by women in other occupations, at all levels of education and expertise, did not make it any less personal or discouraging when these women experienced it.

The workplace experience.

For the women who did find a way into the trade, the challenges did not always stop there. One woman wrote about her experiences:

So here I am, 3 months later- riding around with alternating gas techs, learning about how commercial boilers and water heating systems work. I now have a brand new set of tools I am putting to use. However, not everything is a smooth ride. I struggle with upper body strength, finding places to use the washroom while on site, and storing all the new knowledge and information in my brain. Fitting in with the other men can be difficult and intimidating; however, many of the men have welcomed me with open arms and given me their knowledge and time to help in the facilitation of hands on learning. (Townsend:2007)

Another woman spoke of both good and bad experiences on the job. Although she described one co-worker who pulled her quickly out of a dangerous situation where exhaust gases were rapidly filling a room, in another incident a co-worker was not so helpful:

I went out on a job one time and he's above me –he's a G1 and so you kind of have this feeling like - okay he's a G1, he's the one...he's responsible for me at the time –I'm a G3

so I'm like okay - he doesn't want to see anything happen to me while I'm with him because it's on him - right?

He says –oh, you have to wipe in here –there is a box that comes out and a burner in there, a control for everything to do with the boiler, there's a transformer and all the wires coming in and wires going out. It's the electrical panel on the boiler –you don't put water in there. And he says, did you wipe in there? I say no –I'm going to get electrocuted –what are you talking about. He says –oh no, I turned it off. I went to walk past him and go check the breaker because I need to make sure for myself that it is off at the breaker because I'm not putting something wet in there. And he's standing in front of me... so that I couldn't get past him. He continues to say –just go clean it, just go clean it, it's off –I turned it off at the breaker. And I said –are you sure? I asked him like 3 times now –are you sure that it's off at the breaker because if there's any power coming to this –I am going to get killed. The guy said –Oh it's off at the breaker, just clean it. (Student Interview 16).

When this incident was discussed in an interview later with one of the senior faculty in the trade sector he was clear:

The woman should have taken a reading of the current through the wire - only takes seconds. The lesson is to always consider your safety and be strong in sticking to this. (Faculty interview 18).

The student also said that she had been taught to always check the breaker herself during the training. But she described how hard it was for her to check for herself when a senior worker told her he had turned it off - even though she was sure something was not right:

What am I going to do - he's 64 years old –am I going to grab the guy and physically shove him out of the way so I can run over and check the box because then if I do that then I've just assaulted him –you know what I mean? I could do it and did have qualms about it but he's 64 and I was told to rotate through all these guys to learn from them. So I'm thinking alright -- maybe he really did shut it off –you know. It's like you're all – like you have to protect yourself. (Student Interview 16).

She had wanted to believe that this older man was someone who would teach her the trade.

When she returned to work she found he had a different account of what had occurred:

He...told them that I'd just touched it and that I didn't check to see that the breaker was off.

In spite of the fact that she appeared extremely strong and sure of herself, she had been unable to believe she had to defend herself in that way. Subsequently, much of her energy went into trying to protect her job – by staying on the job to the end of her shift following the incident, by trying

to return to work much earlier than she was advised, and later beginning to keep careful records of her experiences and the way she believed her work was being undermined and tampered with.

After this incident, she had further experiences which convinced her that her work was being sabotaged. She felt isolated and unsure whether she wanted to stay on the job.

...I'm completely alone, my family has no way to help me with anything –you know what I mean...

It's just a constant battle, it's a constant battle and it's like you get that feeling where sometimes you just don't want to do it anymore and you're like, you know what –maybe I'm just better off being a tattoo artist in some little town and just rolling in the money instead of struggling.

She is torn between the promise of a different life that staying in the trade can offer her – and most importantly, her children -- she dreams of a house, a car, paying for an education for her children, and helping them buy their own homes – but she dreads the constant struggle, the need she feels to watch her back:

[to] have to walk around with an eyeball on your shoulder because you've got to watch what's going on around you at every moment.

So for this woman well-paid work involved a dangerous and physically demanding job, as she expected, and the sense that she could not trust her co-workers to support her and to help her keep safe, which she had not.

You know, because I'm a woman –now you think, the one girl got fired, the two girls are leaving for a year okay [on maternity leave] – and so I'm the last woman in there. Now I'm thinking that if they've got rid of this one and those two are gone, if they get rid of me they don't have anything to think about for another year until these other two come back –alright? And I'm thinking that they think the one girl is –she's not going to understand the responsibility and being pregnant and so she's going to be not coming back –alright? --is what I'm thinking –like that's the impression that they give because she's telling me that this one tech guy is telling her – oh, you know, all the girls are going to get fired –all right? So now I'm just in this position where I'm like –am I getting fired? I have no idea and I don't know if they're going to –you know--they can sabotage my work...

A little later she said:

You know –they're freaking me out to the point where I'm second guessing when I'm working on a machine and when you do that –that's when you're going to screw things up –right (Student Interview 16)

This tension and fear that others are sabotaging your work, or at least simply watching, perhaps expecting you to fail, can in itself lead to mistakes and increase the dangers. It contrasts strongly with the supportive environment of training designed to support women who have experienced violence to build trust in themselves and believe they can learn successfully.

Personal change.

The effects for those who became employed are clear. However, it was striking to note that even for those who had trouble obtaining jobs, the project was life-changing. The particular group of students quoted below were still unemployed, taking part in a follow-up course in appliance repair, hoping that this might help them obtain employment:

Student 1: I know one thing, if it wasn't for this program - if my worker hadn't come up to me and said hey, are you interested in this blah, blah, blah... I tell you - I don't know where I'd be because my life totally changed since I came to this program. I don't even know if I'd have a job by now. Maybe I'd still be doing nothing—I don't know what I'd be doing.

Student 2: I might not be alive.

Student 3: I would have been an insane crack head with no hope, no want, no future.

Student 1: I feel more motivated.

When we asked why participating in the project made such an impact, the students struggled to explain exactly what made the difference. But what was clearly important for all was that they were drawn into something that gave them a new way of seeing themselves, a new structure to their lives, a huge challenge, a new sense of hope, and gradually of achievement:

Student 3: It made [life] scheduled again. It was a plan – something that – especially for myself – I never thought I'd go back to school ever - I hated it the first time. (other women agree) Forget it...And then once I got in and realized I could do this, and realized I was actually really good at math and certain things – it brought out a lot of good things. It gave some hope again.

Student 1: I just liked having a schedule again – somewhere I...Something I had to do every morning - waking up leaving on the subway just like the rest of the people in the city going to work, going somewhere, doing something. It felt good to be doing something every day - that's what it was – It felt so good to be doing something again. And meeting people. Every day you go home, have dinner and think about your day – and you're actually doing something.

Interviewer: You said that you really didn't feel you'd be alive if it wasn't for this program?

Student 2: Oh god yeah. I was rid of it. I had already tried [to commit suicide] a couple of times.

Student 3: And it wasn't only just good for me – I've got an 8 year old god son who sat there and watched me go through the whole drug thing, watching me go through everything and then he got to watch me clean up and actually accomplish something. So it was good because other people could see you go back and do something. (Student group interview 12)

A key element here was the change in life that was brought about simply through participating in a project that was at the same time so supportive and so challenging. This was not an easy program. Students laughed telling us many stories about how terrifying it was to learn many of the technical skills, how difficult they found the math, yet the support helped many to believe they could do it. They spoke at graduation with great pride in their achievement and the new possibilities that they now believed this would open up for them:

I'm very proud of us all for having the will power, the determination and the drive to persevere. All we have to do now is polish the rocks for a while and we will end up with the diamonds."

I'm really excited but when I think of not coming to school everyday I get really sad. This has been one of the best experiences of my life and I know that I've made great lifelong friends. Congrats to all of us. We did it!!!!

I'm happy I was fortunate enough to be given the opportunity to have a second chance in life, you know, to do it right this time. I also feel like I've learned a lot through getting to know people I otherwise wouldn't have met. I'm so happy that we're now standing here with the door cracked opened in front of us.

As one faculty member summed up:

A fundamental aspect of the program has been the provision of employable skills and knowledge in ways that also empower students. By creating a supportive learning environment that recognizes the effects of trauma on learning, we offered women support and resources so they can gain control over their lives and meet their own needs and goals.

NEGOTIATING CHANGE IN THE COLLEGE

The challenges and consequent learning from this project were not limited to the classroom and the employment sector. Not surprisingly, given that this was an ambitious pilot project that involved collaboration among people who do not usually work together, the research revealed the possibilities and limitations of running such a project in this college. Some of this learning was recognized during the project, while other parts became clear during the research and had to

be chalked up as “lessons learned” in the hope of applying them in the future. As will be described briefly in the final section of this paper, we are fortunate to have the opportunity to do so.

Disturbing the peace in a fundamentally male environment.

Through interviews, it was clear that the arrival of a full cohort, not only of women, but of women who had experienced violence, in the midst of the men’s world of trades training disturbed the peace of business as usual. The first intimation of this was the difficulty of finding an instructor. The original plan had been to find a woman to instruct the technical courses, but there were no women available to teach from a trade with so few women. Consequently one of the men needed to take on the task, but few of the instructors were willing. They explained that they were afraid that women would not be comfortable with a man as an instructor. One faculty member said:

There were considerable apprehensions around here because of political correctness. Teachers having experience working with guys and have come from hard hat country – working in the field where there aren’t many women and not many in the classrooms – usually only 1 or 2 so there was apprehension.

One or two women have to simply fit in. A whole cohort might require something unique. Faculty reported a fear of “political correctness” and seemed to be afraid that they could be accused of harassment.

They’re afraid of legal action as a result of complaints –whether those complaints are well founded or not – and didn’t want to get into it. (Faculty interview 18)

Because this group was not part of the regular programming, the regular instructors weren’t scheduled for teaching.

...it’s also an institution that is also not normally used to the word marginalized but kind of puts on the margins projects that are not embedded in the institution. So when a part of the college actually creates a new program, you’ve got a wrap around of institutional requirement and desire that it stay there. There’s not as much option for faculty who might not kind of like the idea to say – I’m not going to do this. And because this was a special project there was more permission for a kind of voluntary opting out by the teachers in the apprenticeship program. So I assumed that they would be much more excited about doing something new (Faculty Group Interview 8).

The women themselves and their needs and realities along with the collaborative nature of the project also disturbed the usual approaches in the trades sector. As the coordinator explained:

We just wanted to make sure everyone had everything that they needed to start off. We had a teacher who was brand new and very overwhelmed the [with] dealing with the social issues, the socio-economic issues the women were bringing forward. ...I had not worked with the fellows in a team so we were negotiating that kind of relationship and how they all felt about us. So I was aware of not...of wanting to be nice, wanting to be friendly and wanting to be open and reassure them that you know, I'm not going to come down on them like a ton of bricks every time they say something.

How do I maintain a good relationship? If I confront this guy, the impact won't be on me it will be on the students right? I was very aware of that. And then the women were not... I was doing this on behalf of the group that weren't necessarily sharing my perspective at all, right - so we didn't have any bases of unity around feminism or politics or anything like that... So I just had to be it but not preach it. (Faculty Interview 6)

With the fellows, again, finding language to talk to them about what they were involved in and experiencing that didn't turn them off. So trying to be careful about jargon. Watching this guy go through exactly what I went through when I first came into the field –he was overwhelmed with the women's stories, he wanted to save them all, he was very very concerned and wanted to do everything for them – and really trying to talk with him about boundaries and making sure that...just understanding that you just can't do that and it's not even appropriate for you to. And for him to understand it's okay – we're here, you can let us take that on. He had a hard time with that because he was very much about –I'll do something about it". So talking to him about that and then watching him do what a lot of people do which is totally turn off. So if you can't help, what a lot of people do is kind of say okay, I'm going to revert very strongly to the limits and boundaries – you know – I'm not going to help you. It was a very odd relationship and hard to help him through that. (Faculty Interview 6)

The coordinator had to find a way to negotiate support for this instructor and the others who followed, while trying to avoid creating tensions that in themselves would decrease teaching quality.

We were told in faculty focus groups and interviews that a large and lively cohort of women designated as survivors of violence was a striking presence on the campus dominated by men in trades. Women were a visible and audible presence, some swore, and some easily and openly told the stories of real violence they experienced. Counselling sessions took place in the corridors for lack of a private counselling space. This presence disturbed both male students and

male faculty. This disturbance was revealed by many comments reported by project faculty. Male students, for example would call out remarks such as —“What are you doing here? It’s a man’s job!” Women would have a sharp, sometimes sexualized, response, and the men complained. The violent realities of the women’s lives were seen as shocking, too. The men said they didn’t want to hear such details. Male faculty repeatedly complained about the women swearing. It wasn’t clear whether this was because swearing was generally not permitted, or because women’s swearing was viewed as unacceptable.

The women’s challenge of being students in a special project for survivors of violence.

Students appreciated the resources, support, and connections that being this —“special” cohort of survivors of violence gave them, but few wanted to be seen as part of a group labelled in that way. There was tension from many directions about delineating such a group. Several of the women said that it was neither safe nor desirable to be recognized as part of this group. The technical instructors in interviews suggested there was no benefit in such a designation and from the industry, there was the suggestion that there was no need for them to know about the women’s experiences. But these responses raise questions: Would silence protect the women, make the men more comfortable, make it easier for the women to be hired? Would it limit the possibility of providing the resources and supports they need? This is a complicated tension. Perhaps the women were just like other students, or employees, because many in regular classes will have experienced violence. However, without the designation, there would also be no perceived —“need” to provide the special resources, or to recognize and accommodate their needs and support their learning in any particular way which this study revealed was so vital for this group of students.

As pressure to integrate women into regular groups of trades students mounts, there appears to be a corresponding pressure for the women to fit in, and not be troublesome, as the presence of this group of students on the trades campus of the college seems to have been. Although women —“fitting in” better may easily be seen as an efficient way of increasing their representation in the trades, this attitude puts burden of integration on the individual student or leaves the status quo, which disadvantages women, unchanged.

Collaborating across institutional cultures.

As discussed earlier, relationships with service providers, such as housing and job search organizations, and government agencies, such as Ontario Works, often posed challenges, due to competing demands and often differing ways of achieving similar goals.

Similarly, like the industries to which they correspond, programs and divisions within a college also tend to have somewhat different cultures and this project revealed the contrasts strongly. Commitment to student learning and success may be common across the institution, but it is often expressed in different ways and with different areas of emphasis. There are also differing assumptions about how students should behave and what is important.

This project involved three different divisions on two campuses of a large urban college. All



appeared invested in the success of the project and proud of its achievements. People in all three divisions, as well as senior administrators at the college, spoke of being sympathetic to the aims of the program, eager to see the women achieve their goals, and pleased that the college was participating.

Figure 6. Staff and Faculty from Different Divisions in the Shop.

This common commitment was essential to the success of the project and was the foundation for the collaboration without which it could not have been carried out.

The collaboration was not without its challenges, however. Faculty in the AWCCA Program, for example, are accustomed to working with students who have complex life situations including challenges around child care, housing, and social assistance. Students in this project often have had painful personal experiences, including experiences of violence, and faculty are practiced at

helping students to feel secure in the classroom and to believe that they can learn. These students are preparing to be helpers and it is important that they understand their own challenges and inner dynamics. Students in Access programs designed for students who need academic upgrading or who require additional supports because they have histories of mental illness or addictions often have similar life issues. These students are preparing for further education, and the programs emphasize academic skills and managing current life issues, like transportation or child care, so that the student can continue in school. Their faculty and counsellors are responsive, but they focus on the logistical and academic manifestations of these challenges rather than on the emotional and interpersonal effects. Many students in Technology programs probably have similar backgrounds and life situations, too. In this area, the emphasis is on acquiring technical skills and preparing for a relatively impersonal workplace. The kind of self-awareness and personal exploration that the AWCCA Program encourages in its students is likely to be seen as self-indulgent and irrelevant in a trades program.

It is crucial to recognize that each of these three faculty groups is genuinely attempting to prepare and support students. The misunderstandings and almost inevitable clashes in expectations we heard about in and around faculty interviews did not appear to arise from indifference or hostility. Instead they appear to reflect conflicting assumptions, usually not articulated, about how students should behave, what their priorities should be (e.g., attending a class vs. going to a social service appointment), how much personal issues and stresses are viewed as inherent in the student's learning experience or peripheral to it, how faculty should express friendliness and encouragement, and so on.

It is challenging to address these cultural differences within a complex institution and change comes slowly. The nature of assumptions is precisely that they are not expressed and often are not even conscious. However, assumptions can be articulated and compared when conflicts between them are anticipated. The project would probably have benefited from this dialogue before students began. This was hampered by the realities of project funding and the lack of lead time for meetings between faculty in the different divisions. The collaboration among the areas involved, although good, could have been better had these implicit beliefs been made more explicit and negotiated to provide a more consistent experience for the students.

Institutional constraints.

Locating the program in a college was essential to ensure that academic credit could be given for the learning the women did. Constraints and limitations go along with that advantage, however. The college, and the Ministry which funds it, have some inflexible procedures and expectations about what students can do and how programs must be run.

In some respects, the RHVACT project was like a community-based program lodged within a college. Community-based programs are often more flexible and more attentive to personal needs than large institutions. The supports that were added, from the counsellor in the classroom to the food vouchers and fresh fruit, were atypical in the college. At the same time, the college provides access to credentials, to equipment, to instructional expertise, to assessment for regulated activities and licensing, and collateral educational opportunities that are not possible in the community. It also has services like the food bank, the gym, the library and open computer labs, clubs, and so on.

The challenge for colleges seeking to serve more marginalized students might be to learn from the community, and from projects like this one, so that atypical students can find their place in the college and have access to education. This requires thinking about student services in quite different ways, from meeting more basic needs to recognizing that a student's need for safety may make it impossible for her to submit an assignment on time.

The opportunities and traps of a special project.

I think what's happened so far with CABT [-Centre for Applied Building Technologies] – is that they've got their traditional students who are the fellows whose dad took them out since they were little or the fellows who've decided I – my son has decided he'd like to take a skilled trade and he has no background in that - so it is guys coming out of high school and they go into either full time post-secondary or it would be the fellows who are working usually casually and then they'll start to get the training. So that's the normal route. The way the college is approaching – trying to create new pools of students is through special projects. So this gets set up as a special project as does the Aboriginal students in carpentry as does I think, the newcomers, new immigrants into plumbing – different programs. (Faculty Interview 6)

Like many other activities which receive project funding, the RHVACT project benefited from and was limited by the special project structure. Most college programs are funded in ways that permit few if any supports for students above those that are provided for all by the institution. All students have access to limited counselling, academic assistance, and student-led services such as the food bank. Students use these services to varying degrees, depending on their individual needs and resources. However, they are not provided to the extent and with the intensity that was anticipated within for this project.

The project was planned with awareness that the students would benefit from more extensive, intensive and flexible supports than usual and that they might not succeed in the absence of such supports. Programs for disadvantaged students are often possible only with project funding that permits the hiring of a counsellor, subsidized transportation, child care, and so on. Such projects provide an opportunity for students to participate in college programs and for the host college to identify some of the access issues that make further education difficult. This project, like other similar ones, clearly provided an opportunity to work with atypical students and to test innovative educational approaches.

Despite the benefits, project funding has limitations.

It quickly became apparent that we were marginalized within the college. We were given a room that was horrific. It had a fan going constantly... it was the hardest [place] to find you ever saw, it had a lock on the door that you had to have the code for to get in, had no AV equipment in it... (Faculty Interview 6)

I felt like we had a kind of parallel experience to the women actually, that some of what they were experiencing, we were experiencing as well. Very similar I found. So we would get the last available shop times – not ideal shop times... [The counsellor's] counselling office ended up having a photocopier in it the entire time so it never was her counselling office. (Faculty Group Interview 8).

Projects and programs that are funded in this way tend to sit outside the usual institutional structures and systems. Therefore, there were often problems with registration, timetabling, assignment and preparation of faculty, that are more extensive than the usual institutional frustrations and irregularities that most experience. Even though this is not the result of

any conscious discrimination, the student may feel marginalized once again in the very environment that was intended to reduce the student's sense of separateness and feelings of not belonging. Although this may seem a minor point for many, for students who have experienced violence this experience of seeming "less than" can be experienced as major.

The transition from special funding and demonstration projects to regular delivery can be difficult even when a project has been very successful. The specialized components of a high-support program are difficult to sustain. It becomes easy to dismiss the experience as unique and to lose the aspects of it that may be transferable or mounted in another form.

I think that it's probably a transition time where the college is saying that it wants this, it's doing these projects to test the waters but it hasn't made that commitment yet. ... the money is in the regular apprenticeship programs ...they have an intake every 8 weeks so it's very, very busy there... So in order to do this well, you would need a dedicated office that is just about ... non traditional students. I think it would be great to have a women's office But you really need an office... Maybe a pre-apprenticeship type of office that... is considered as legitimate and as important as the other programs and has to be accommodated along with the others. (Faculty Interview 6).

PART FIVE: CONCLUSIONS AND IMPLICATIONS

As discussed throughout this report, this research has revealed some important directions and understandings about how to support women who have experienced violence to learn effectively and prepare to enter the trades. The conclusions are summarized here. While they are particular to this project and this group of students and are certainly not generalizable as research findings, it is reasonable to suppose that the availability of supports that benefited the women in the project would benefit any group of students and, similarly, that the elements that hindered or discouraged them might affect other students in much the same way. Any classroom of students, men and women, is likely to include one or several who have experienced or are at risk of personal or systemic violence. Students who have not experienced these or other challenges may still welcome and benefit from added supports like those provided in this pilot project. This can only be speculative on the basis of the slender evidence in this study, but it contributes to the larger question of how colleges can be welcoming to all students and support them in their efforts to achieve success.

Building a community of learners.

The relationships that developed among the students and between the students and staff, both instructors and other support people, were crucial in this project. While this is well-recognized as a key element in student engagement, it had a special value and importance for these learners. Taking on the challenge together strengthens the group. When students feel that they have comrades in the struggle and can support each other, they are less isolated and can be encouraged by the shared experience even when it is challenging.

Long-term and ongoing relationships among the women appear to increase their chances of eventual success. This was true for the women who completed the pilot program and graduated, but also seemed to be important for some who did not complete the pilot program but remained connected to the other students and some staff. A student's belief that the staff and other students believed her potential, showed empathy and concern, and were willing to be supportive, helped her to succeed. Having a cohort of women who were all learning the same thing, despite their many differences, made it possible for them to know one another and to lend logistical assistance as well as encouragement.

An integrative seminar can be a useful vehicle for developing a learning community, as it allows students to reflect on the learning process and the effect the project is having on them. However, some students who are eager to take on a hands-on practical job are less than keen on a class where feelings are shared. Alternative approaches which build trust, community, and a shared analysis might include role play, team practical tasks, and work in other media besides words to explore feelings in the moment and prepare for the realities of the future.

Individualized supports.

Careful, respectful, and flexible response to needs as they arise is vital to support women with multiple barriers to learn successfully. Material needs, such as childcare, transportation, food, work clothes, tools, as well as emotional needs, must be met. Supports can be modified to fit the individual, adapt to students' particular needs, the training environment, and the particularities of the workplace or trade to facilitate learning. Attendance policies may need to be modified in ways that recognize women's responsibilities for children and other family members as well as

the impact of violence and poverty on mental and physical health and consequently on attendance. The glib answer that such flexibility is not available in the workplace disregards the difference between being a student and being an income-earner who has more resources and more choices.

Counselling, advocacy, job coaching, and job searching are most effective when they can be modified to meet individual needs. Support without judgment is vital. Students who have experienced violence are often quick to blame themselves, and doubt their ability to carry out the work. When others judge and doubt this may be impossible to withstand.

This project benefited from flexible and adequate funding, making it possible for the educators to respond to a broad range of needs. Too often, funding allocations and parameters are set in advance and cannot be modified, even when it becomes apparent that the money can be spent more effectively. Accountability practices are often focused on matching what is done to what is proposed rather than making necessary changes to plans in order to supply what actually was needed. This project was fortunate in being funded by the Ontario Women's Directorate, which was open to changes as the need for unanticipated supports emerged.

Academic challenges and supports.

Students benefit from the availability of individual tutoring when needed. As noted, women in the project did very well academically. The opportunity to learn or refresh math skills and other knowledge helped to create a distinction between what the women already knew (or remembered) and what they could learn if given an opportunity. Only the latter was relevant to their success in the project. The differences in prior academic achievement between the students who completed the project and those who discontinued suggests that providing academic support even earlier in the project might have been helpful, particularly for those who never took upper-level high school math courses. While completion of high school math courses could be used as a selection criterion, providing more effective and better-timed remediation is more in keeping with the rationale for projects like this one than restricting access would be.

Designing learning for regular small successes is valuable. Success leads to more success. Just as students can easily spiral downward as failures and violence multiply and compound each other, they can also spiral upward, building on small successes and increasing their belief that they are competent and capable of creating change. Even in the face of great success, survivors of violence and systemic oppression can quickly doubt they are succeeding. One student in this project stopped attending when her certificate didn't arrive, immediately assuming that she had really failed, even though she had been told she had passed with an excellent mark.

Challenge is as vital as support. When a difficult, even seemingly impossible, task is completed, the sense of achievement is huge. A non-traditional task, such as welding, can be particularly exciting for women who never imagined themselves doing something that seems initially to be so intimidating.

Role models, allies, and mentors.

A woman mentor from the trade can be extremely important to help women to learn appropriate ways of doing a task, to provide stories of life at work, and to make it easier for women to imagine what life might look if they enter the trade. Practical advice about how to accomplish the same tasks as a man even if one is smaller and not as strong is helpful and credible when it comes from a woman who is doing that work.

A person who is a supportive “witness” and ally in the class is valuable. Students were aware of the counsellor's supportive presence in the class and were taught skills that helped them cope and remain engaged in stressful moments. The camaraderie of being able to share the struggle and see someone noticing is valuable to increasing persistence. This supportive presence in the classroom can also be of value for the instructor who can relax, knowing there is someone else there to support an individual in crisis. Other high support programs use job coaches in this role with similar effectiveness.

The counsellor and integrative seminar teacher also tried some of the tasks the women were being taught. Watching a teacher or counsellor, someone the students identified as “smart,” find

new learning difficult can also help to build confidence in a struggling student. These project staff modelled persistence, tolerance for frustration, and a willingness to laugh at themselves.

Employer engagement and employment potential.

Although there were assurances of good employment prospects when the project was planned, some difficulties emerged. Relationships between the college and several prospective employers might have cushioned the effect of this. Ongoing job coaching can build these relationships, helping to create a receptive climate among employers and to support both the employee and employer through the first few months of a job, when misunderstandings and frustrations are most likely to occur.

If women, and especially women who have experienced violence, are to truly find a welcome in the male-dominated trades, culture and practices need to change. Representatives of these trades say that they want to hire women, but the intention has to be coupled with creating a more welcoming and equitable workplace culture. A job developer often works as much with a workplace as with a prospective employee to create an inviting environment for non-traditional workers.

Some of the skills that the women needed to secure employment in this field were not evident at first. It was more difficult for women who did not have a driver's license to find employment. A higher level of Gas Technician certification increased a woman's ability to work independently and therefore increased employability.

A group of twenty or so non-traditional employees attempting to find work in a single field, other factors such as reluctance to hire women, seasonal variations that affect hiring and workplace restructuring, all impeded women's employment and made things more difficult. More diverse vocational outcomes might have avoided this.

Staff communication and collaboration.

Staff working together as a team with consistency and communication among staff is crucial. A range of people make it easier for each student to find someone to connect with. Good

communication among staff is important to ensure that students do not get different information and decisions. As noted, faculty approached teaching and students with different assumptions based on their discipline and experience. Some of these were identified and discussed during the project but most were not. The collaboration among the areas involved, could have been enhanced had these implicit beliefs been made more explicit and negotiated to provide a more consistent experience for the students.

Instructors need access to supports to help them to maintain good boundaries, feel empathy for students without trying to rescue them, and recognize that students who are less satisfying to teach because they look as if they are not motivated are likely struggling with the impacts of violence on their learning. Such students need support and encouragement rather than judgement and –consequences.” The faculty teaching them also need support to manage the inevitable frustrations of working with challenging students whose behaviour and choices are sometimes hard to understand.

It is important that teaching practices and classroom dynamics create as safe a learning environment as possible. Poor teaching practices, such as false promises, favouritism, or setting students up for failure or ridicule, are never defensible, but they can be especially damaging for students who have experienced violence. Even behaviour like thumping on a desk for emphasis can have unintended negative effects on students’ comfort in the classroom and ability to learn. If such situations occur, it is helpful to recognize this, acknowledge it explicitly, and make changes.

Understanding the long-term effects of violence.

Many of the behaviours which lead to a critical judgement and certainty that a student is not –serious” or motivated – such as missing class, arriving late, hanging back from opportunities to try things out, sitting in the back of the class, acting out, joking or silence – need to be recognized as common responses to the impact of violence on learning. Although these behaviours are inappropriate in a classroom, the communication that is embedded in them must be recognized. Simply reacting to the behaviours in ways that shame students limits the teacher’s ability to use this as a teaching moment that helps the student to develop focus and self

discipline. The experience of a challenging and supportive learning environment is extremely valuable. Participating in a structured learning community can support students to begin to see themselves differently.

This raises a larger issue, of course. If there are students throughout the college who have experienced violence, whether personal or systemic or both, then the practices that make learning more accessible and successful are applicable everywhere, irrespective of program content. The statistics about violence suggest that it is unlikely that any large program – and few small ones— would be devoid of students who have had such experiences. Good supportive teaching practices for students who have experienced violence should therefore be viewed as good teaching practices, regardless of what one knows about the students' backgrounds. Sensitivity to the potential that any student may have experienced violence and the use of practices arising from that awareness have a place in every classroom. The level and nature of the supports extended as part of this project, such as a counsellor in the classroom and food, could not be made available to all students and may not be needed. Fortunately, however, most of the practices rely much more on attitude and approach than on expensive tangible supports and could be incorporated across the college without interfering with the preparation faculty believe is necessary to ensure that students are ready to face the employment demands of their sector.

LIMITATIONS OF THE PRESENT STUDY AND DIRECTIONS FOR FUTURE RESEARCH

The general purposes of any research include knowledge generation/production, creating better understanding, and prediction. This study contributes to the first two purposes: production of applied knowledge that is usually context specific and process knowledge for enhancing understanding and explanatory power. However, it fails to offer generalizability or prediction. This was a study of a project that was not initially intended as a subject for research. It involved a relatively small number of participants who were referred by social service agencies. Therefore it has the same limitations of any research with participants who were not selected randomly, no matched controls, and no formal pre-post measures. In assessing the appeal and effect of the training for the participants, it is impossible to fully separate the tangible benefits, such as

increased skills and future employment, from the indirect benefits, such as having an identity and structured time as a college student, maintaining one's relationship with the referring worker, child care, and camaraderie with fellow students.

As this was designed as a training project and became a research study only in retrospect, the data sources included observations, logs, interviews, and documents that were collected before the conceptual framework and process of the research study were formulated. As a result, some of the data were probably not as complete or tightly defined as they would have been if research had been a primary or initial purpose. Some staff who had been involved with the delivery of the project were co-investigators and, despite rigorous testing of interpretations with co-investigators who had not been part of the project, bias and selective interpretation of data may have affected the analysis.

The results are interesting and can be used as input to improve future projects of a similar nature. However, from a research perspective, they are not generalizable even to the population of women who have experienced violence or are judged to be at high risk and who are interested in future work in the skilled trades. The employment outcomes for participants were influenced by their personal skills and motivation but were also subject to the job market at the time. The study's conclusions are recommendations based on what emerged from this study and they should be understood as such. The recommendations point to improvements that can be made to learning environments to support students and help them be more successful. Further research would need to be done to more fully identify the relative merits of these improvements and their value for other groups of students, including those who come to education with fewer barriers than the students in this project.

This study reveals a need for further research to understand with more nuance and depth the perspective of employers and their hiring processes, and the subtle and not so subtle dynamics in the workplace when women enter the trades. Such research would be strengthened by an overarching analysis that identifies the intersection of multiple barriers that women experience in the context of non-traditional workplaces and the impact of a history of violence on informal learning in workplace settings as well as in formal training.

A longitudinal study would be especially valuable to track multi-barriered students over a longer period of time to assess the impact of various interventions. This should include overall supports as well as effective teaching practices such as those identified as helpful through this study. This would allow further exploration of the value of these supports to other groups of students who have high needs and would permit further differentiation to identify the most effective supports and delivery mechanisms.

Finally, a study is needed on the potential for self-employment and entrepreneurship. When industries have difficulty changing predetermined practices, another option for women's employment may be self-employment. The pitfalls and possibilities of this direction should be assessed with particular reference to learning from other countries where some innovative micro-enterprise projects have been successful.

SUMMARY

Survivors of violence and other forms of systemic oppression participate in all classes and programs. Colleges need to find ways to provide acknowledgement and support for their needs wherever they are studying within the college. Like the increased recognition and accommodation of learning disabilities, the recognition that survivors of violence are in all classes and may need extra resources is vital. Survivors should not need to be labelled as a "special" group. Educational institutions need to break silences about the commonplace presence of issues of violence and learning and work towards meeting students' diverse needs and modifying teaching practices to support the learning of all.

Instructors would benefit from training to recognize and address the impacts of violence on learning. Learner-centred approaches focus on the needs of students, some of whom may be trauma survivors. All instructors need to understand why victims of violence, both systemic and personal, react the way they do to teachers, students, and material. Instructors need training in appropriate roles, boundaries, and ways to avoid acting on judgements and assumptions or echoing past abuse. It is important that instructors and administrators learn that the person who might be judged as "the bottom of the barrel" may be a survivor of multiple violences seeking to heal and create change in her life through participating in an educational program.

This research has shown the value of offering women who have experienced violence something different. Material and emotional supports and flexibility are clearly vital elements. In addition, the training the women received was specific skill-building that led to certification and defined job opportunities rather than generalized readiness for employment. It is also important to address the workplace itself. Even if women are prepared to enter non-traditional employment, the workplace is not necessarily ready to receive them. This study suggests that working with employers to create a supportive and equitable environment for on-going learning on the job is a vital complement to the work with the students.

EPILOGUE: FURTHER WORK

A second follow-up project with a similar group of women is underway. The findings from RHVACT project described here have been incorporated into the design of the successor project. Briefly, the current project has an extended period of preliminary academic preparation, which is delivered to the women in a cohort so that they can form a community of learners with mutual support. After this, they will enter a range of technology or apprenticeship programs, choosing the programs they wish and meeting the same entrance requirements as other students. This gives greater choice, removes the stigma of the women studying the technical subjects in an identified group, and increases the likelihood of employment, as they will be entering a variety of occupations. The women will continue to have a weekly integrative seminar for camaraderie, support and problem-solving. Stronger links have been forged with the Technology Division to create better communication and collaboration so that faculty can learn from one another and provide better support to these students and to others. It is gratifying to see the results of this study applied so quickly. The authors are optimistic about the second group of students benefiting from what has been learned in this study.

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PART SEVEN: APPENDICES

INTERVIEW TOOLS

The three sets of questions which follow were used as loose guides for open-ended exploratory focus groups and group interviews. Each individual faculty follow-up interview was unique, based on earlier information faculty members had provided in the focus group and was used to understand the nature of their work in detail and depth. Although follow-up student interviews were also somewhat individual we have included an example to provide an illustration of their general focus.

Student focus group questions.

Frame the discussion by noting that while students had the experiences they're about to talk about as a group, their reactions to the experiences are individual – all are correct.

We will go through the questions in the student focus groups in this order:

1. We have some specific questions in mind but first we'd like to hear what you think is important to ask about?
2. Talk about yourself when you came into the program? Compare who you are now with who you were then.
3. Brainstorm a list of women identify as supports. Then ask: Were there times when you needed to use particular supports? Think about times when things were tough and it was difficult to make it into the classroom. What was it that made it possible for you to get to class?
4. Was there support from other people in your life that helped you to attend? Was there pressure from others in your life that made it difficult?
5. Think about times when things were tough and you didn't make it to class. What would you have needed to be able to come? Which supports were helpful and how were they helpful? Were there some supports that were not useful and if so, which ones were they?
6. Which supports would you like to see included if this program were to run again?
7. What was important about your experience in the program?
8. Think about your experiences in the classroom. Could you think back to a time when you were interacting with a teacher that felt good? Tell me about that experience. What did you like about the interaction?

9. Could you think back to a time when you were interacting with a teacher that didn't feel good? Tell me about that experience. What did you not like about the interaction?
10. Do you have any comments about your experiences in the program that occurred outside of the classroom?
11. Who do you think is responsible for your success in the course? Some say the teacher is responsible for students' success, some say they themselves are – what do you think?

Faculty focus group/workshop questions.

Encourage teachers to describe and expand on their answers and keep track on a flip chart – try to encourage building a discussion. Make sure to honour their experiences by noting them and not commenting/editorializing.

1. What can you remember about what you thought before you started working with this group of students? Any assumptions you had? Did any of these assumptions change over time? How?
2. Let's talk about program delivery. What exactly did you do? Describe ways that you assisted women to participate in class. Did you do anything differently with this group compared to what you have done with other groups of students? If so, what? How did that work out?
3. Were there things you thought would be effective but weren't? Why? What did you do when that happened? What teaching techniques did you use that were effective?
4. Preparing students to participate in the skilled trades: We've had discussions about techniques used to do this. Across the college, teachers are involved in helping students transition to the workplace. Could you comment generally on how you do that with students, and with this group specifically, since they came into the program a little differently than most students do (not as apprentices or already working in the field)? How would you say you as individuals or as a program facilitated this transition for this group?
5. Outside of the classroom: Do you have any comments about students' experiences outside of the classroom, with faculty, non-faculty employees, other students, and/or services?
6. If you haven't already mentioned it, what would you do differently the next time?
7. What do you think is critical to keep doing in this type of project?

RHVACT Questions for in-depth/follow-up interviews with students.

1. Tell us about yourself before and after the course – are there things you will do now that you wouldn't before? If so – what supported that change?
2. Tell us about your education – before this course and since – in what ways was the RHVACT course similar and different from the education you've taken part in before and since?
3. Tell us more about RHVACT – what worked for you? What didn't?
4. How did the screening process feel?
5. What did each person do that made a difference for you? What helped? What hindered? Probe for as much specific as possible.
6. Could you have succeeded without the range of supports? Tell us more about what it felt like to do the training since without the supports.
7. Tell us what you are willing to share about the tough experiences in your life and whether/how you've seen them affecting your earlier learning – what you've taken on and not taken on, your learning difficulties and successes.....
8. You said in the last interview... that it made you feel normal to be able to get up and go to school every day – can you tell us more about that? What difference did that make to how you were able to learn? Has that feeling continued since? Tell us more..
9. Can you tell us any more about the details of the course – particularly the day to day of classes – who did what that made a difference to your success?
10. Tell us anything else about the program that seems important to you.

EVALUATION

A summative evaluation of the project was carried out on its completion. Some of the data drawn from focus groups, interviews and an online questionnaire were relevant to the current study. The faculty focus group and student questionnaire are included here. Student interviews asked students to elaborate on the issues raised in the questionnaire.

Staff focus group evaluation questions.

1 How effectively do you think the program addressed the barriers you identified which prevent women from entering the trade?

Were some barriers addressed better than others?

What remain difficult to address?

2. What did you learn about:
 - What constitutes a safe and supportive learning environment?
 - The use of role models
 - The use of job developers/coaches

3. Did these approaches work to assist women to overcome –significant challenges?”
 - What else is needed?
 - Are there some challenges this program was unable to help women overcome?
 - If so what are they?

4. Do the graduates have the skills they need?

5. Do the graduates have the knowledge they need?

6. Did you identify promising practices that can be used elsewhere?
 - What will you/have you done to make it possible for them to be used elsewhere within and outside the college?
 - Has there been interest in incorporating these ideas?
 - If so, from where/who?

7. What kind of partnerships have been developed
 - Eg. between the VAW /apprenticeship/ and trade sectors through this project?
 - Did other partnerships evolve during the project?

8. Are you seeing any changing attitudes in the trade - or how long down the road do you think it would be reasonable to look for them?

9. Do you feel the project was a success?
 - Do you feel it met each of the priorities?
 - 1: Develop knowledge, skills and abilities to increase women’s employment and income-earning potential.
 - 2: Find and/or maintain employment.
 - 3: Increase women’s assets and resources to reduce their vulnerability to poverty and abuse.)
 - Tell us about why you do or don’t consider it a success and what got in the way of fully meeting any of the priorities...

10. What funding models and sources do you know of that might help this program to become sustainable? (Focus group - Rolf, Brenda...)

Student evaluation questionnaire.

This questionnaire was accessed and structured online through Survey Monkey.

Before you started the program

1. What was going on in your life before you started the course?

Check what you were doing

Working

Staying at home

Looking after children or family

Other (what? _____)

2. Give one reason for signing up?

While you were in the program

3. Check off the areas that worked really well

the application process

location of program

how you were welcomed at the beginning

the classrooms

the teachers

the hours

other students

study time

financial support

Work clothing

Tools

Food in classroom

Food bank

Food vouchers

what you learned (the curriculum)

the hands-on parts

the book-learning parts

the availability of the equipment

how you were taught (the teaching)

how you were evaluated (the tests)

the placement

the work itself

the people

help with learning

the supports, such as.

Job coach/developer

Counselling

- _____ Mentor/role model from the trade
- _____ Math tutoring
- _____ the coordinator - to talk to when needed
- _____ driver education

Can you tell us more about what worked really well?

4. Check off the areas that really did not work for you

- _____ the application process
- _____ location of program
- _____ how you were welcomed at the beginning
- _____ the classrooms
- _____ the teachers
- _____ the hours
- _____ other students
- _____ study time
- _____ financial support
- _____ Work clothing
- _____ Tools
- _____ Food in classroom
- _____ Food bank
- _____ Food vouchers

- _____ what you learned (the curriculum)
- _____ the job preparation courses
- _____ the apprenticeship courses
- _____ the availability of the equipment
- _____ how you were taught (the teaching)
- _____ how you were evaluated (the tests)
- _____ the placement
- _____ the work itself
- _____ the people
- _____ help with learning
- _____ the supports, such as.
 - _____ Job coach/developer
 - _____ Counselling
 - _____ Mentor/role model from the trade
 - _____ Math tutoring
 - _____ the coordinator - to talk to when needed
 - _____ driver education

Can you tell us more about what really did not work?

5. Name one thing you learned from Anna's class that still matters to you.

After the program

6. Did you get a job after the program finished? Yes/No Are you still in this position? Yes/No
If yes, go to question 7.
If no, go to questions 9A-C.

7. Put a number between 1 and 5 to rate the following (with 1 being the worst ever and 5 being the best ever). Rate your...

- _____ job
- _____ workplace
- _____ boss
- _____ treatment as a woman on the job
- _____ co-workers
- _____ pay and benefits
- _____ hours
- _____ travelling to and from work
- _____ child care arrangements (if you have children)
- _____ level of preparation for the actual work

8. Is this the type of job you expected to do? If no, what made it possible for you to do it?

9A. What are you doing now?

9B. Did the program help with what you are doing now or do you think it might be of help in the future? Explain.

9C. Do you want someone from the program to follow up with you about this? If yes, contact.....

10. If you could make one suggestion to improve this program, what would it be?